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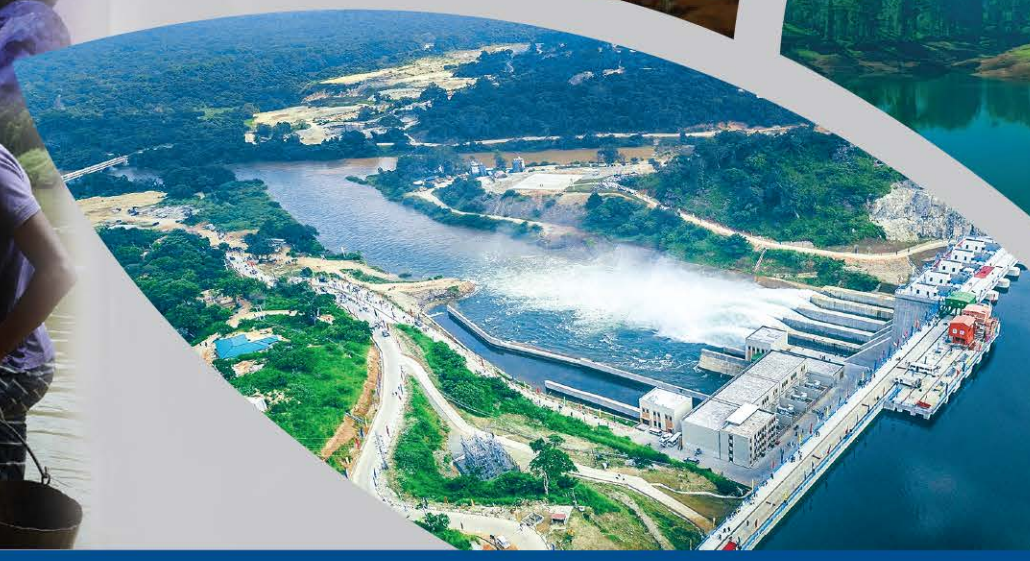
ஆண்டு செயல்திறன் அறிக்கை மற்றும் கணக்குகள் 2018

Annual Performance Report and Accounts 2018



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மகாவலி அபிவிருத்தி மற்றாடல் அமைசக

Ministry of Mahaweli Development and Environment

Annual Performance Report & Accounts 2018

MINISTRY OF MAHAWELI DEVELOPMENTAND ENVIRONMENT

MINISTRY OF MAHAWELI DEVELOPMENT AND ENVIRONMENT

HE.THE PRESIDENT MAITHRIPALA SIRISENA
Minister of Mahaweli Development and Environment

Hon. AJITH MANNAPPERUMA M.P
State Minister of Mahaweli Development and Environment

PRINCIPAL OFFICERS OF THE MINISTRY

Mr. ANURA DISSANAYAKE
Secretary to the Ministry of Mahaweli Development and Environment

Mr.M.P.D.U.K.Mapa Pathirana
State Secretary to the Ministry of Mahaweli Development and Environment

Mrs. H N Nilukshi Gunasekara
Additional Secretary (Administration I)

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

Mr. D Jeewanadhan
Additional Secretary (Natural Resources)

Miss. C.H. Devendra
Additional Secretary (Tecnical)

Mr. M.G.W.M.W.T.B. Dissanayake
Additional Secretary (Environment policy and Planning)

Heads of Agencies

Department of Forest Conservation	- Mr. Anura Hathurusinghe, Conservatrot General
Mahaweli Authority of Sri Lanka	- Dr. D M S Dissanayake, Director General
Department of Coast Conservation and Coastal Resource Management	- Mr. B K Prabath Chandrakeerthi, Director General
Central Environmental Authority	- Mr. A J M Muzammil, Chairman - Mr. P B Hemantha Jayasinghe, Director General
Central Engineering Consultancy Bureau (CECB)	- Eng. G D A Piyathilaka, Chairman – Eng K L S Sahabandu, General Manager
Geological Survey & Mines Bureau	- Mr. W M A S Iddawela,Chairman - Dr. C H E R Siriwardhena, 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	- Mr. Reginald cooray , Chairman - Mr. H P Sumanasekara, Director General
Gem &Jewellery Research & Training Institute	- Mr. Nawarathna Bandara Alahakonn, Chairman - Dr. Prashan Francis, Director General
State Timber Corporation	- Mrs. Niluka Ekanayake, Chairman - Dr. N D Ruwanpathirana, General Manager
Mahaweli Consultancy Bureau (MCB)	- Dr. Harsha Samaraweera, Chairman

Project Directors – Main Development Projects

Moragahakanda & Kaluganga Development Project	- Eng. D D Wijayarathna, Project Director
Uma Oya Multipurpose Development Project	- Eng. Dr. Sunil De Silva, Project Director
Mahaweli Water Security Investment Program	- Eng. K R Neil Bandara, Program Dorector

Ecosystem Conservation and Management Project (ESCAMP) – Mr Anura De Silva, Project Director

Maduru Oya Right Bank Development Project	- Eng. Nilantha Dhanapala, Project Director
Climate Resilient Integrated Water Management Project	- Eng. G S C Radrigo, Project Director

MAJOR FUNCTIONS OF THE MINISTRY OF MAHAWELI DEVELOPMENT ANDENVIRONMENT

- *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 Watersheds.*
- *Implement and Monitoring of Renewable electricity generation encompassing all tribute canals of the Mahaweli River basin.*
- *Introduction and mobilization 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 and analyze the problems in environment and natural resources sector through Stakeholder consultation to enable policy formulation.*
- *Instruct and facilitate the stakeholders in formulating environment and natural resources relevant policies and ensure the implementation.*
- *Undertake Strategic Impact Assessment of environment and natural resources related Policies.*
- *Ensure the implementation of multilateral environmental agreements signed by the Sri Lanka incoppliance with the international commitments.*
- *Preparation of Stategies and Action plans for implementation of policies related to environment and natural resources and execution of pilot projects.*
- *Development of monitoring mechanisum for environment and natural resource sector and develop strategies based on the data and information of monitoring.*
- *Conduct research to identify implact of implementation of policies and analyze the resreach finding and disseminate among public and related agencies.*
- *Creating a conducive environment for state and political sector's commitement towards sound environment management*
- *Create environmental education and awareness at national level in relation to the Environment and natural resources policy reforms and other major environmental Initiatives.*

Message from the Hon. Minister of Mahaweli Development and Environment

I am pleased to send this message for the "Annual Performance Report & Accounts 2018" of the Ministry Of Mahaweli Development and Environment which serves as an advisory document and a guideline to maintain a balance between protecting natural resources and the rapid economic development taking place in Sri Lanka.

At present, we are looking for alternative energy sources to face the challenge of possible shortage of resources in the future due to the imperative requirement to satisfy the needs of increasing population. The contribution of the parties is a must to achieve the sustainable development goals as well as the new economic development goals through initiatives such as Blue-Green economy.

Already, under the Ministry, various policies, strategies and action plans are being implemented for the conservation of environment and natural resources and for the sustainable development. Through these plans, steps have been taken to minimize environmental hazards such as pollution, deforestation, soil erosion, damages to biodiversity and climate change, which have effects both nationally and internationally.

In view of converting dry zone into a fertile land, supply the water for about 83,000 hectares of land in two seasons and contribute to national grid of 25 MG of electricity generation were able to achieved in 2018. It is a pleasure of us to ensure the environment conservation while mitigating climate change impacts through the implementation of multipurpose development projects.

I believe that we were able to fulfill the responsibilities towards following International Conventions on Environmental Conservation in an appropriate manner through the programmes implemented Island-wide under the "Punarudaya" national programme for environmental conservation (2016-2018). According to the adoption of agreements at the 21 st Conference of the Parties to the UNFCCC(COP21) in Paris under our contribution, strategic policies and plans have been prepared and implemented under 13 main subject fields to prevent globale warming by reducing emissions. Furthermore, I am pleased to inform that the activities undertaken at globally and regional level are at a highly satisfactory level.

Maithripala Sirisena

Minister of Mahaweli Development and Environment

Message from the Hon State Minister of Mahaweli Development and Environment

I am pleased to be able to deliver a message at this occasion when presenting the Annual Performance Report & Accounts 2018 of the Mahaweli Development and Environment Ministry and its affiliated institutions.

It is necessary to appreciate the Ministry and the institutions comes under the purview of the Ministry who play a vital role in sustainable utilization and management of natural resources without affecting the environment with the challenging objectives of providing better environment for all and increasing livelihood of the people.

At present, we all have a responsibility to overcome challenges of sustainable solutions for climate change as well as challenges of economic, social and cultural while ensuring protection of land, earth, and ocean .

We have already commenced the activities to achieve the green economy with the guidance of His excellency President Maithreepala Sirisena and support of the Prime Minister Ranil Wickremesinghe. In this regard, global environmental conservation measures have been recognized nationally and internationally as a result of engaging in agreements and conventions relevant to the environment.

I will take this opportunity to appreciate the service rendered by the Ministry officials and officials of affiliated agenciesfor the implementation of the economic development programs based on centered rural areas developed through development of infrastructure.

Ajith Mannapperuma, M.P.
State Minister of Ministry of Mahaweli Development and Environment

Message of the Secretary, Ministry of Mahaweli Development and Environment

I am delighted to place a message in the "Annual Performance Report & Accounts 2018" related to the Ministry of Mahaweli Development and the agencies under it. This report entails progress achieved by the Ministry and its agencies together during 2018 via implementation of programs related to the Environmental Conservation, Mahaweli Development and Multi-scheme Development, and other activities, together with the proposed action plan aimed at year 2019.

The Ministry of Mahaweli Development and Environment, being the sole organization responsible for ensuring environmental conservation in the country, could achieved a satisfactory progress in 2018. The Ministry could implement a number of programs encompassing bio-diversity conservation, "Wanaropa' aiming at escalating forest cover, the climate change mitigation, the interventions for terrestrial and marine pollution control, and minimizing the damage caused by mining and quarrying industries; and could achieve a substantial progress in them.

Further, I greatly appreciate uncountable service rendered by the Ministry towards the socio-economic wellbeing of the people living in Mahaweli Development areas, through various Mahaweli Development Programs such as Moragahakanda, Uma Oya, Dam Safety, Mahaweli Water Security, and Multi-Schemes programs.

In addition, the Ministry could accomplish a number of programs during last year, including the updating of National Environmental Policy, coordinating with the line Ministries and the agencies under them to implement action plan, and also the "Punarudaya- three year-Environmental Conservation program" 'which has been implemented under the guidance of His Excellency the President.

The responsibility of the Ministry, in relation to the conservation of environment, has not limited only to Sri Lanka, but its commitments penetrate across international boundaries to ensure that global environmental conservation is in right path, being signatory to international treaties and conventions. Accordingly, this report entails briefly the activities implemented by this Ministry during past year, and the Ministry could achieve a satisfactory progress during the period under review.

In particular, the leadership and the guidance provided by His Excellency the President to this Ministry is gratefully acknowledged, and I am also indebted to the Honorable State Minister of Mahaweli Development and Environment for their commendable leadership rendered to this Ministry. I also wish to express my sincere thanks to all the employees in the Ministry and the agencies under it for their commitments towards goals of the Ministry that we all achieved together.

Anura Dissanayake
Secretary
Ministry of Mahaweli Development and Environment

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1. Introduction

The Ministry of Mahaweli Development and Environment has provided the wide range of responsibilities since year 2015, besides environment conservation and development of mahaweli zones while increasing the livilihoods of the people living in the mahaweli area and improvement of investments in the society. The role and responsibilities of previous year in relation to policy making in the mahaweli development sector and environment management and conservation of natural resources by reporting as "Annual Performance Report & Accounts 2018". This report contains the progress achived in 2018 and activities that have been implemented by the ministry along with the progress archived by National Environment Action Plan and "Punarudaya".

With the leadership of honnerable President Maithreepala Sirisena, being the Minister of subject of Environment, the Ministry of Mahaweli Development and Environment unables to mitigate the environmental impacts arise with the accelerated changes of lifestyle of the society and economic development of the country with the strengthening of the ministry, affiliated agencies, stakeholders along with whole State setup with legally, technically and institutionally in order to increase the livelihood of the society towards thrift and sustainably through environmental conservation and infrastructure development projects.

While introducing proper water management in the purview of Mahaweli area, increase the livelihoods of the civilians in ensuring prioritization of environment and natural resources conservation and adopted measures to mitigate climate change impacts in view of the needs of natural resources of present and future generations.

The 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 are the main institutions of the environment sector while, Sri Lanka Mahaweli Authority, Central Engineering Consultancy Bureau, Mahaweli Consultant Bureau are the institutions of mahaweli development sector.

In this report, it is expected to present detailed performance of the divisions, projects and institutions 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 therein.

Financial Progress of Ministry 01.01.2018 – 31.12.2018

	Division/Institute	2018Allocation (Rs.Mn.)	Progress as at 31.12.2018	
			(Rs.Mn.)	Financial%
1	**Mahaweli Development**	**36,157.47**	**34,671.31**	**95.9**
2	**Environment Protection**	**1,707.97**	**1,566.04**	**91.7**
3	**Public Institutions under the Ministry**	**1,782.50**	**1,691.36**	**94.9**
4	**Department of Forest Conservation**	**913.60**	**911.95**	**99.8**
5	**Department of coast conservation and coastal resource management**	**1,367.62**	**448.84**	**32.8**
6	**Minister's Office**	**3.59**	**2.70**	**75.2**
7	**State Minister's Office**	**3.67**	**3.39**	**92.4**
8	**Administration and Establishment Services**	**18.72**	**17.07**	**91.2**
	Sub Total	**41,955.14**	**39,312.66**	**93.7**
7	**Projects implemented with the United Nations affiliated institutions**	**934.94**	**1106.89**	**118.4**
	Sub Total	**42,890.08**	**40,419.55**	**94.2**
8	**"Punarudaya"**	**108.78**	**100.38**	**92.3**
	Total	**42,998.86**	**40,519.93**	**94.2**

Main projects directly implemented by the Ministry - Physical / Financial Progress

	Project	2018 Allocation(Rs.Mn.)		Physical & Financial Progress as at 31.12.2018				
		Allocation	Revised Allocation	Expenditure (Rs.Mn.)	Bills in Hand (Rs.Mn.)	Total (Rs.Mn.)	Financial %	Physical %
1	Moragahakanda Kaluganga Development Project	11,400.00	18,877.70	16,030.05	2403.23	18,433.28	97.6	95
2	Uma Oya Multipurpose Development Project	11,300.00	7,510.00	6,523.30	920.60	7,443.90	99.1	88.4
3	Mahaweli Water Security Investment Program	7,380.00	5,199.00	5,108.39		5,108.39	97.4	97
4	Dam Safety and Water Resources Planning Project	1,440.00	2,540.00	2,283.05		2,283.05	89.9	100
5	Eco System Conservation and Management Project (ESCAMP)	910.00	950.00	950.00	48.90	998.90	105	100
6	Maduruoya Right bank Development Project	5.10	5.14	0.14		0.14	2.7	
7	Feasibility Studies	50.00	28.03	21.54		21.54	76.8	95
	Total	**32,485.10**	**35,109.87**	**30,916.47**	**3,372.73**	**34,289.20**	**97.7**	

Foreign Grant Funding projects directly implemented by the Ministry

	Project	2018 Allocation(Rs.Mn.)		Physical & Financial Progress as at 31.12.2018				
		Allocation	Revised Allocation	Expenditure (Rs.Mn.)	Bills in Hand (Rs.Mn.)	Total (Rs.Mn.)	Financial %	Physical %
1	mplementation of Montreal Protocol (MP) Regulations in Sri Lanka	25.16	30.16	29.95		29.95	99.3	100
2	Mainstreaming Biodiversity conservation and sustainable use for improved Nutrition and well being	16.47	16.47	8.79		8.79	53.3	60
3	mainstreaming agro bio Project on diversity conservation and use in Sri Lankan agro ecosystem for ivelihood and adaptation to climate .change	8.84	13.79	12.74		12.74	92.4	93
4	Project on Mercury initial assessment (MIA) under Minamata Convention	5.00	5.00	4.07		4.07	81.4	100
5	Project on air quality assessment for health and environmental policies	4.29	4.29	0.58		0.58	13.5	20
6	mplementation of Montreal Protocol (MP) Regulations in Sri Lanka	4.03	4.03	4.03		4.03	100	100
	Total	**63.79**	**73.74**	**60.16**		**60.16**	**81.6**	

Grants Projects jointly implemented by Ministry and UN affiliated agencies – Physical/Financial Progress

	Project	2018 Allocation(Rs.Mn.)		Physical & Financial Progress as at 31.12.2018				
		Allocation	Revised Allocation	Expenditure (Rs.Mn.)	Bills in Hand (Rs.Mn.)	Total (Rs.Mn.)	Financial %	Physical %
1	Climate Resilient Integrated Water Management Project	1,145.00	1,084.60	764.89		764.89	71	50
2	Addressing Climate Change Impacts on Marginalized Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka – Climate Change Adaptation Project (CCAP)	553.10	553.10	411.70		411.70	74.4	89
3	Enhancing Biodiversity Conservation and Sustenance of Ecosystem Service in Environmentally Sensitive Areas Project	106.00	137.38	113.93		113.93	82.9	83
4	Rehabilitation of Degraded Agricultural Lands Project (RDALP) in the Central Highlands	29.90	29.90	24.58		24.58	82.2	87
5	Environmentally Sound Management and Disposal of Polychlorinated Biphenyls (PCBs) waste & PCB contaminated equipment" Project	27.34	27.34	17.80		17.80	65.1	80
6	Sri Lanka's Third National Communication on Climate Change (SLTNC)	20.52	20.52	20.11	0.83	20.94	102	90
	Total	**1,881.86**	**1,852.84**	**1,353.01**	**0.83**	**1,353.84**	**73.1**	

Foreign Grant Projects Directly Implemented by UN affiliated agencies – Physical and Financial Progress

	Project	2018 Allocation(Rs.Mn.)		Physical & Financial Progress as at 31.12.2018				
		Allocation	Revised Allocation	Expenditure (Rs.Mn.)	Bills in Hand (Rs.Mn.)	Total (Rs.Mn.)	Financial %	Physical %
1	Switch -Asia Sustainable Consumption and Production (SCP) National Policy Support Component for Sri Lanka	95.50	95.90	86.31		86.31	90	100
2	**"Implementation of the National Biosafety Framework in Accordance with the Cartagena Protocol on Biosafety" (2017 - 2021)**	48.08	66.98	55.15		55.15	82.3	85
3	Project on Biodiversity Finance Initiatives (BIOFIN)	52.53	52.53	36.89		36.89	70.2	79.5
4	**Assistant Project on "Updating Climate Change Vulnerability Assessment and Piloting Mainstreaming Climate Change Adaptation into National Development Activities in Sri Lanka**	50.40	50.40	36.00		36.00	71.4	80
5	**on of sixth National Report on Biological Diversity**	8.21	8.21	6.05		6.05	73.7	88
6	**on of Nationally Appropriate Mitigation Actions (NAMAs)**	7.74	7.74	7.61		7.61	98.3	100
	එකතුව	**252.46**	**281.76**	**228.01**		**228.01**	**80.9**	

Institutions under the Ministry - Physical / Financial Progress

	ව්‍යාපෘතිය	2018 Allocation(Rs.Mn.)		Physical & Financial Progress as at 31.12.2018				
		Allocation	Revised Allocation	Expenditure (Rs.Mn.)	Bills in Hand (Rs. Mn.)	Total (Rs.Mn.)	Financial%	Physical %
1	Department of Forest Conservation	834.20	913.22	911.95		911.95	99.9	100
2	Central Environmental Authority	1,591.30	354.3	301.6	48.29	349.89	98.8	100
3	Gem and Jewelery Training and Research Institute	60.00	60.00	58.93		58.93	98.2	100
4	Mahaweli Authority of Sri Lanka	2810.50	2733.50	2587.26	30.19	2,617.45	95.8	98
5	Marine Environment Protection Authority	90.00	90	77.25		77.25	85.8	88.6
6	Department of Coast Conservation and Coastal Resource Management	1,367.62	1,367.62	448.84		448.84	32.8	36
7	State Timber Corporation	Not allocated Capital Investments						
8	Geological Survey and Mines Bureau							
9	National Gem and Jewellery Authority							
10	Central Engineering Consultancy Bureau							
11	Mahaweli Consultancy Bureau							
	Total	**6,753.62**	**5,518.64**	**4,385.83**	**78.48**	**4,464.31**	**80.9**	

Divisions under the ministry - Physical / Financial Progress

	Division	2018 Allocation(Rs.Mn.)		Physical & Financial Progress as at 31.12.2018				
		Allocation	Revised Allocation	Expenditure (Rs.Mn.)	Bills in Hand (Rs.Mn.)	Total (Rs.Mn.)	Financial %	Physical %
1	Land resources	9.70	8.14	8.37		8.37	102.8	100
2	Forest resources	2.00	2.00	2.00		2.00	100.0	100
3	Climate change	1.50	1.50	1.47		1.47	98.0	97
4	Legal division	0.30	0.25	0.24		0.24	96.0	100
5	Biodiversity	4.00	4.00	3.76		3.76	94.0	99
6	Air Resources Management and National Ozone Unit	3.00	2.26	2.10		2.10	92.9	97
7	Environment planning and economics	1.00	0.96	0.79		0.79	82.3	88
8	Education Training and Research	6.00	6.00	4.87		4.87	81.2	85
9	Policy planning and monitoring	0.50	1.20	0.91		0.91	75.8	95
10	Establishment and Administration							
	Minister's office	4.90	3.59	2.70		2.70	75.2	
	State Minister's Office	2.50	3.67	3.39		3.39	92.4	
	Establishments and Administration	15.40	18.72	17.07		17.07	91.2	
11	Environmental Pollution Control and Chemical Management							
12	Investment Promotion							
13	International Relations							
14	Human Resource Development							
15	Investigations							
16	Internal Audit							
	Total	**50.80**	**52.29**	**47.67**		**47.67**	**91.2**	

Annual Income Target and Progrss Analysis - 2018.12.31

	ආයතනය	2018 ආදායම් ඉලක්කය (රු.මි.)	2018.12.31 දිනට ප්‍රගතිය		අරමුදල් (ස්ථිර තැන්පත් හෝ වෙනත් ආයෝජන) (රු.මි.)	භාණ්ඩාගාර දායකත්වය 2018 (රු.මි.)
			(රු.මි.)	%		
1	Central Engineering Consultancy Bureau	14,600.00	12,800.00	87	2,000.00	25.00
2	State Timber Corporation	4,700.00	4,727.00	101	2,097.00	2,014.00
3	Geological Survey and Mines Bureau	3,436.00	3,002.00	87	2817.91	1,700.00
4	Department of Forest Conservation	1,910.00	2011.40	105.3	4.20	937.9
5	Mahaweli Authority of Sri Lanka	1,193.16	753.49	63.2	86.90	
6	National Gem and Jewellery Authority	934.00	509.21	54.5	643.00	25.00
7	Central Environmental Authority	335.13	330.00	98.5	9.9	
8	Mahaweli Consultancy Bureau	100.39	90.00	90		
9	Department of Coast Conservation and Coastal Resource Management	50.00	50.44	100	2.24	52.68
10	Marine Environment Protection Authority	33.71	34.45	102	12.56	
11	Gem and Jewelery Training and Research Institute	12.09	12.43	102.8	5.01	
	Total	**27,304.48**	**24,320.42**	**89.1**	**7,678.72**	**4,754.58**

PART I

Main Projects Implemented by the Ministry

1. **Moragahakanda Kaluganga Development Project**
2. **Uma Oya Multipurpose Development Project**
3. **Dam Safety and Water Resources Planning Project**
4. **Mahaweli Water Security Investment Program**
5. **Ecosystem Conservation and Management Project**
6. **Maduru Oya Right Bank Development Project**

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 including the increased rice yield per hectare will give 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 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, and Riverston etc. Moragahakanda and Kaluganga have a great ecotourism potential.

Enhancing employment opportunities: 650 people are directly deployed in the Project. Further youths 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 includes two rock fill dams, spill way, two sluices 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 (7000ha) - 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 during 2018 are given below.

Madirigiriya Ground

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 Mn. 10.94 has to be paid for the power house variation and the saddle dam excavation variation is USD Mn. 15.48.

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

Item no.	Description of Works	Cumulative work done up to end of 2018.12.31	Financial Progress during 2018 (Rs. Mn)
1.0	Construction of main dam	Completed in 2017	2,481.65
2.0	Saddle dam 1 (including apparent structures such as EMC outlet, EUC outlet, Power House, Spillway etc)	Completed in 2017	
3.0	Saddle dam 2	Completed in 2010	

Kaluganga Reservor Head Works

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.

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

Item no.	Description of Works	Work done during2018 (%)	Cumulative work done up to end of 2018 (%)	Financial Progress during 2018(Rs. Mn)
1.0	Construction of main dam	10.0	95.0	7,115.94
2.0	Saddle dam	34.0	90.0	

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 2018	Cumulative work done as at 2018.12.31
1	Buildings	44 Nos completed	163 Nos completed
2	Roads		
2.1	Main Roads	-	10 km completed
2.2	Market Roads	8 km completed	28.9 km completed
2.3	Hamlet Roads	5 km completed	35 km completed
3	Irrigation works		
3.1	D & F Canals	3.5 km completed	47 km completed
3.2	Small tanks	-	9 Nos completed
3.3	Level crossings	17% completed of 3 level crossings	46% completed of 3 level crossings

Left bank of Kaluganga

Nos.	Activity	Work done during 2018	Cumulative work done as at 2018.12.31
1	Buildings	25 Nos completed	138 Nos completed
2	Roads		
2.1	Main Roads	3 km completed	27.96 km completed
2.2	Market Roads	4.65 km completed	20.39 km completed
2.3	Hamlet Roads	3.95 km completed	45.28 km completed
3	Irrigation works		
3.1	Main Canal	-	2.9 km completed
3.2	Branch & Sub Branch Canals	-	4.71 km completed
3.3	D & F Canals	9.7 km completed	89.26 km completed
3.4	Small tanks	-	2 Nos completed

Medirigiriya development area in system D

Nos.	Activity	Work done during 2018	Cumulative work done as at 2018.12.31
1	Buildings	19 Nos completed	58 Nos completed
2	Roads		
2.1	Main Roads	8 km completed	8 km completed
2.2	Market Roads	20% completed of 35.1 km	60% completed of 35.1 km
2.3	Hamlet Roads	20% completed of 56 km	70% completed of 56 km
3	Irrigation works		
3.1	Main Canal	-	6.5 km completed
3.2	Branch & Sub Branch Canals	1 km completed	16 km completed
3.3	D & F Canals	-	Pre cast structures completed
3.4	Small tanks	2 completed	13 nos completed

Laggala Pradeshiya Sabha Building

Laggala School Educational Complex

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 2018;

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 2018	Cumulative (as at 31.12.2018)	During 2018	Cumulative (as at 31.12.2018)	During 2018	Cumulative (as at 31.12.2018)
Thalagoda	0	328	0	85	2	60
Kadawatha	2	255	1	69	0	96
Kambarawa	2	308	0	96	1	39
Galporugolla	0	160	4	69	1	30
Elagamuwa	5	247	0	93	0	50
Medhapihilla	3	183	2	133	0	32
Kongahawela	3	46	0	33	0	8
Maragamuwa	0	13	0	12	0	1
Millagahamulathenna	12	150	8	117	1	23

Rajawela	0	8	0	6	0	0
Leloya	11	11	2	2	1	1
KiriOya	15	15	1	1	11	11
Ambana	9	9	0	0	9	9
Total	**62**	**1733**	**18**	**716**	**26**	**360**

Resettlement activities related to Kaluganga reservoir effected families during the 2018;

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 2018	Cumulative (as at 31.12.2018)	During 2018	Cumulative (as at 31.12.2018)	During 2018	Cumulative (as at 31.12.2018)
Karandamulla	1	211	1	9	0	12
Guruwela	0	10	0	0	0	0
Galgedawela	3	34	0	2	1	4
Rawanagama	0	94	0	14	0	12
Gonawela	0	81	0	10	0	6
Pallegama	3	184	0	22	3	27
Miniranketiya	4	164	1	12	2	30
Halminiya	0	36	0	0	0	2
Imaduwa	2	79	0	0	1	8
Gangahenwela	0	30	0	2	1	2
Rambukoluwa	1	59	0	5	1	3
Akarahediya	1	12	0	8	1	1
Total	**15**	**994**	**2**	**84**	**10**	**107**

Laggala Hospital

Laggala Police Station

Compensation

The following tabledescribes the compensation paid in each development area;

Development Area	Compensation paid during 2018 (Rs. Mn.)	Compensation paid (Cumulative as at the end of 2018 – Rs. Mn.)
Moragahakanda	785.00	4,562.78
Kaluganga	840.00	3,008.78
Medirigiriya	6.60	63.72
Total	**1,631.60**	**7,635.28**

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 Migratory Plan prepared for Moragahakanda Agricultural Development Project, progress of the actions implemented on the ground during the year 2018 is given below.

100m width Reservation Development
Tree Planting – Moragahakanda reservoir

12,548 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.

Forestry Development

Forest Department carries out activities as per the MoU signed between Mahaweli Authority of Sri Lanka and Forest Department.Rs. Mn. 18.46 has been granted for the relevant activities during 2018.

Wild life conservation program with Wildlife Department

- Establishment of Pubbiliya - Sadawasalakanda electric fence about 3 km in Opalgala to Maragamuwa.
- Shifting 0.5 km of Galaboda electric fence.
- Three rest rooms construction in Galaboda, Kalundewa & Maoya was started
- Clearing the 11 km path way in Agunawelpelessa electric fence.

Program of environment day

According to advice of secretary, Mahaweli Authority was called up the world environmental day program in 2018.

- School children motivation program was conducted at Adawala Montigopallawa School, Opalagala and Galaboda School.

Water quality analysis of Moragahakanda

The project wishes to carry out water quality analysis with selected water sample points such as Ma- Oya, Ambanganga, Galaboda Oya, Poththatawela, Thelgamu Ganga, Just downstream the dam. pH, Electric conductivity, Temperature, Turbidity, Do, COD, BOD, Nitrate etc. Were checked during year 2018.

Community Infrastructure Development

On-farm soil conservation

Twelve Soil conservation programs were completed and 13 farm lands have been implemented.

Rehabilitation of agro wells & deep wells

23 agro wells in Moragolla, 14 in Galaboda, 07 in Bambaragahawaththa, 21 in Helambaghawaththa & 08 in Pubbiliya have been rehabilitated by removing silt and further developing. One deep well was established in Bandarayaya farm land area.

Rehabilitation of small anicuts & field canal

Anicut / Canal	work done/ to be done	Status
Thalayaya - Senagama canal	18 drops with 14 farm turnout & earth filling canal & turfing	Rs. 1,889,216.25 was paid for the construction

Rehabilitation of agricultural roads

Access roads have been developed by the project to facilitate farmers for carrying their harvest safely to the market.

- Adawala 1.6 km agriculture road was rehabilitated.
- Maragamuwa 3.5 km agriculture road was rehabilitated.
- **Tree planting programme in catchment area**
- Pepper, Arecanut, Pomegranate et..were donated to the people of catchment area.

GS Division	Number of farmers	Plant species & number of plants
Andawala	56	bamboo plant - 71 Arecanut - 335 Lime -201 Pomegranate - 64 Wood apple - 67
Galaboda	31	bamboo plant - 75 Lime -225 Pepper - 205 Arecanut - 220 Wood apple - 114 Passion fruit - 118
Moragolla	69	Arecanut - 345 Lime - 345 Pepper - 345 Pomegranate - 138 Beli fruit - 69
Senagama		Pepper - 160 Arecanut - 160

Medirigiriya tree planting programme

- Robarosia trees & Naa trees have been planted at main road from Medirigiriya RPM office to project office.
- Neem trees & Kumbuk trees have been planted at street from project office to Bandara Lake.
- Small patches & 2 borrows areas (1 hectare) have been rehabilitated.
- EIA report was processed Madirigiriya to Kanthale road along the Wasgamuwa National Park.

Kaluganga Project

Buffer Zone Development

1100 plants in 100 m reservation of Kaluganga reservoir were planted
Re demarcating of 100m reservation of Kaluganga reservoir

Tree planting program

Implement by the project

- Tree planting in tanks (tank 05, tank07, tank09, tank 10) reservation- 5000 No. of plants were planted in the tank reservations of Kaluganga area.
- Avenue planting, tree planting & landscaping of
  - Divisional Forest Office-Laggala
  - Divisional Hospital- Laggala
  - Govijana seva center-Laggala
  - Central college – Laggala
  - Primary schools- Heerati oya & Guruwela
- Provision of planting materials for government institutions such as schools, divisional secretariat office, agrarian service center etc.
- 04 Nos. of rural plant nurseries were established.
- Maintained the rehabilitated burrow pitsin Maaoya area

"**LAGGALA GREEN CITY PROJECT"**has been commenced at the end of 2018. Tree planting programs were conducted by covering main road & market roads. Total covered area is about 9km. 2257 plants planted under Laggala green city project.

Implemented by the Forest Department

Rs15.0 Million was provided to forest department according to the MoU signed between MASL & FD for the enrichment of forest plantation, buffer zone development establishment of fire belts, demarcation and maintenance of forest plantations.

- Maintenance of enrichment planting -10ha
- Maintenance of buffer zone – 60ha
- Demarcation of forest reservation 42km

Plant Production in Kaluganga Central Plant Nursery

17,729 Nos. of plants were produced in 2018 and 13,900plants were issued for tree planting programatthe Kaluganga catchment & resettlement area

Construction works of new office building, surround wall and water tank tower for central plant nursery has been completed.

Soil Conservation Measures

10 Nos. of homesteads developed with soil conservation measures (30 acres) in the Kaluganga watershed.

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

- Rehabilitation of 02 nos'. of anicuts were completed

Anicut	Estimated cost (Rs.)	Status
Battawela Anicut-Dammanthenna	1,477,014.25	completed
Madama Anicut & Field canal – Puwak pitiya	770,085.45	completed

- Six (06) estimates prepared for the construction of anicuts & field channel

Wild life Conservation Program

- Establishment of the live fence- Establishment of the live fence parallel to electric fence with agave planting, citrusand Boganvila
- Establishment of the central elephant control unit in Guruwela with following facilities in 2015 and continued in the year 2018
    - A vehicle allocated with 400liters of fuel per month
    - Provide elephant crackers -500 No. per month
    - Accommodation facilities
    - Telephone, Electricity etc
    - Subsistence for wildlife officers
- Established and continued of village elephant control committees-09committees (nawa Imaduwa, Kajuwaththa, Thorapitiya, Devaladeniya, Guruvela (No 34), Kabaragoimada,Mahapitiya,Central control unit, Maa oya) established and continued.
- Maintenance of new settlement electric fence (62km) is being continued.
- Shifting the electric fence (2.5km) in Thorapitiya area due to the construction of Left Bank Main Canal

Biodiversity conservation program

- Introducing beetle which called salvinia beetle (*Crytobagus salviniae)* to control salvinia (*Salvinia molesta)* in Tank 04
- Removal of *mimosa pigra* (Giant mimosa) about 12ha at Yakakadulla tank area and road reservations.
- Commencing the Animal Rescue Programme at Kaluganga reservoir with the assistance of Dept. Of wild life conservation & Lifesaving unit of Srilanka Police

Category	Rescued amount
Mammals	12
Reptiles	3056
Insects	109
Arachnida	05
Mollusca	67
Total	3249

Training & capacity building for the officers& settlers

- Eight (08) awareness programs were completed including soil conservation & nursery management programs.
- Four training program were conducted for school children on environmental conservation andfarm management.
- Training program conducted by Natural Resource Management Center about Soil conservation.
- Conducting an awareness program about Alien invasive species with the assistance of Plant Protection Service, Dept. of Agriculture and Gannoruwa.
- A waste management training was provided by MAS Holdings at Thulhiriya with the guidance of Dept. Small Industries

Solid Waste Management Program

- Solid waste management program will be started with the consultancy of Faculty of engineering university of Peradeniya, in the Laggala new city and resettlement area.

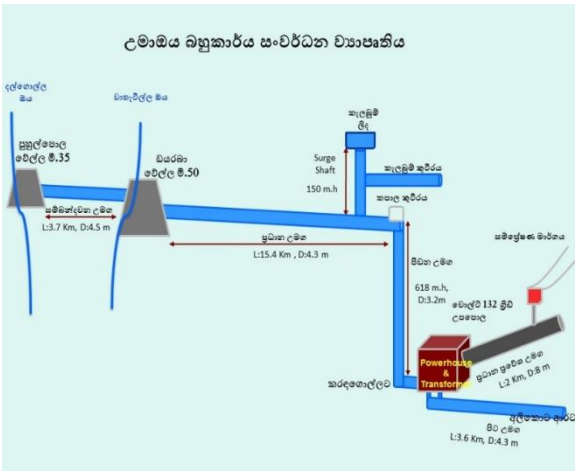
Obtaining Environmental Licenses

- Extending the Environmental Impact Assessment report's validity period of Kaluganga Developmentproject.
- Obtaining the environmental clearance for the proposed tunnel (LB Main canal)
- Extension of Q1and Q2 Quarry sitelicensesfor the contractor of Kaluganga dam construction.
- Monitored environmental impacts mitigation activities at the construction sites.
- Conducted two pre crack surveys at Wellawela & Leloya areas to assist the construction of Left Bank Main Canal.
- Demarcation of identified areas of "Haththota Amuna" as an archeological site.

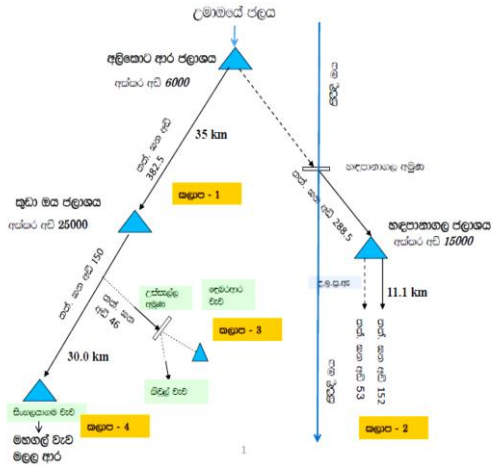
Uma Oya Multipurpose Development Project

The main objective of the Project is annual average diversion of 145 Million Cubic Meters (MCM) of excess water in Uma Oya basin to Kirindi Oya basin for alleviating the water scarcity in the Southeastern dry zone of the country without affecting the water uses in Uma Oya basin.This will provide, irrigation water to around 6000 ha of agricultural land in Moneragala District and 30 MCM of drinking and industrial water requirements in Moneragala and Hambantota Districts while generating and adding 290 GWh of electrical energy annually to the National Grid. The project will also provide NWSDB drinking water requirement of the two water supply schemes of Greater Bandarawela and Attampitiya in the Badulla District.

Project Components and Cost



Schematic Diagram of Head Works



Schematic Diagram of Downstream Development Works

The project has two components viz. the Head Works and Downstream Development and Construction of Head Works is done on an EPC Contract by M/S FARAB Company of Iran while Downstream Development component is implemented by the Irrigation Department under Forced Account.

The Total cost of the Project is USD 514 million plus LKR 15,474.25 with the Head Works component costing USD 514 million plus LKR 6,122.0 million and the Downstream Development Works costing LKR 9,352.5 million.

Main Features of Head Works

The main features of the Head Works component of the Project is comprised of 35 m and 50 m high new reservoirs built with Roller Compacted Concreate (RCC) across tributaries of Uma Oya at Puhulpola and Dyraaba, a 3.7 km long Link Tunnel connecting the two reservoirs, a 15.4 km long Headrace Tunnel (HRT) from Dyraaba Reservoir and a 120 MW capacity Underground Power Station associated works at Randeniya.The electricity generated at the Power Station will be connected to the CEB Grid Substation at Badulla 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

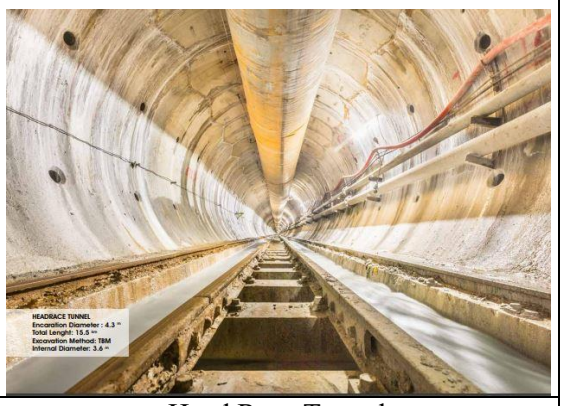
construction of two new large reservoirs of 6.5 MCM and 29.0 MCM capacity across tributaries of Kirindi Oya at Alikota Ara and Kuda Oya, and enhancing capacity of existing Handapanagala Tank from 6.5 MCM to 14 MCM. Other infrastructure include construction of 48 km of transfer canals, provision of irrigation facilities to 1500 ha of new land in Handapanagala Tank and rehabilitation and upgrading of over 100 village irrigation systems augmented by Uma Oya waters.

Progress of Head Works

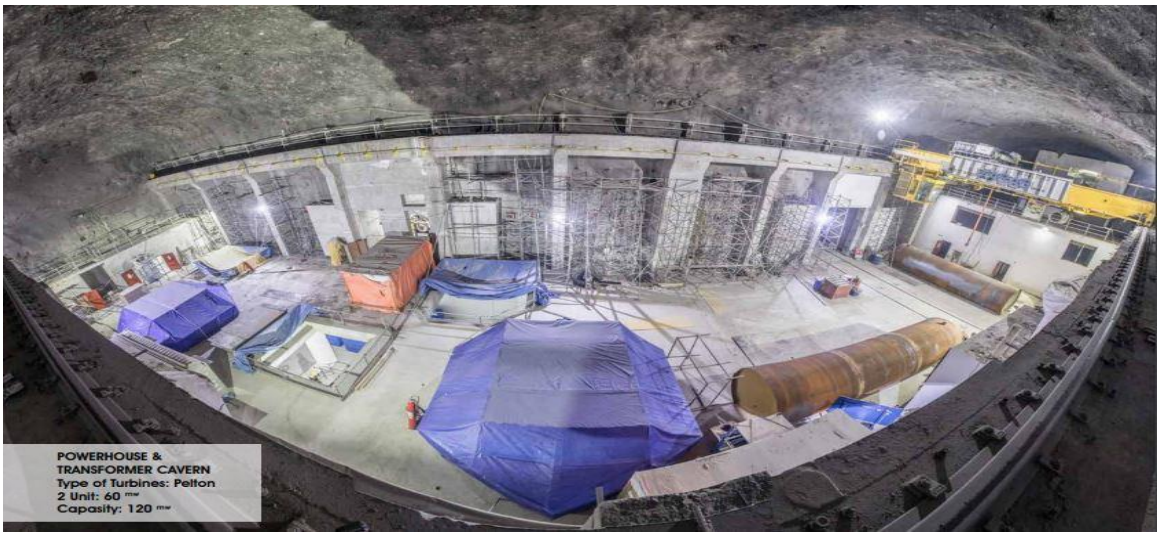
Puhulpola Dam

Dayraaba Dam

Link Tunnel Intake

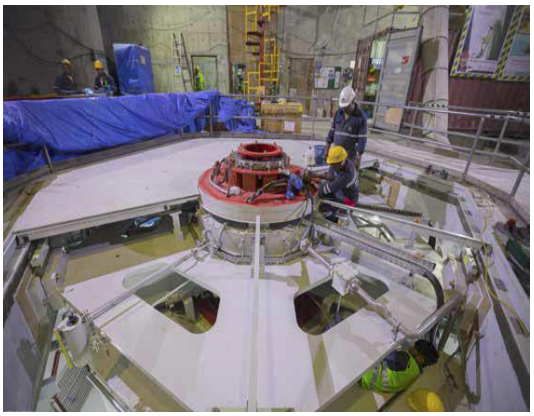


Head Race Tunnel



Underground Power House

Main Transformer Installation



Generator in Place

Transmission Line under construction

Overall progress of Head Works by end of December 2018 is 87.80 % and the detail activity-wise progress is given below:

UOMDP Head Works - Activity-wise Progress as at 31-12-2018	
Major Activity	Physical Progress
Puhulpola Dam	82.33%
Link Tunnel	93.98%
Dayraaba Dam	91.97%
Headrace Tunnel	73.19%
Surge Tank and Surge Shaft	51.68%
Vertical Pressure shaft	92.17%
Power House	90.46%
Main Access Tunnel and Other access tunnel	94.77%
Access roads and Relocation Road	78.51%
Transmission Line	87.27%
Tailrace Tunnel	95.86%
Overall Head Works	**87.80%**

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 2018 stands at 72.0% with the Alikota Ara Regulating Reservoir and work on Handapanagala Tank being nearly complete. The activity-wise detail progress is given below.

AlikotaAra Dam

AlikotaAra Reservoir Spillway

Transfer Canal

Village tanks being rehabilitated

UOMDP - Downstream Development: Activity-wise Progress by End of December 2018	
Major Activity	**Physical Progress**
Construction of Alikota Ara Reservoir	99.5%
Construction of Kuda Oya Reservoir	65.0%
Capacity Enhancement of Handapanagala Wewa	88.0%
Construction of LB Canal System in Handapanagala Scheme	77.0%
Alikota Ara - Kuda Oya Transfer Canal	36.0%
Kuda Oya - Sinhalayagama Transfer Canal	64.0%
Rehabilitation and upgrading of village Tank Systems	45.0%
Overall Downstream Development Works	**72.0%**

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

The overall physical and financial progress of the Project as at 31stDecember 2018 are given below:

Activity	Physical Progress		Financial Progress			
	Cumulative Progress 2017 (%)	31/12/2018 Cumulative Progress (%)	Total Estimated Cost (Rs. Mn)	Cumulative Expenditure 2018 (Rs. Mn)	liabilities (Rs. Mn)	31/12/2018 Cum. Expenditure Including liabilities (Rs. Mn)
UOMDP Head Works	82.38	87.80	80,447.5	62,884.4	209.8	63,094.2
Downstream Development	48.0	72.0	9,352.5	5,699.8	710.8	6,410.6
Overall Project Progress	78.9	86.22	89,800.0	68,584.2	920.6	69,504.8

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 atlimiting 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 Machines (TBM) were further modified so that the coverage and interlacing of pre-grouting for sealing is enhanced. Number of probes in the TBM face was 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 could be satisfactory and the accepted levels of water ingress has been achieved with the flow at tunnel portal reduced to 200 l/s by end of 2017. Accordingly, the construction of balance section of the tunnel is ongoing 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 construction period of Head Works has been extended till end of 2019.

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	: 23rd October 2014
Closing data of the Project	: 15th May 2018
Financial Closing date of the Project	: 30th 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 and 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 established 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 contracts 16 contracts completed including Victoria. Progresses of the 31 contracts are given below.

Spillway operating system of the modernized Babarawana reservoir

Reconstruction of the Beambawana reservoir

No	Dam	Contract Amount (LKR Millions)	Starting date	Completion or intended completion date	Major activities and Current progress as at 30th September 2018
Irrigation Department					
1	Angamuwa	172.99	1st Mar 2016	5th December 2016	Physical Progress- 100% Financial Progress -100%
2	Padaviya	131.1	25th Feb 2016	25thAugust 2017	Physical Progress - 100% Financial Progress -87.53%
3	Thoppur	48.3	24th May 2016	20th October 2017	Physical Progress - 100% Financial Progress - 87%
4	Mahakanadarawa	105.99	25th Feb 2016	1st March 2017	Physical Progress - 100% Financial Progress – 100 %
5	Mahawilachchiya	218.08	3rd Feb 2016	3rd August 2017	Physical Progress - 100% Financial Progress - 95%
6	Wan Ela	69.17	8th May 2016	1stDecember 2017	Physical Progress - 100% Financial Progress -97.50%
7	Soraborawewa	20.17	4th Aug 2016	30th November 2017	Physical Progress - 100% Financial Progress -100%
8	Janaranjanawewa	108.47	15th Aug 2016	30thMarch 2018	Physical Progress - 100% Financial Progress - 98.80%
9	Kottukachchi	74.54	2nd Aug 2016	30thMarch 2018	Physical Progress- 100% Financial Progress -80.97%
10	Bandagiriya	78.29	30th Aug 2016	11thApril 2018	Physical Progress - 100% Financial Progress - 67%
11	Nawagiriwewa	89.06	22nd Aug 2016	11th April 2018	Physical Progress - 100% Financial Progress - 91%
12	Unnachchai	76.47	19th Sep 2016	11th April 2018	Physical Progress -100% Financial Progress – 68.08%
13	Kachchimadu	97	8th Aug 2016	15th May 2018	Physical Progress - 60% Financial Progress - 58.23% (Terminated The Contract)
14	Baduluoya	59.85	23rd Nov 2016	15th May 2018	Physical Progress - 100% Financial Progress - 63%
15	Muthukandiya	20.45			Physical Progress - 100% Financial Progress - 91%
Mahaweli Authority of Sri Lanka					
1	Victoria	1,453.20	29 January 2015	8th March 2017	Physical Progress - 100% Financial Progress -100%
2	Henanigala	130.08	23rd Jan 2016	22nd April 2017	Physical Progress 100% Financial Progress – 100%
3	Bambarawana	61.41	14th Jan 2016	14th April 2017	Physical Progress 100 % Financial Progress – 98.92%
4	Pusselavinna	43.94	14th Jan 2016	11th June 2017	Physical Progress 100% Financial Progress – 98.81%
5	Ulhitiyarathkinda	266.4	12th Aug 2015	26th March 2017	Physical Progress 100% Financial Progress – 87.23%

6	Urusitawewa	48.66	9th Nov 2016	December 2017	Physical Progress -100% Financial Progress – 100 %
7	Ambagahagama	34.72	16th Sep 2016	28th February 2018	Physical Progress - 100% , Financial Progress – 82.5%
8	Panakkaniya	13.82	13th Sep 2016	10th April 2018	Physical Progress -100% Financial Progress – 91.12%
9	Pimburaththewa	270.41	8th April 2016	11th April 2018	Physical Progress - 100% Financial Progress – 100 %
10	Muwagammana	64.09	28th Mar 2016	31st March 2018	Physical Progress -100% Financial Progress – 70%
11	Minipe TBC	495.47	7th Nov 2014	28th February 2018	Physical Progress - 100% Financial Progress – 100%
12	Udawalawa	91.47	11th Aug 2016	31st March 2018	Physical Progress -100 % Financial Progress 97.58%
Northern Provincial Council					
1	Periyapandivirachchan	72.44	8th Nov 2014	30th April 2016	Completed. Financial Progress - 100%
2	Muthuiyankaddu Civil	171.5	20th Feb 2015	1st December 2016	Completed. Financial Progress - 100%
	Muthuiyankaddu Electro Mechanical	428	1st Mar 2015	12th March 2016	Completed. Financial Progress - 100%
3	Thondamaru Civil	112.37	25th July 2016	30th April 2018	Completed. Financial Progress - 100%
	Thondamaru Electro Mechanical	297.85	17th June 2016	30th April 2018	Completed. Financial Progress - 100%
Kandy Municipal Council					
1	Roseneath	24.62	27th Jul 2016	30th November 2017	Completed. Financial Progress - 96.45%
2	Dunumadalwa	43.94	18th Aug 2016	15th May 2018	Completed. Financial Progress - 52%
Ceylon Electricity Board					
1	Maussakele	69.24	26th July 2017	11th April 2018	Completed. Financial Progress - 100%

Progress of other major contracts under DSWRPP- AF

No	Name of Contract	Current Progress	Contract Amount
1	Electrification and automation of Rajangana&Kaudulla radial gates	Completed	LKR 226.47 Mn
2	Polgolla flood and reservoir control center	Completed	LKR 307.15 M
3	National center for Dam Safety	Completed.	LKR 25.17 Mn
4	Replacement of Rajangana dam 1-15 radial gates	Completed	LKR 282.58 Mn.
5	Replacement of Rajangana dam 16-30 radial gates	Completed	LKR 255.79 Mn
6	Preparation of Emergency Action Plans for remaining 8 dams	Completed.	Rs. 12.89 Mn
7	Establishment of Hydro-meteorological System.	Original Contract; Out of 122, 120 stations completed. Installations of 4 stations out of 120 were completed by Trained staff of IAs. Two data centers completed and web portal functioning for internal data management staff. Additional Financing 45 HMIS station installation completed and new data is receiving from 165 station to the two data centers for water resource planning and real time flood monitoring	
8	Expansion of groundwater monitoring network	Expansion of groundwater monitoring network for the seven pilot areas completed.	
9	Improvement to training centers for dam operating staff – Galgamuwa	Completed.	LKR 184.4 Mn.
10	Establishment of Kotmale Office & Training Center for dam operation staff	Completed	LKR 152.78 Mn
11	Rehabilitation Castlereigh Bottom outlet valve	Completed	28thAugu 2017 LKR 83.40 Mn
12	Development of Operational Model for WMS of MASL	Completed	LKR 151.96 Mn
13	Geodetic Survey in VIctoria	Completed	17th July 2017 LKR 88.20 Mn

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.

	Dam	Preparation of EA	Incorporating EMP in to bid document	Preparation of Monitoring Metrix	Progress of EMP Implementation
	North Provincial Council				
1	Muttiyankaddu	Completed	Completed	Completed	100 % Completed
2	Periyapandivirichchan	Completed	Completed	Completed	100% Completed
3	Thondamanar Barrage	Completed	Completed	Completed	100 % Completed
	Mahaweli Authority of Sri Lanka				

4	Ulhitiya - Rathkinda	Completed	Completed	Completed	100 % Completed
5	Henanigala	Completed	Completed	Completed	100 % Completed
6	Bambarawana	Completed	Completed	Completed	100 % Completed
7	Pussalavinna	Completed	Completed	Completed	100 % Completed
8	Urusitana	Completed	Completed	Completed	100 % Completed
9	Victoria	Completed	Completed	Completed	100 % Completed
10	Ambagahagama	Completed	Completed	Completed	100 % Completed
11	Panakkaniya	Completed	Completed	Completed	100 % Completed
12	Muwagammana	Completed	Completed	Completed	100 % Completed
13	MinipeTrans basin Canal	Completed	Completed	Completed	100 % Completed
14	Pimburaththwa	Completed	Completed	Completed	100 %Completed
15	Udawalawa	Completed	Completed	Completed	100 % Completed
	Department of Irrigation				
16	Padaviya	Completed	Completed	Completed	100 % Completed
17	Angamuwa	Completed	Completed	Completed	100 % Completed
18	Mahakanadarawa	Completed	Completed	Completed	100 % Completed
19	Wanela	Completed	Completed	Completed	100 % Completed
20	Thoppor	Completed	Completed	Completed	100 % Completed
21	Soraborawewa	Completed	Completed	Completed	100% Completed
22	Rosneath	Completed	Completed	Completed	100% Completed
23	Mahavilachchiya	Completed	Completed	Completed	100% Completed
24	Janaranjanawewa	Completed	Completed	Completed	100% Completed
25	Kottukachciya	Completed	Completed	Completed	100% Completed
26	Bandagiriya	Completed	Completed	Completed	100% Completed
27	Nawagiriwewa	Completed	Completed	Completed	100% Completed
28	Dunumadalawa	Completed	Completed	Completed	100% Completed
29	Unnachchiya	Completed	Completed	Completed	100% Completed
30	Kachchimadu	Completed	Completed	Completed	100% Completed
31	Mutukandiya	Completed	Completed	Completed	100% Completed
32	Baduluoya	Completed	Completed	Completed	100% Completed
	Ceylon Electricity Board				
33	Maussakele	Completed	Completed	Completed	100% Completed

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	-	2,851	11,062
Mahavilachchiya	1,778	-	-	1,778	7,645
Muthiyankaddu	1,663	52	505	2,220	7,650
	6,206	138	505	6,987	26,357

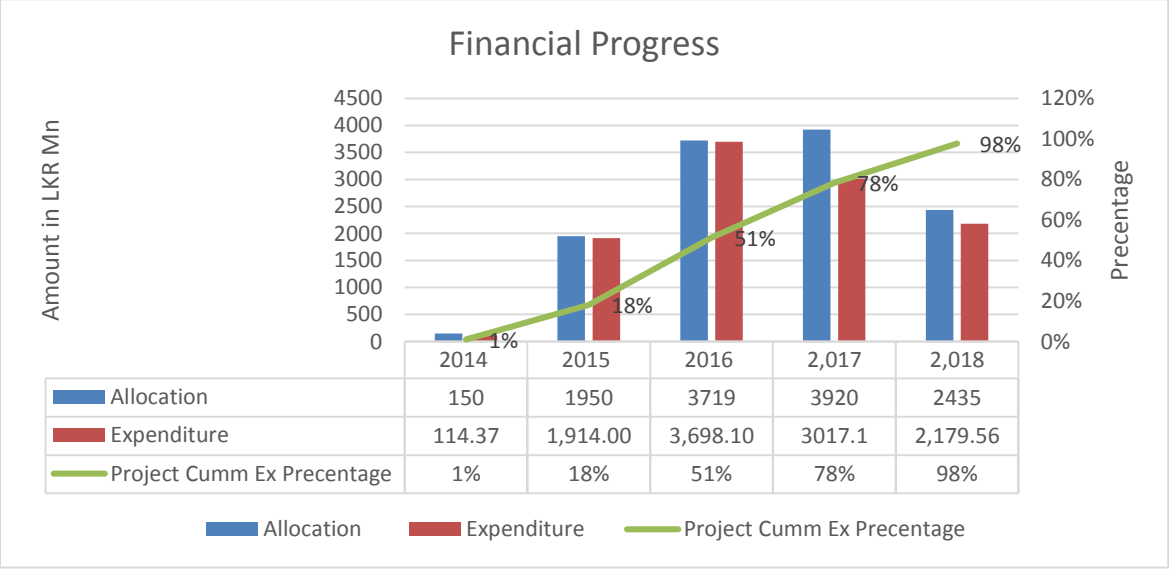
- The project commenced of LSA implementation of the all 3dams from June 2016 up to October 2016.

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 progamme was successfully completed and saving has utilized for the renovation of Irrigation Management Division building in Anuradhapura.

Financial Progress of the Project



Rehabilitation of Janaranjana tank

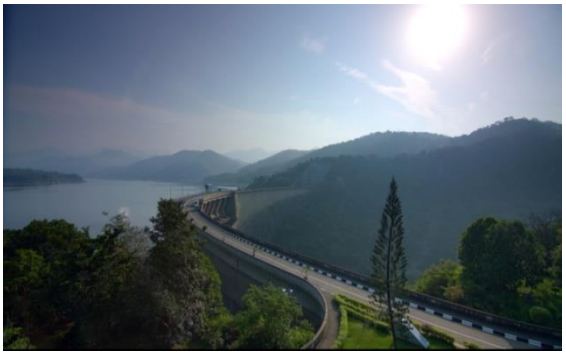
Downstream gates and security structures Janaranjan tank

Drainage system with drainage water and drainage leak

Thopur tank bund built

After reconstruction of UlhitiyaRathkinda

Improved Spillway Operating System - UlhitiyaRathkinda



Renovated Victoria Dam – Mahaweli Authority of Sri Lanka

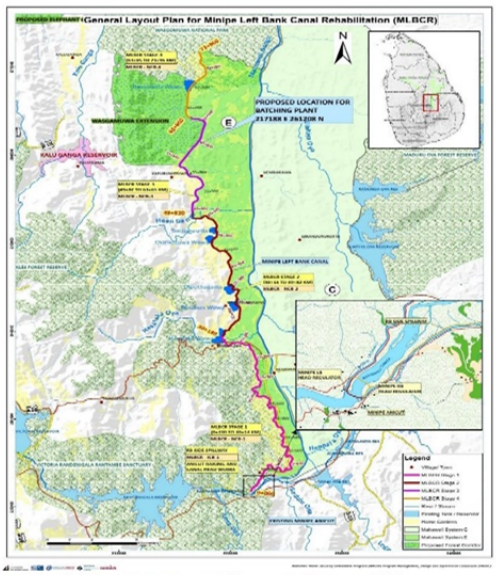
Renovated Sorabora Tank – Department of Irrigation

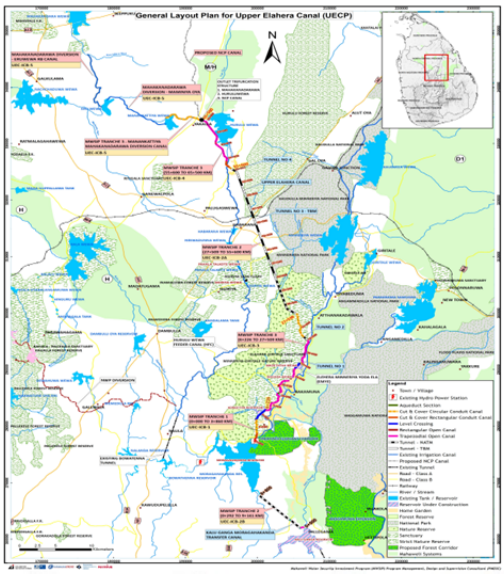
Renovated Muthiyankaddu Dam – North Provincial Council

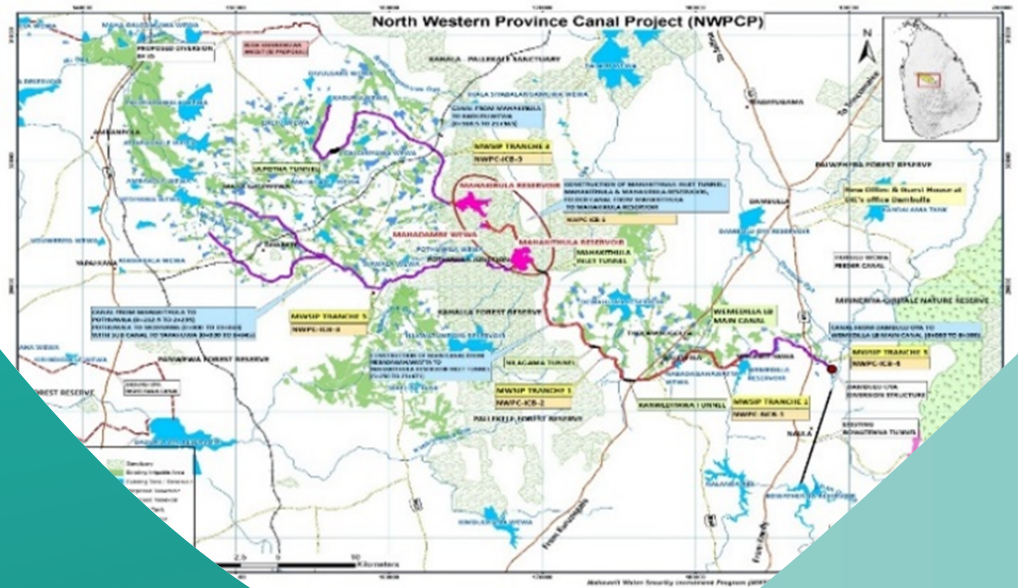
Renovated Rajanganaya Dam – Department of Irrigation

Renovated Maussakele Dam – Ceylon Electricity Board

Hydro-Meteorological Information System (HMIS) Station







Mahaweli Water Security Investment Program

The Mahaweli Water Security Investment Program will accelerate the economic activities of Sri Lanka's northern dry zone region by transferring surplus water from the Mahaweli river basin for irrigation, drinking and commercial purposes. It will develop bulk water conveyance and storage infrastructure planned under the North Central Province Canal Program (NCPCP), a high priority program of the government that will support completion of the Mahaweli Development Program (MDP), which started in 1973.

ADB and the government signed the financing framework agreement (FFA) for the investment program on 23rdApril 2015. On 24thJune 2015, the board approved the provision of loans to Sri Lanka under a multi tranche financing facility (MFF) of up to $453 million equivalents to be implemented between July 2015 to December 2024. The MFF comprises three tranches and uses the time-slicing approach with individual tranche outputs covering pieces of the overall facility's outputs:

Output 1 under the investment program will implement three projects: (i) the Upper Elahera Canal Project (UECP) comprising about 101 kilometers (km) of water conveyance infrastructure linking the existing reservoirs at Kalu Ganga, Moragahakanda, Huruluwewa, Eruwewa, and Mahakanadarawa, which supply existing irrigation and town supply schemes; (ii) the North Western Province Canal Project (NWPCP) that will construct about 91 km of new and rehabilitated conveyance channels and two new reservoirs at Mahakithula and Mahakirula to transfer water from the DambulaOya River and Wemedilla reservoir to command existing irrigation and town supply schemes; and (iii) the Minipe Left Bank Canal Rehabilitation Project (MLBCRP) that will increase storage in its head reservoir and rehabilitate about 74 km of existing canals to improve conveyance and reliability of service to existing farmers.

Tranche 2 outputs will have two main outputs: (i) completion of new and improved water conveyance and storage infrastructure increased; and (ii) multidisciplinary investment program management operational. Output 1 includes construction of about 21 km out of 101 km of conveyance channels under the UECP and the continuation of construction activities under the NWPCP that were initiated under Tranche 1. Specifically, Tranche 2 will finance: (i) partial

construction of a 28 km of tunnel, using tunnel boring machine and drill and blast construction methods; (ii) partial construction of about 8.8 km of new tunnels and channel using drill and blast construction method; (iii) continuing construction of the Mahakithula and Mahakirula Reservoirs, and Mahakithula Inlet Tunnel that will be initiated under Tranche 1; and (iv) project management recurring costs.

Program Impact

Improved agricultural production and sustained economic growth in the North Central Province, Central Province, North Western Province and Eastern Province.

Program Outcome

Outcome secured access to water resources for agricultural and drinking purposes in project areas .

Program Outputs

1. New and improved water conveyance and storage infrastructure constructed.
2. Systems for improving water resources management and productivity developed.
3. Multi-disciplinary investment program management operational.

Overall Economic Benefit

Raising paddy production in 32,800 ha of existing command area by increasing cropping intensities from 130% to 180% and yields from about 3 tons/ha to 6 tons/ha.

Other Benefits

Build more than 260 kilometers of new and upgraded canals, reservoirs and other irrigation infrastructures.

- Helping to deliver clean drinking water for over 350,000 people.
- Increasing Water efficiency.
- Feeding water to 13 major reservoirs and 353 minor tanks in the North Western Province.

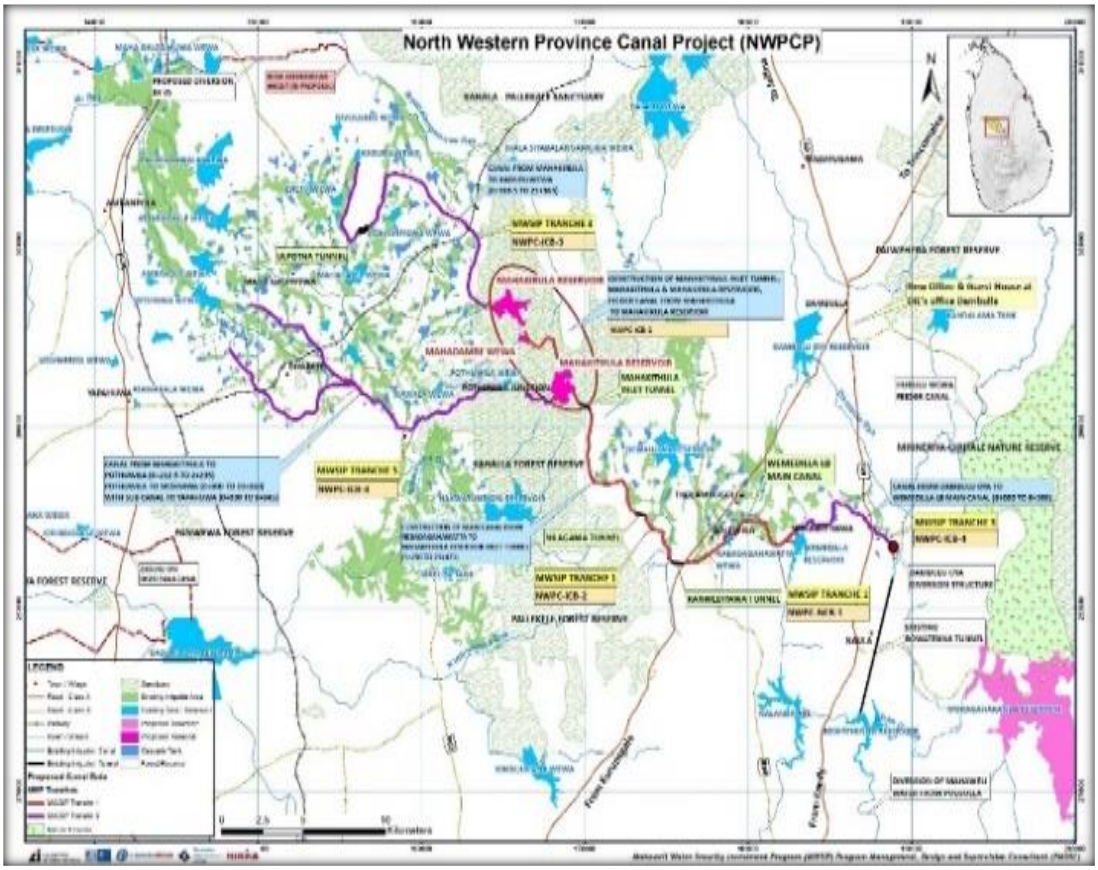
Minipe Left Bank Canal Rehabilitation Project (MLBCRP)

- 74 km canal rehabilitation
- Gate rehabilitation and motorization
- Minipe Anicut raising by 3.5M and Head works Reconstruction

Rehabilitation activities on the left bank bank of Minipe

North Western Province Canal Project

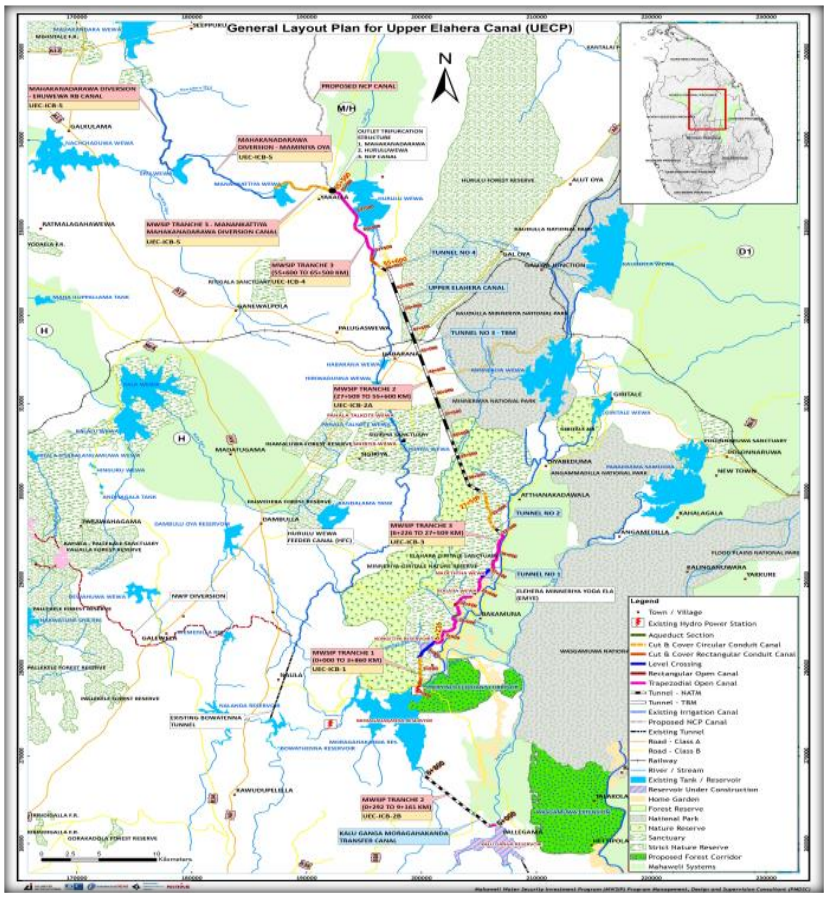
- 96 km of new and upgraded canals (including 940 m of tunnel)
- 2 earth dams 26m high



Improvement of Wemadilla left bank canal to Nabadagahawaththa

North Central Province Canal Project

- 65 km new canal/conduit
- 8 km tunnel connecting Kaluganga and Moragahakanda



Constructions of North Central Province Canal Project

Overall Project Progress and Major Activities

Program Progress

This annual report is presented the financial and physical progress of year 2018 incompliance with the Annual Action Plan (AAP) 2018. As per the AAP, the program is mainly targeted to implement the infrastructure activities of Minipe Rehabilitation Project (MLBCRP), North Western Province Canal Project (NWPCP) and North Central Province Canal Project (NCPCP). So the following tables present the overall financial and physical progress of the major activities as at 31st December 2018. In addition, the progress of the awarded contracts is also presented.

Financial Progress

Project period	Total Estimate Rs. M. (tranche 1 & 2)	Annual allocation (2018) Rs.M.	As at 31.12.2018			Annual progress %	Cumulative Progress as at 31.12.2018	
			Target Rs.M.	Progress Rs.M.	Progress %		Rs.M.	%
2015-2024	64,282.00	5,199.00	5,199.00	5,065.37	97	**98**	8,271.61	13

Physical Progress

Item	Annual Physical Targets %	As at 31.12.2018	
		Target %	Progress %
Minipe Left bank Canal Rehabilitation Project (MLBCRP)	24	24	24
North Western Province Canal Project (NWPCP)	31	31	30.5
North Central Province Canal Project (NCPCP)	22	22	21
Consulting Services (PMDSC, ISEWP & Expert Panels)	12	12	12
PMU & PIU Operations and Maintenance (Utility Shifting, Community Work Contracts, Field Office Work, Office Equipment's, Vehicles, Salaries, Training, Equipment Operation & Maintenance, Environmental & Social Mitigation and Strategic Communication Plan)	11	11	10.5
Total	**100**	**100**	**98**

Contract Progress

Contract Package	Contract Amount (Rs.Mn)	Expenditure (Actual work done) (Rs. Mn)	Physical Progress as at 31 Decmber 2018 (%)
MLBCR-NCB-1	414.16	202.2	**71**
MLBCR-NCB-2	343.03	98.17	**59**
MLBCR-NCB-3	829.03	262.58	**34**
MLBCR-NCB-4	246.98	136.35	**90**
MLBCR-NCB-5	425.5	40.35	**23**
MLBCR-ICB-1	2144.52	123.82	**10**
UEC-ICB-1	3742.44	813.25	**28**
UEC-ICB-2B	8218.95		**2**
NWPC-NCB-1	926.11	468.32	**60**
NWPC-ICB-2	7266.82		**1**

Ecosystem Conservation and Management Project (ESCAMP)

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 will generate national and local environmental and community-level benefits. At the national level, the project will develop the capacity of the key implementing agencies, the Department of Wildlife Conservation (DWC) and the Forest Department (FD) to manage PAs more effectively and based on modern PA and landscape management approach. Locally, the project will directly benefit approximately 15,000 people out of which at least 30 percent are expected to be female beneficiaries from communities located in the adjacent areas of the participating PAs. It will also benefit other sensitive natural habitats by supporting sustainable use of natural resources and the mitigation of the human-elephant conflict etc.

The project was designed to implement from 2017-2021.

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

No	Project Components	Project cost (US$ million)
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**

Major Activities Performed by Project Components

Component 1: Pilot Landscape Planning and Management

The project is financed to a new planning process which will look at ecologically functional wider landscape units that will provides guidelines and principles for management of protected areas and ecosystems outside the designated PA network.
Following activities have been completed during the period from 31.01.2018 to 31.12.2018 under this Component.

- Completed 03 Regional Level Planning Committee Meetings with regard to the appointing of Regional Level Planning Committees. Accordingly completed 06 working group meetings with the guidance of Regional Level Planning Committees and they were conducted following Focus Group Discussion (FGD) methodologies.
- Both primary and secondary data collection was completed by recruited consultants and they have submitted the final copies of study reports based on field findings.
- The draft supplementary report for the final Landscape Management Plan has completed with the information given by the regional level planning committees.
- One-day workshop was conducted on the development of proposals and 46 field based offices from both FD and DWC were participated.

- Two radio programs were conducted through SLBC. Also Two radio programs were conducted through SLBC. In addition, the production of a video documentary on landscape planning has also been completed.
- EOIs were called to hire a consultancy firm to complete the planning process for first Landscape Management Plan for Dry Zone. Accordingly, 12 consultancy firms have been responded and three (03) were shortlisted to call Request for Proposals (RFPs).

Component 2: Sustainable Use of Natural Resources and Human-Elephant Co-Existence

Component 2 is supported to the communities who are living adjacent to PAs and other ecologically sensitive areas to plan for natural resource use and to develop biodiversity compatible, productive and climate resilient livelihood activities and to scale-up successful models that address the human-elephant conflict.

Sub-component 2(a): Sustainable Use of Natural Resources for Livelihood Enhancement

The project is supported the development of sustainable natural resources based livelihood options for communities living adjacent to PAs in order to obtain their participation for conservation and management and also minimize their dependency. Community Action Plans (CAPs) have been developed by the FD and Micro Plans have been developed by DWC through participatory community consultation process to identify the biodiversity-friendly and climate-smart livelihood options.

Progress of the FD

Altogether 41 CAPs have been developed by the FD covering 91 villages. At the beginning of 2018, PMU hired a short-term consultant on Community Development and Livelihood and he has conducted seven (07) training programs and workshops on the preparation of CAPs, writing proposals, participatory management, livelihood development, gender and assessing other training needs for capacity building etc. for selected Range Forest Offices (RFOs), Extension Officers (EOs) and Field Assistants (FAs) in the Forest Department. The following table illustrates the physical progress of the field project sites up to end of 31st December 2018.

Field project site	Physical progress of the sub-component 2(a)
Anuradhapura	- Conducted 26 training programs for selected community members on Bee keeping, value added food producing and community forestry etc. All together 222 trainees were participated. - Assisted to commence 64 income generating activities (23 were female beneficiaries) such as distributed sawing machines, hand looming machines,

	boxes for bee keeping and machines for value added foods production etc. - Two (02) health camps conducted where altogether 255 patients were participated. - Developed 472 home gardens of which 352 (74%) were female beneficiaries.
Polonnaruwa	- Conducted 4 training programs (163 trainees) on healthy foods production, beetle cultivation, bee keeping, sewing training and bag training. - Assisted to start 6 income generating activities such as distributed sawing machines, boxes for bee keeping and to begin community forestry activities.
Puttalam	- Conducted 6 community awareness programs. - Assisted to commence 500 home gardens of which 18 were female beneficiaries.
Kurunegala	- Distributed 02 tailoring machines as income generating intervention. - It was planned to assist 100 home gardens during the 4th quarter of 2018, however the completion of that task was unable to fulfill due to adverse climatic conditions.
Mathale	- Assisted to commence 482 home gardens of which 82 were female beneficiaries. - Renovated field canal (about 110m) and it covers 60 Ac of paddy field in Illukumbura area. Also two (02) drinking water wells have been renovated and all together 292 benefited households are covered by both interventions. - Sanitary equipment was distributed among 8 families who did not have permanent toilet facilities in the Atanwala village.
Kandy	- Conducted 8 training programs (649 trainees) on Bee keeping, establishment of nurseries, Garcinia production, Coffee production, organic farming, modern agricultural techniques, Pepper cultivation and Ginger and Turmeric cultivation. - Distributed planting materials for Garcinia production (30 HHs), distributed bee keeping boxes and related equipment (25 HHs), purchased materials related to improve drinking water facilities for 40 HHs and distributed sanitary materials for 25 HHs. - Assisted to start 83 home gardens during the 4th quarter of 2018. - School bags related equipment were distributed among 190 school children. - Two (02) health camps were conducted and 135 patients have been benefitted though that programs.
Rathnapura	- Assisted to develop six (06) home staying facilities in Kudawa and Pitakale villages. - The construction of a community hall is in-progress and it will be benefitted 247 families (of which 25% are females) in the Kudawa GND covering five villages (Kudawa, Pitakale, Pethiyakanda, Ketalapattala, Buthkanda).
Matara	- Conducted 6 training programs on Book keeping, Micro financing, Kithul products, Export agriculture and Tourist-guide program where 280 trainees (of which 27% were female) were participated.
Galle	- Assisted to develop10 home staying facilities, two (02) community halls and one (01) drinking water scheme. All together 264 families will be benefitted. - Developed 103 home gardens in 5 villages (48% were female beneficiaries).

Progress of the DWC

Community Development Consultant had identified relatively poor skills and knowledge on community consultation process by DWC filed level offices. Therefore, he conducted 3 comprehensive trainings on community consultation and mobilization for selected filed level officers of the DWC. Accordingly, following physical progress have been recorded during the reporting period.

Name of the village	Implementing activity	Physical progress
Koonwalana	Construction of a community water supply scheme	Procurement for purchasing related equipment is in progress. Further, a CBO has been nominated to build the structures and for maintenance.
Nedigamwila	Providing a buffet set for a community based catering service	Procurement is in progress to purchase relevant materials.
Yahangala-East	Providing materials to establish a 'Eco-Friendly Children Park'	Procurement for purchasing related equipment is in progress. Further, a CBO has been nominated to build the structures and for maintenance.

Sub-Component 2(b): Human-Elephant Co-Existence for Livelihood Protection

Component 2(b) is financed to scale-up successful Human-Elephant Coexistence (HECOEX) pilot projects within high Human Elephant Conflicting areas. Activities of this sub-component are implemented by the DWC and related community based organizations with the guidance of the Component Coordinator hired by the PMU. Further, this sub-component is also financed for studies to identify viable economic incentives for affected local communities and development of policies and procedures. Following physical progress related to the activities implemented under sub-component 2(b) was recorded during the reporting period.

Dahangaha Lake

Activity	Progress
(1) Countrywide Elephant Survey	– One-day workshop and one core-group meeting was conducted to finalize the data collection methodologies of the survey. – Agricultural Biotechnology Center at University of Peradeniya was selected and entered with a contract to do *Genetic Analysis of Dung Method* – Twelve Assistant Directors and Deputy Directors in the Head Office of DWC have been appointed to coordinate *Waterhole Count Method.* – *Individual ID Method* and *Questionnaire Survey Method* will be conducted under supervision of experienced scientist.
(2) Assessment of wild-elephant distribution, ranging pattern and monitoring	– 40 nos. of Radio Collars were procured and supplied to DWC. The procurement was handled by the PMU. Collaring plan to be finalized and DWC has now planned to place the collars to elephants from January to June 2019.
(3) Village and agricultural electric fencing program - Kurunagala and Anuradhapura district	– Anuradhapura and Kurunegala district were selected (11 from Kurunegala and 06 from Anuradhapura) to implement the pilot level village and agricultural fencing program. – Awareness programs on 'Village and Agricultural Fencing' were conducted for selected villages. – Contract was awarded to purchase village fence equipment by DWC and clearing the customs is in-progress. – A HEC survey was carried out in two villages to collect baseline information. – Street Drama to make aware among communities on HECOEX was produced and 27 drama session have been completed. – Recording of TV program (with Derana TV channel) was completed and telecasted.
(4) Establishment of Problem Elephant Rehabilitation Center (PERC) in Lunugamwehera NP	– Technical Committee for Cabinet Approval Tender Board has been appointed to assist the procurement process for this activity. – Tender was awarded for fence path cleaning and completed the task. – Contract has been awarded to construct 5 nos. of internal tanks in the PERC. About 35% of the work is completed. – Cost estimations and specifications have been completed to construct internal and service road network.

Sub-component 3(a): Protected area conservation and management

Component 3 is supported for interventions in PAs in compliance with the Fauna and Flora Protection Ordinance (FFPO) and the Forest Ordinance (FO); support nature-based tourism development, and strengthen the institutional capacity and investment capability for conservation and management. Sub-component 3(a) is financed to improve habitats by introducing best management practices in protected areas managed by both FD and DWC. Accordingly, priority PAs of the DWC and FD PA network are eligible for support under this sub-component, covering terrestrial, marine and wetland Ecosystem.

Progress of the FD

Main activity	Physical progress
(1) Reviewing, updating and preparation of PAs' Management Plans	– FD has updated Management Plans for Sinharaja Conservation Forest (CF) and developed a new management plan for Hurulu Forest Reserve (FR).
(2) Demarcation and maintenance of PA boundary	– 18 villages have been covered through 'Conflict Resolution' meetings. – 471 km of forest boundaries have been surveyed and demarcated (surveyed - 241km and demarcated – 230 km). – Purchased 6,560 boundary posts to demarcate forest boundaries in Hurulu-Anuradhapura, Hurulu-Polonnaruwa and Knuckles-Mathale. Further, 6,200 boundary posts (Hurulu-Anuradhapura – 4,500, Hurulu-Polonnaruwa – 1,500 and Knuckles-Mathale – 200) have been purchased and 500 posts (Sinharaja-Rathnapura) have been fabricated with the support of a CBO called 'Sinharaja Sumithuro' to use during first quarter 2019. – 431 km of forest boundaries have been maintained (cleaned the boundary and painted the posts) with the assistance of communities adjacent to Sinharaja FR.
(3) Habitat management, including control of Invasive Alien Species (IASs), habitat creation & enrichment etc.	– 128ha extent of new IASs sites were controlled at Hurulu-Polonnaruwa (100ha) and Wirakkodichole-Puttalam (28ha). – 592ha of IASs sites have been maintained.
(4) Restoration of degraded forests	– Implemented Assisted Natural Regeneration (ANR) in 148ha of new sites and 86ha extent of existing sites have been maintained. – Maintained 86ha Pinus under planting sites and 45ha of enrichment planting sites.

(5) Development, improvement & rehabilitation of PA management infrastructures	– 60% of construction is completed in 11 BFO quarters. Also Ministry Tender Board approval has been granted for another 10 quarters where construction is commenced of 6 quarters. – Construction is in-progress (60% completed) of an office building and quarters complex at Puttalam, Galwila -Weerakkodichole FR.
(6) Forest fire prevention and control	– Established 4 Nos. of Forests Protection Units at Sinharaja-Matara. – 103 km of fire belts have been maintained. – 17 km of new fire line around FRs have been opened.
(7) Rehabilitation and expansion of the road network within PAs	– 15% construction works were completed in access road at Sinharaja entrance in Kudawa-Rathnapura. – The contract was awarded to improve access road and car park at Kanneliya-Galle.

Progress of the DWC

Activity	Actions done during the first quarter 2018
(1) Reviewing, updating and preparation of PAs' Management Plans	– Procurement process has been started to hire a consultant to update Management Plans of DWC.
(2) Introduction of SMART Patrolling Tool for Wildlife PAs	– The implementation of SMART Patrolling-Phase I in 7 National Parks (NPs) is in-progress. Basic trainings for establishment of SMART Patrolling in these NPs were completed and related equipment were distributed among 07 NPs in 2017. – For SMART Patrolling phase II 7 trainings (2 basic trainings, 4 trainings on field data collection and 1 data management training) were completed covering 22 PAs and totally 180 field staff members were trained. – Technical Evaluation has been completed for the procurement of equipment for phase II of the SMART Patrolling.

(3) Rehabilitation of water sources in Yala NP	– 90% construction works of 10 tanks have been completed. The balance part was delayed due to adverse weather conditions in Yala NP (block II). – Cleaning and improving of 4 Nos. Rock Pools were completed. – Primary investigation and surveying were completed to construct 11 nos. of earthen concrete ponds.
(4) Habitat management, including control of invasive species, habitat creation & enrichment etc.	– The implementation of both IAS Management Plans for Udawalawa NP (400ha) and Lunugamwehera NP (200ha) is in-progress. Accordingly, 20ha extent of IAS in Lunugamwehera NP and 150ha of Udawalawa NP have been removed.
(5) Studies including forest die back issues	– Two workshops on forest die back were successfully completed – The development of two proposals on forest die back issues is in-progress.

Sub-component 3(b) - Nature-based Tourism in protected areas

This sub-component aims at enhancing the quality of nature-based tourism through planning of nature-based tourism and visitor services in PAs, based on needs and carrying capacity assessments. The sub-component will support to prepare systematic development plans for enhancing nature-based tourism in selected PAs, including establishing the optimum number of visitor and development and renovation of visitor services infrastructure. Further, this sub-component will support to improve the present status of visitor services such as guiding services and community based tourism services, etc.

During the period under review, the PMU was hired an International Consultant on Nature Based Tourism Development (NBTD) and he developed four (04) Nature Based Tourism Plans (NBTPs) for Sinharaja, Knuckles, Bundala and Udawalawa PAs and Carrying Capacity Assessment Report for Yala NP considering key factors such as Market Demand, Attraction Inventory, Infrastructure and Services, Supply and Competitiveness, Human and Institutional Capacity and Environmental Considerations etc. All these plans and related reports have been shared with the FD, DWC and WB to obtain the feedbacks and then finalized. Accordingly, nine workshops have been conducted by him to capacitate responsible officials in both Departments who are responsible for planning and implementation of tourism related developments and activities. Also a three-day (03) workshop was organized by the PMU to review the NBTPs for Knuckles (Mathale Division) and a comprehensive Action Plan was developed.

FD has maintained 12 km of nature trails in Hurulu-Polonnaruwa FR. Tender has been awarded on the improvement of 30kms nature trails at Kanneliya and Knuckles CFs (Anagimala Ella in Galle-

Sinharaja CF and Dawatagala, Dothulugala, Wedilunuguhawa, Deenston and Alugallena in Kandy Knuckles CF). About 60% of the construction work has been completed.
Three-day workshop was conducted by DWC at National Wildlife Research and Training Center (NWRTC), Girithale to develop comprehensive proposals on Nature-Based Tourism Development (NBTD). Accordingly, 25 new proposals on NBTD were drafted by the DWC and was ready to submit to PMU for scrutinizing and approval process.

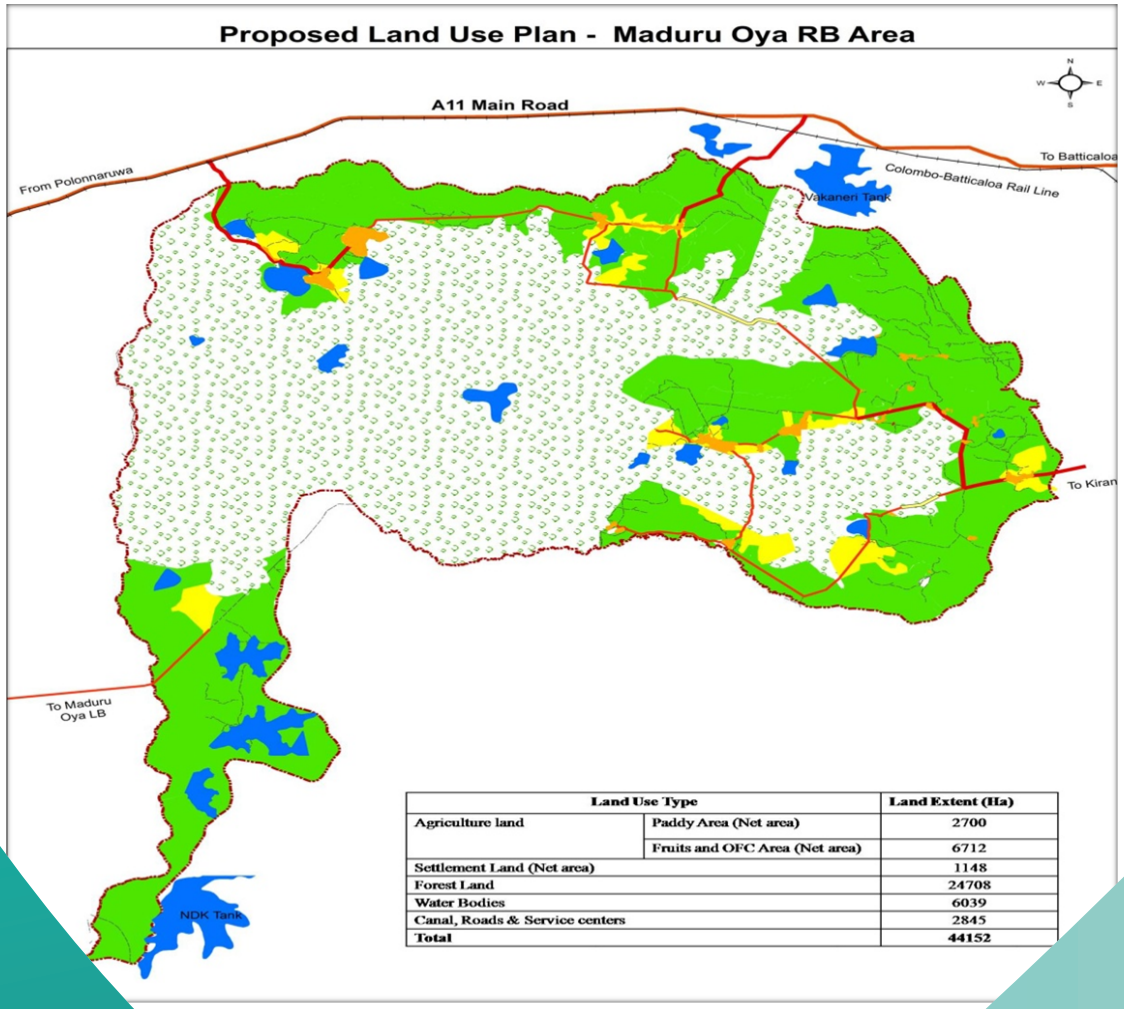
Sub-component 3(c) - Institutional capacity and investment capability of DWC and FD

Progress of the FD

Project is planned to support structural improvement and quality improvement of theFD training center. Accordingly, the Detailed Design on the development of Sri Lanka Forestry Institute (SLFI) was completed and it is at final improvement stage. Preparation of Conceptual Designs of the Inamaluwa Field Training Center has been completed and preparation of Detailed Design was also in final stage. Procurement process for the construction and improvement will be commenced during the first quarter 2019. PMU assisted to procure required field and office equipment (GPSs, Computers, other office equipment etc.) as requested by the FD mainly for their Divisional and Range offices.

Progress of the DWC

Project also provide its financial support to upgrade the DWC training institute as well. Detailed designs to improve the NWRTC was completed and called bids for consultation work. These Bids were closed on 28th December 2018. While using the ESCAMP funds, the DWC conducted their 'Wildlife Diploma Course' with the collaboration of University of Colombo for selected 27 Rangers and the first course was successfully completed. The PMU together with technical experts of DWC is designed to conduct a post-evaluation to evaluate the impacts of the course. The 'WILDLANKA-2018', an annual event was held on 7th-9th August 2018 with the part funding support of ESCAMP.
PMU has procured 8 Tractors and Tailors and 10 slashes to assist their habitat management programmes. In addition to that, 4 small excavators were also procured to assist the habitat management and road improvement works. In order to strengthen the institutional capacity at the field level equipment such as desktop computers and laptop computers were also procured and supplied to DWC.

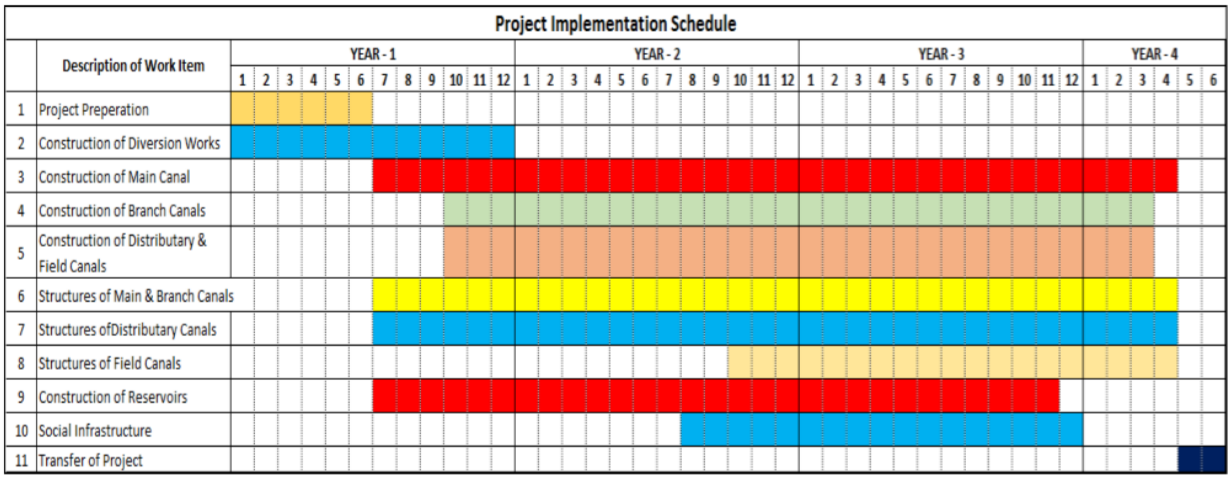


Maduru Oya Right Bank Development Project

Maduru Oya development project is the first major project taken up for construction under the Accelerated Mahaweli Development Programme (AMDP). Maduru Oya, lies between Mahaweli River and Mundeni Aru, with a tatal length of 135 km and a catchment area of 453 km^2. The command area of the Maduru Oya development project,with a gross area of 135,000 ha that includes a net irrigable area of 37,500 ha (22,000 ha in the left bank and 15,500 ha in the right bank). lies along the right side of the Maduru Oya and is bounded in the East by Kiran lagoon. On the south east by Miyangolla Ela and on the North and West by Maduru Oya.
At present the command area under the Maduru Oya left bank is about 20,000 ha. The current water duty of Maduru Oya left bank is estimated to be around 2.0 m and 1.6 m for Yala and Maha seasons respectively.

Project Expenditure – US$ 475 Mn
Project period – 04 Years
Contractor - China CAMC Engineering Co.Ltd

Implementation Program



Progress Achieved in 2018

- Signing of Engineering Procurement Construction (EPC) Agreement with China CAMC Engineering Co. Ltd
- Submission of EIA report
- Submission of Addendum of the EIA

PART II

Project Progress under the Ministry through Foreign Grants

1. Projects directly implemented by the Ministry

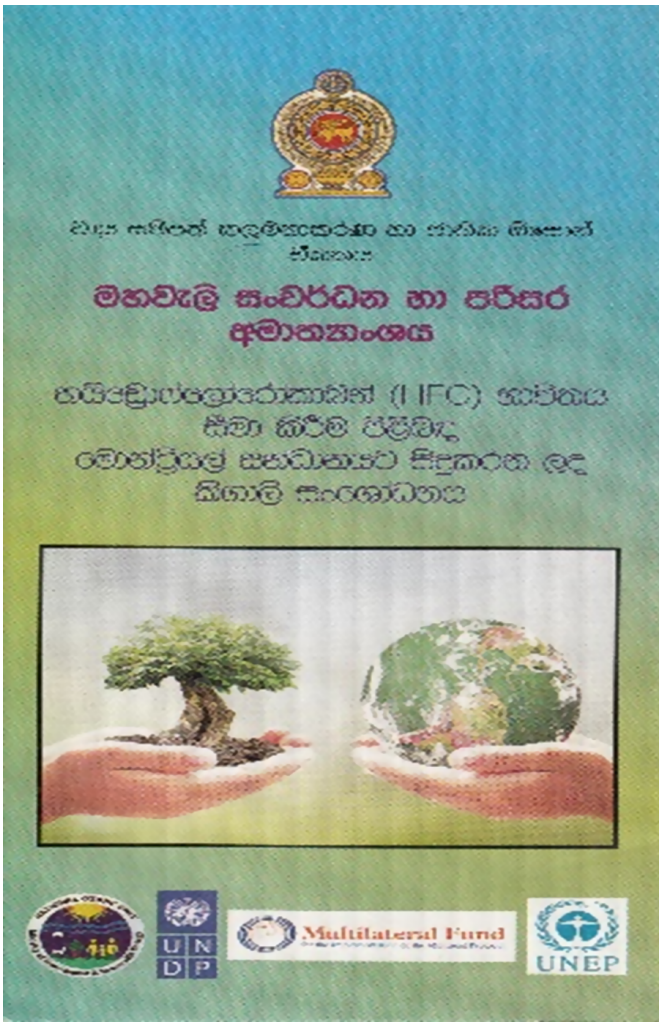
I. Implementation of Montreal Protocol (MP) Regulations in Sri Lanka

II. Mainstreaming Biodiversity Conservation and Sustainable use for Improved Human Nutrition and well-being

III. Mainstreaming Agro biodiversity Conservation and use in Sri Lankan Agro-ecosystem for Livelihood and Adaptation to Climate change

IV. Mercury Initial Assessment (MIA) under Minamata Convention

V. Air Quality Assessment for Health and Environmental Policies



Implementation of Montreal Protocol (MP) Regulations in Sri Lanka

Several legislative measures had been taken by the Montreal Protocol to control the consumption and gradual phase out of Ozone Depleting Substances (ODSs) complying with the MP regulations. At present, 55 out of 96 ODSs have been completely phased out on time as per the Phase-out schedule set out by the Montreal Protocol. Methyl bromide was banned for all applications-except for the Quarantine & Pre-shipment purposes (QPS). Remaining 40 Hydrochloroflurocarbons (HCFCs) chemicals are being phased out gradually since 2013 and it will be completed by 2030.

National Ozone Unit of the Ministry implemented several activities during 2018 to recover the ozone layer and reduce the global warming to confirm the protection of the life on the earth.

Establishment of Project Steering Committee (PSC) for Implementation of Montreal Protocol (MP) in Sri Lanka.

In order to strengthen the coordination of relevant stakeholders for implementing of MP in Sri Lanka, PSC was established in 2018 under the direction and approval of Secretary to the Ministry of Mahaweli Development & Environment. The PSC will be tasked with discussing the key important issues and to take policy/enforcement decisions to achieve targets of Montreal Protocol.

Issuance of Quota to import Hydrochloflurocarbon (HCFCs) for year 2018 (Mechanism for controlling the import of ozone depleting substances)

Implementation of Hydrochloflurocarbon (HCFC) Phase out Management Plan (HPMP) is in progress for the control and phase out of HCFCs. As a control measure for importing of HCFCs, National Ozone Unit issued quota to 24 registered institutions and restricted to import 164.761mt of HCFC during 2018.

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 Sri Lanka at its inception. Accordingly, 2017 report were submitted to the relevant secretariats in April 2018 and 2018 report will be submitted on April, 2019. Secretariats utilize these data received from each party to determine whether any illegal imports of ODSs have been taken place and also this will support to control illegal imports & exports of these chemical substances.

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) which having high ODS high GWP values. Therefore, in parallel to the global effort to minimize the climate change effect cause due to equipment working on R22 air Conditioners, Sri Lanka is formulating the measures to impose ban on import of equipment working with R 22, with collaboration of Department of Import and Export Control.

To encourage the purchase of Air Conditioners working with 0 ODP and Low GWP refrigerant (R 32 and R 290) and having capacity from 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). 97 units of ACs was purchased under this programme in 2018.

Establishment of R-22 Refrigerant Reclamation Centers.

With the control of HCFC import under HPMP, it is predicted that HCFC refrigerant for services and maintenance of equipment would be short supplied in future and for lessening the inconvenience, 8 refrigerant Reclaim Centres covering entire island have been established in collaboration with the Technical Colleges to purify (Reclaim) and reuse of used HCFC. The 9th reclaim center was established at the Gampaha Technical College on 5th June 2018 in parallel to the World Environmental Day 2018.

Grant Refrigerant Analyzer (Identifier) for Sri Lanka Custom

A refrigerant Analyzer is designed to differentiate various types of refrigerants and analyze their components contained. These analyzers are used to detect for any illegal import of refrigerants at the Custom entry point. Accordingly, NOU purchased 02 analyzers and handed over to Sri Lanka Customs by H.E. the President at the World Ozone Day celebration which was held on 17th September 2018 at BMICH.

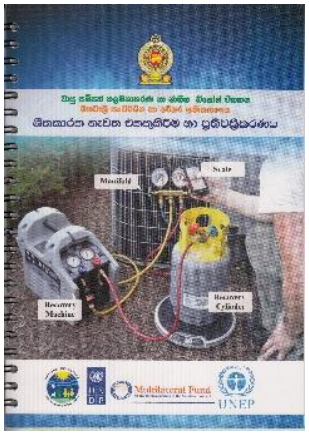
Preparation of Database in Ref /Ac Service sector providers

At the Project Steering Committee meeting, it was recommended to maintain a Database of Institutions and the details of technical staff of the Ref/Ac service sector, since HCFCs are used mainly in this sector. Accordingly, NOU has taken an action to register the Institutions and the Technicians of the Ref/Ac service sector at the Divisional Secretariat level under the direction of the District Secretariat and the Ministry of the Home Affairs.

Certification System and Formal Training Programme for Ref /Ac sector providers

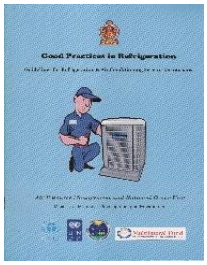
Many technicians who are working in this field have acquired proper training with recognized certificates. However, certain technicians are found to be not properly trained. Therefore, they may not have a sense of the damage caused by the release of refrigerants while they are working. To standardize the service of this technicians NOU has started the process to introduce a certification system after giving them a proper training and they will be awarded the certificate of Recognition for Prior Learning (RPL). This programme was initiated in 2018

The Kigali Amendment



197 countries including Sri Lanka adopted this amendment to phase down HFCs at the Meeting of Parties to Montreal Protocol in 2016. Under this amendment, countries committed to phase down 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 this 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.
Sri Lanka became the 28th Country that ratified for this Amendment.

Publicity through printed and electronic media on control and usage of ODS and phase down HFC under the Kigali Amendment



To achieve this target in Sri Lanka, NOU has launched an extensive publicity programme through print and electronic media. Printed materials such as leaflets, booklets, News bulletins and books were printed and initial steps were taken to produce of 02 video documentaries related to the protection of ozone layer and climate change. 04 paper advertisements were published in three languages (Sinhala, Tamil, English) to spread this message to the public.

Awareness Programme organized by National Ozone Unit (NOU)

- **Capacity Building Workshops for Customs Officer and Officers of Department of Export and Import Control to prevent illegal importation of ODSs.**

NOU conducted two training workshops and trained 116 Customs Officers and 100 officers attached to the Department of Export and Import Control were also trained. Identifying ODSs using refrigerant identifiers is also demonstrated at these sessions. This practical activity helps Customs officers to use the identification equipment before releasing consignment of refrigerant from the harbor.

- **Introducing Green Technologies for REF/AC Service sector**

13 training workshops on green technologies were conducted for Ref/Ac technical students attached to Technical Colleges, Vocational training centers and Owners of the Ref/Ac service sector workshops and technicians to minimize or prevent release of refrigerant to the atmosphere while repairing ref/ac equipment. New conditions were included to EPL (Environmental Protection Lysence) guidelines for recover refrigerant without releasing them to the atmosphere. Practices in green technology at Ref/Ac service workshops is mandatory with the effect from 01 January 2019.

- **Training/Awareness programs for teachers, government officers, police officers and school students**

NOU conducted 26 workshops for teachers, government officers, police officers and school students on topics covering Ozone Layer, Ozone layer depletion and its harmful effects on climate change, biodiversity and human health.

- **Special Awareness Programmes for Environment Pioneers**

National Ozone Unit launched a special programmes for the gold and silver medalist of the Environment Pioneers in collaboration with the Central Environmental Authority and the Ministry of Education.

1). Two-day residential awareness programme on Ozone layer depletion and related issues on Climate Change, Biodiversity and Human health. 05 workshops were conducted in North, Eastern, Central, Uva and Sabargamuwa

2). Island-wide Ozone Quiz Programme - This was held in parallel to the celebrating World Ozone Day 2018 and conducted this programme for the Gold and Silver

medalists of Environment Pioneer Team. The programme was conducted in both Sinhala and Tamil medium. In Sinhala medium 16 of environment pioneers attached to the 16 districts and 05 groups of environment pioneers in Tamil medium attached to 05 separate districts were participated. Finally 07 Sinhala medium programmes and 01 Tamil medium programme had been telecasted on ITN (Independent Television Network)

- **International Ozone Day - 2018**

Montreal Protocol celebrated its 31st Anniversary and Sri Lanka held World Ozone Day celebration on 17th September 2018 at the Bandaranayeka Memorial International Conference Hall (BMICH) under the patronage of His excellency Maithripala Sirisena, President of republic of Sri Lanka as the distinguished Chief Gusts. Hon Deputy Minister Ajith Mannapperuma also graced this occasion. The theme of this year was "Keep Cool – Carry on Montreal Protocol". A Round Table Discussions also held in parallel to World Ozone Day.

Mainstreaming Biodiversity Conservation and Sustainable use for Improved Human Nutrition and well-being (BFN)

- **Knowledge Based Activities**

Food composition Analysis -
Selected set of underutilized species composed of fruits, vegetables and leafy vegetables were analyzed under this project for its composition in order to popularize the nutritional benefits and importance of consumption among the population. Altogether 33 underutilized species have been analyzed in 2018 under the support of Fruit Research Center, Gannoruwa and Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya.

- **Policy, Regulatory Frameworks & Markets**

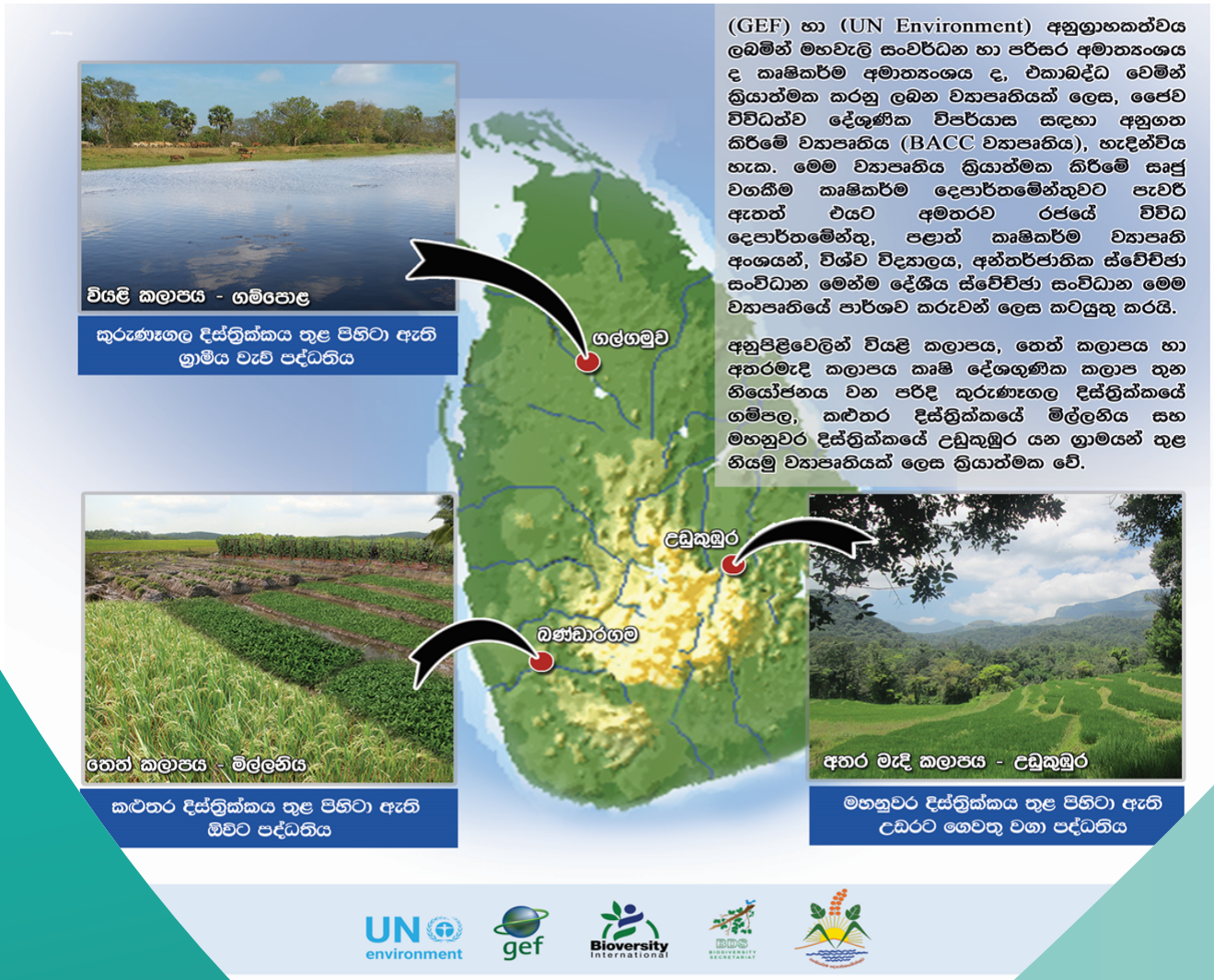
New Marketing options and guidelines for agro-biodiversity and food with high nutritional value identified and developed with recommendations and guidelines prepared into a detailed report and a brief in partner with the Agribusiness Centre, Faculty of Agriculture, University of Peradeniya. National Agirculture Information & communication centre sharing and disseminating the outputs with the participation of key resource persons from both government and private sector including NGOs.

- **Raising Awareness & Out-scaling**

Home Garden Diversification in Project Pilot Sites

Several awareness programs have being conducted to up-scale utilization of agro-biodiversity and healthy eating habits at project pilot sites including establishment of school home garden at the Gampola, Giribawa site, with the establishment of home gardens for 50 households. Project was designed including water conservation tactics to support the villagers in home garden establishment & maintenance in 2018.

Integrated Pest Management Programme for the villagers was conducted to help villagers identify environmental friendly pest and disease control tactics to protect the home gardens from prevailing pest and disease problems. Expert consultation was provided by the officers from Plant protection Services, Department of Agriculture.



(GEF) හා (UN Environment) අනුග්‍රාහකත්වය ලබමින් මහවැලි සංවර්ධන හා පරිසර අමාත්‍යාංශය ද කෘෂිකර්ම අමාත්‍යාංශය ද, එකාබද්ධ වෙමින් ක්‍රියාත්මක කරනු ලබන ව්‍යාපෘතියක් ලෙස, ජෛව විවිධත්ව දේශුණික විපර්යාස සඳහා අනුගත කිරීමේ ව්‍යාපෘතිය (BACC ව්‍යාපෘතිය), හැඳින්විය හැක. මෙම ව්‍යාපෘතිය ක්‍රියාත්මක කිරීමේ ඍජු වගකීම කෘෂිකර්ම දෙපාර්තමේන්තුවට පැවරී ඇතත් එයට අමතරව රජයේ විවිධ දෙපාර්තමේන්තු, පළාත් කෘෂිකර්ම ව්‍යාපෘති අංශයන්, විශ්ව විද්‍යාලය, අන්තර්ජාතික ස්වේච්ඡා සංවිධාන මෙන්ම දේශීය ස්වේච්ඡා සංවිධාන මෙම ව්‍යාපෘතියේ පාර්ශව කරුවන් ලෙස කටයුතු කරයි.

අනුපිළිවෙලින් වියළි කලාපය, තෙත් කලාපය හා අතරමැදි කලාපය කෘෂි දේශගුණික කලාප තුන නියෝජනය වන පරිදි කුරුණෑගල දිස්ත්‍රික්කයේ ගම්පල, කළුතර දිස්ත්‍රික්කයේ මිල්ලනිය සහ මහනුවර දිස්ත්‍රික්කයේ උඩුකුඹුර යන ග්‍රාමයන් තුළ නියමු ව්‍යාපෘතියක් ලෙස ක්‍රියාත්මක වේ.

Mainstreaming Agro biodiversity Conservation and use in Sri Lankan Agro-ecosystem for Livelihood and Adaptation to Climate change (BACC)

- **Re-introduction and new introduction of traditional and improved crop varieties**

Continuous multiplication of traditional and newly improved varieties is done in the research field of Plant Genetic Resources Centre (PGRC) and HORDI in order to increase the amount of seeds given to farmer in project sites. Farmer Field Fora (FFF) were conducted using the distributed varieties with the aim of selecting farmer preferred and resistant/ adaptive varieties to climate change. FFF is a community based knowledge and action platform that facilitates the use and maintenance of diversity in the production system both as a way of risk minimization as well as providing farmers access to knowledge, planting materials, credit and networks.

- Bio diversity Fair

Bio diversity fair a was held at Gampola project site with the participation of 88 farmers from Gampola and Wanniukudawewa and the diversity fair is a popular practice employed by various organizations to sensitize communities on the value and importance of biodiversity and traditional knowledge. Awareness-raising practices increase community participation in managing biodiversity in a systematic way by changing their present mind-set and behavior. Evaluation process was carried out to find out and award the best farmers.

- **Community Biodiversity Registers**

Training programs on maintaining of Community Biodiversity Register (CBR) were organized and conducted for farmers in three pilot project sites with the participation of PGRC, DoAy and DoA officers. A CBR is basically a farmers' information database on biodiversity and traditional knowledge. It documents and associated traditional knowledge and plant genetic resources and thereby protects them from bio-piracy.

- **Establishment of soil conservation demonstration plots**

Thirteen soil conservation demonstration plots were established in Gampola, Milleniya and Udakumbura sites with the technical support of Natural Resources Management Center. The established soil conservation technologies include soil bund, stone bund, lack and spill drains, gliricidia hedgerows, individual platforms, water percolation pits and compost pits.

- **Identifying and Studies on Pollinators, Pest, Predators and Natural Enemies**

The following targets have been fulfilled by the HORDI, Gannoruwa to identify and promote the environment ecosystems and their services;

- Based on survey data, major pollen insects present in projects sites and bee attracting weed species have been identified by HORDI officers.
- Most abundant insect fauna was also identified as order Hemiptera and second most was order Diptera in all three locations.
- A show room has been created at HORDI where major pollinators and host plant specimens are preserved and displayed in an insect box, together with six posters displaying the pollinators and their host plants found in the three sites and five posters on pests in three sites.

- **Establishment of Community Seed Bank**

Community seed banks store and manage seeds that aim to provide community members with seeds to use. Under one CSB, there will be 5-10 domestic seed banks to enhance traditional seed multiplication and strengthen seed exchange among community. 6 domestic seed banks have already established in Gampola site.

- **Introduction of marketable herbal products**
- **Distribution of Medicinal plants**
- **Diversity Home Garden**

A training program was conducted for the farmers who had an interest in maintaining diversity home garden and also fruit plants were distributed to increase diversity in home gardens. A competition was held to find out the home garden which has the greatest diversity and to inspire farmers in maintaining diversity garden. Established 107 home gardens in Gampola and 103 home gardens in Milleniya. Selected 6 best home gardens maintained in Gampola project site and awards were given.

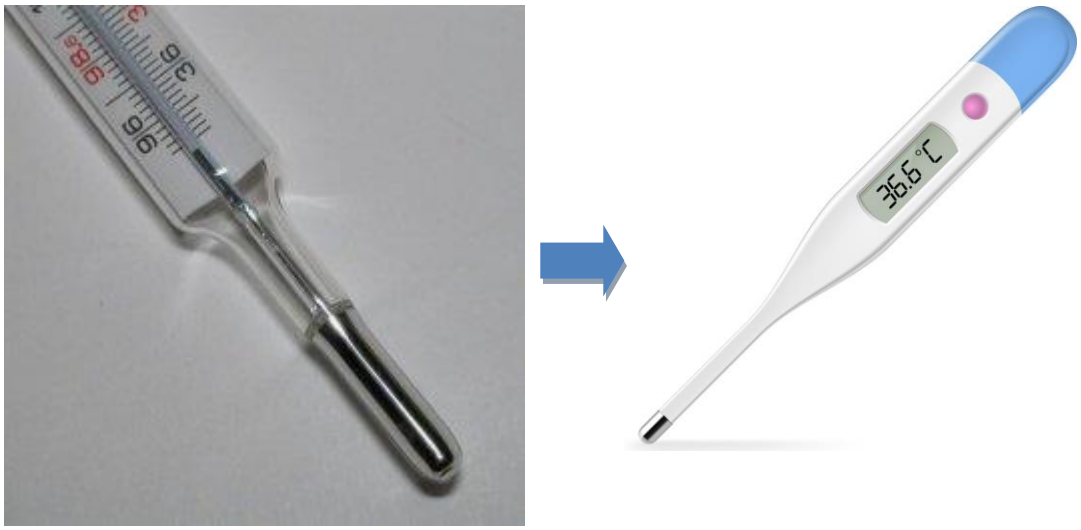
- Two news letters were prepared and distributed among farmers in three pilot project sites to aware the community in three pilot project sites about the project activities.

Mercury Initial Assessment (MIA) under Minamata Convention

Mercury is a neurotoxin and an island wide survey on Mercury usage in Education, Health and Industrial sectors was completed and comprehensive inventories were prepared based on the survey data, This information is used for carrying out mercury management programmes islandwide. . Education sector has reduced usage of mercury, where health sector is in the process of phasing out mercury.

Steering Committee on MIA monitored the progress of mercury management activities in the country.
Two awareness programme on "Minamata Convention and mercury management in the country" were conducted for school children in Galle and Colombo Districts

An agreement was signed with the Gem and Jewelry Research Institute to carry out " Survey on Small Scale Jewelry Sector".and the survey was initiated. This survey will help to find the mercury usage among small scale jewelers and will be able to introduce alternatives to safeguard health and environment.



Air Quality Assessment for Health and Environmental Policies

Health impact of the Air pollution is necessary to develop policies to control emission of pollutant and reduce health risks. With this understanding Ministry of Mahaweli Development and Environment with partnership with the United Nations Environment Programme (UNEP) has initiated this project. Under this project, the Ministry will carry out a detailed assessment of the evidence base on air quality and related health issues in order to review existing national action plan on air quality. As a part of this process the Ministry is planned to obtain the service of consultants to gather information on air quality and the states of air quality monitoring in Sri Lanka, identify gaps in knowledge that act as barriers to the development of evidence-based policies and to carry out comprehensive policy and plan review. In 2018 ARM division was appointed consultants, conducted “Inception Work Shop” and obtained Inception Report.

2. Projects implemented by the Ministry and the institutions affiliated to the United Nations

I. **Climate Resilient Integrated Water Management Project**

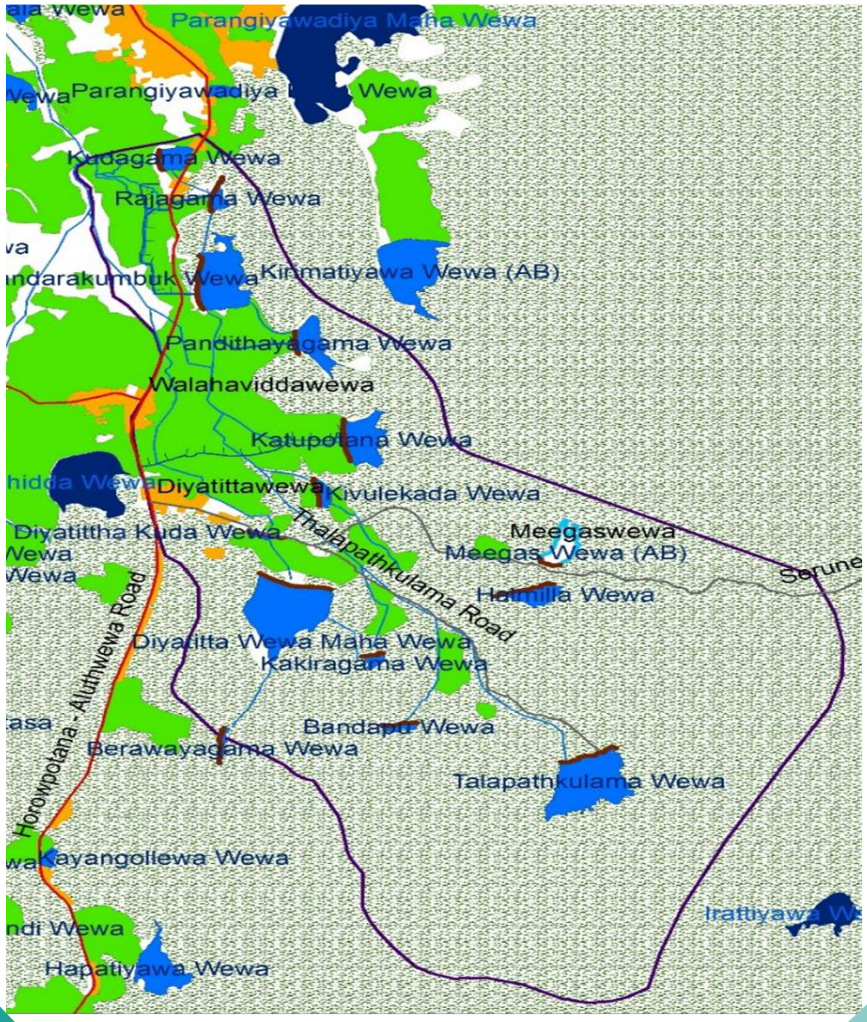
II. **Addressing climate Change Impacts on Marginal Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka – Climate Change Adaptation Project (CCAP)**

III. **Enhancing Biodiversity Conservation and Sustenance of Ecosystem services in Environmentally Sensitive Areas Project**

IV. **Rehabilitation of Degraded Agricultural Lands Project (RDALP) in the Central Highlands**

V. **Environmentally Sound Management and Disposal of Polychlorinated Biphenyles (PCBs) waste & PCB contaminated equipment Project**

VI. **Sri Lanka's Third National Communication on Climate Change (SLTNC)**



Climate Resilient Integrated Water Management Project

Upgrading village irrigation systems and promoting climate resilient farming practices in three river basins of the Dry Zone

- Identification of all the tank cascades for construct during the whole project period
- Preparation of a technical guideline for Cascade Level Water Resources Management and Development
- Rehabilitation of 42Village Irrigation Tanks in Anuradhapura District and 14 Village Irrigation Tanks in Vavuniya District (Annexure 1)
- Completion of surveying and designing works in 81 Village Irrigation Tanks coveringVavuniya, Anuradhapura and Puttalam and Kurunegala Districts (For commencing the Construction works in 2019)
- Tree planting program in cascade catchments of rehabilitated tanks cascades
- Conduction of 15 of training programs for all agricultural departmental officers on Climate Smart Agriculture in Kurunegala, Puttalam, Anuradhapura, Vavuniya and Trincomalee districts.
- Implemented the climate smart agricultural activities in Trincomalee, Vavuniya, Puttalam, Anuradhapura and Kurunegala Districts (Ecological home gardening (700 units), Commercial fruit planting (351,000 plants), Livestock programs – Paultry, cattle sheds and fodder grass production units (107 units), Seed paddy production programs(250 acres)
- Supervision of the project activities with the assistance of 04 civil society organizations and relevant technical specialists

Before Construction

After Construction

Katupothana wewa – Before and after construction- Bandarakumbuk wewa cascade – Anuradhapura district

Enhancing decentralized water supply and management solutions to provide access to safe drinking water to vulnerable communities

- Signing two Memorandum of Understandings (MOUs) between the NWS&DB and DNCWS the Project for continuing future project activities
- The investigation and identification of suitable water sources for the 11 new RWS schemes in Kurunegala, Puttalam, Vavuniya and Anuradhapura districts was carried out by NWSDB and the work is on-goig. Obtaining land clearance, Drilling of new deep tube wells, Yield and water quality tests of existing dug wells, existing deep tube wells and new deep tube wells are On -going. CBO formation are on–going. Consultancy teams have been recruited and ready to commence designs in these 11 new RWSS.
- Conducting a Trade Fair to promote and identify available water purification technologies by conducting an exhibition in parallel with World Water Day.
- Location selection and proper technology determination is on-going to install 15 large advance filtration systems and 09 small scale water filtration systems. Consultancy teams have been recruited and ready to commence designs

- Conducting a perception survey through Sri Lanka Rain Water Harvesting Forum of the existing domestic rain water harvesting systems and fomualting the Project implementation mechanism based on the results and recommendations.
- Conducted awareness programs, house hold surveys and adopted a transparent process to identify beneficiaries for the rain water haresting systems. 545 Rain water harvesting systems have been installed in Kurunegala, Puttalam, Vavuniya and Anuradhapura districts.
- Supervision of the project activities and conducting field activities with the assistance of 04 civil society organizations and relevant technical specialists of the Project, NWSDB & DNCWS.

Test the feasibility to install drinking water supply systems

Distribution of Rain Water harvesting Tanks

Strengthening climate/weather and hydrological observing, forecasting and water management systems to enhance adaptive capacity of smallholder farmers to droughts and – foods

- Engaged in a mapping exercise to map the 148 existing meteorological observation points in the Project districts in order to idenfy the gaps in existing Meteorological Network.
- To improve the forecasting ability, 01 overseas training (12 days) for Numerical weather prediction (for one of the forecasters) in the Met department. In addtiton a 10-day training course was conductetd for 12 forecasters on GIS for Meteorology.
- To improve the Existing metereological observation network in the project districts, 5 agro-meteorological observation stations, 10 automatic rain gauges, 01 central server will be provided for the Met department. Contract was awarded to install the system.
- 08 stream gauges were purchased for the Department of Irrigation and these equipments will be installed in Malwathu Oya and Yan Oya basins in order to improve the water maangment and flood management purposes.
- Met dept has started dessimimnating 10-day wearher forecasts to Agrarian Service Centers in Project locations.
- Web GIS server was procured for Met dept which will be useful in dessimminating the forecasts to the local levels
- With the support of Natural Resource Management Center of Department of Agriculture, Seasonal Agriculture Advisory for the last Maha season was provide to project stakeholders in 4 districts.
- To improve the flood early warning system in the Malwathu Oya basin, flood risk assessment is being conducted in Vavuniya and Mannar districts.
- Disaster preparedness and response plans are being prepard in 25 GN divisons in 8 project cascades.
- Community mobilizarion and supervision of the project activities with the assistance of 04 civil society organizations and relevant technical specialists.

Addressing climate Change Impacts on Marginal Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka

Climate Change Adaptation Project (CCAP)

The overall objective of this project is to build resilient community livelihoods and improve food security against climate change induced rainfall variability that leads to longer droughts and more intense rainfall. It expects to introduce novel and drought-resistant agricultural strategies and improve the infrastructure and irrigation facilities of the communities living in the project areas. This project is funded by the Adaptation Fund and World Food Programme functions as the coordinating entity. On the part of the Government of Sri Lanka, the Addressing Climate Change Impacts on Marginalized Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka – Climate Change Adaptation Project division under the Ministry of Mahaweli Development and Environment (MMDE) is the implementating agency. Further in order to increase the efficacy of the project, in 2017 the United Nations Development Programme (UNDP) was included as an implementing partner.

The Project's main targeted areas are the Medirigiriya, Lankapura Divisional Secretariat (DS) Divisions in the Polonnaruwa District and Walapane DS Division in the Nuwara-Eliya District. The beneficiaries for this Project were selected through the small farmer organizations under the Agrarian Service Centers of the above DS divisions. The Project covers a total of 183 farmer organizations which consist of 70 in the Polonnaruwa District including 52 in Medirigiriya/Ambagaswewa Agrarian Service Centers in the Medirigiriya DS division, 18 in Pulathisigama / Galamuna Agrarian Service Centers in the Lankapura DS division and 113 in the Walapane DS division including Theripeha, Rupah, Munwatta, Nildandaheena and Walapane Agrarian Service Centers in the Nuwara-Eliya District.

Main activities performed IN 2018

The Project is implementing under two main components as mentioned as below. During the corresponding period the project carried out 76 sub projects of infrastructure development worth of Rs. 79.07 million under the, including agro wells, irrigation projects and agri roads development projects etc.

S/No	Sub Project	No of sub Projects	Project Amount Rs .Mn.	Beneficiary families
1	Irrigation water projects	8	10.53	3421
2	Agri-roads	15	19.07	6048
3	Minor Tanks	11	11.45	2640
4	Drinking water projects	3	3	137
5	Agro-wells	34	6.8	352
6	Soil conservation projects	1	1	221
7	Agroforestry projects	1	1.7	330
8	Sprinkler Irrigation projects	2	2	26
9	Electric Fences	1	1	582
Total		**76**	**56.55**	**13,757**

In further developing household food security and building resilient livelihoods for rain-fed farming households 25 sub projects were implemented at a cost of Rs. 40.1 million which included Post-harvest Technology programmes, dairy farming and protective housing for cultivation etc. in order to improve the adaptive capacity of affected farmer families. The details of the sub projects are elaborated below

S/No	Sub Project	No of sub Projects	Project Amount Rs .Mn.	Beneficiary families
1	Protective housing	7	3.84	200
2	Agriculture Development Programme	2	11.6	854
3	Livestock Development Programme	1	2.27	158
4	Distribution of farm equipment and machinery	2	3	78
5	Post-harvest Technology programmes	5	5.61	9119
Total		**17**	**26.32**	**10,409**

Under main component - II, the following 12 programmes were conducted at a cost of Rs. 8 million which included building institutional capacity of village, divisional and provincial service centers, land use mapping and establishing landslide early warning systems etc. as elaborated in Table

S/No	Sub Project	No of sub Projects	Project Amount Rs .Mn.	Beneficiary families
1	Landslide early warning systems	1	5.78	Walapane DSD
2	Institutional Capacity Building Programs	4	3.39	2500
3	Preparation of land use maps	1	0.43	Walapane DSD
4	Poverty reduction programs (alternative income)	6	15.89	60
Total		**12**	**25.49**	**2560 and the Walapane DSD**

Hence, within the year 2018 the Addressing Climate Change Impacts on Marginalized Agricultural Communities Living in the Mahaweli River Basin of Sri Lanka – Climate Change Adaptation Project division has implemented 113 subprojects at a total cost of Rs. 127.89 million which includes an operational cost of Rs. 19.53 million.

Farmer market (Walapane)

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

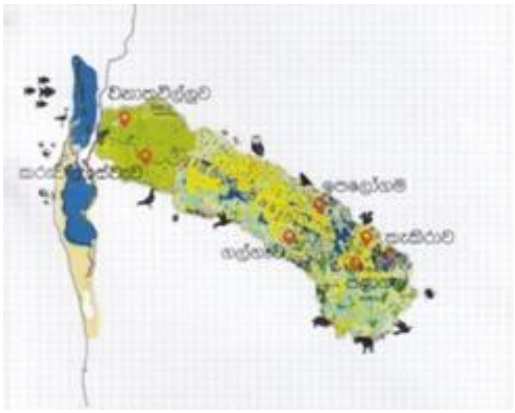
The project "Enhancing Biodiversity Conservation and Sustenance of Ecosystems services in Environmentally Sensitive Areas (ESAs)" is funded by GEF, implemented by the Ministry of Mahaweli Development & Environment (MoMDE) & supported by UNDP. The objective of this project is to conserve biodiversity conservation and sustainable development through a new land use governance framework, focusing the environmentally sensitive areas with high conservation value, identifying the Environmental sensitive zones which are vital for ecosystem services and biodiversity are outside of the declared protected areas, in order to minimize biodiversity threats.

Government institutes such as the Forest Department, Department of Wildlife Conservation, Department of Land Use Policy Planning, Department of Coast Conservation, Department of Agriculture, Department of Irrigation, Sri Lanka Mahaweli Authority, Central Environmental Authority, Biodiversity Secretariat, District Secretariats of Anuradhapura and Puttlam, Non-Governmental Organizations, Civil Society Organizations and community are the key stakeholders of this project.

While, they are appointed to empower the public, non-governmental, private and community sectors and become stakeholders in environment sensitive area management, protected Areas and Environment-Sensitive Areas are focused on achieving the benefits of sustainable socio-economic development, through the project.

Preparation of land use plans based on the pertinent landscape and ocean views, which are integrated with ecosystem services and biodiversity data and a number of activities are carried out, including the implementation of business plans through agriculture, fisheries, tourism & other related sectors on the basis of this are undertaking.

Accordingly, the project will provide a fundamental basis for sustainable development in Sri Lanka, through the sustainable management of ecosystems. It is also expected to utilize the experience of this project in Sri Lanka's for other environment sensitive areas



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

Following activities were done during year 2018 under the project.

- Sustainable eco-tourism Plan was prepared for the Manewa- Kanda proposed forest reserve under the Forest Conservation Department. Development activities of the Manewa- kanda eco-tourism park have been completed and It is due to be opened for the foreign & local tourists.

- A Management Plan for coral reef coastal sanctuaries has been prepared. Completed the survey at "Bar Reef Sanctuary", after having agreements with suitable parties Buoys were installed to demarcate the identified core areas in order to facilitate the regeneration of corals in kalpitiya Bar Reef Sanctuary.

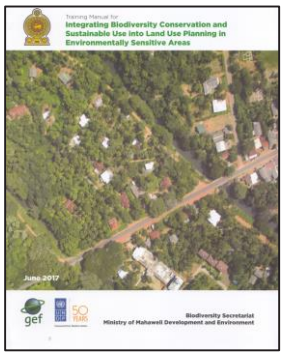
Prepared Management Plan for Coral Reef Marine Sanctuaries

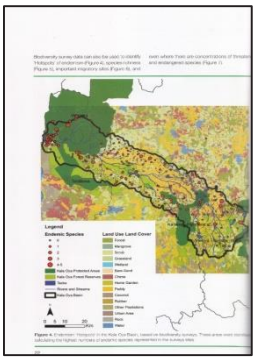
- Twelve of guidelines on agricultural models for the promotion of environmental farming in Anuradhapura & Puttlam district have been prepared. Departmental officers were trained and initiating programs on eco-friendly farming ongoing.

Farmers Woodlots Programme at Kadiyangalla (Ipalogama) and Nelliyagama (Kekirawa) -12ha

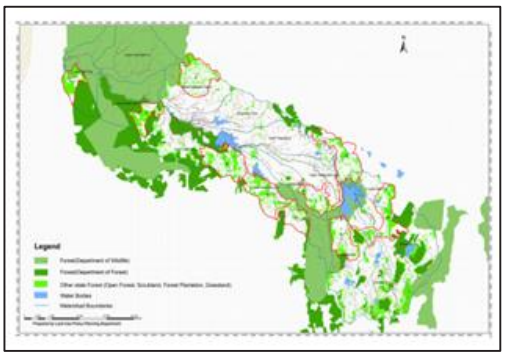
- National Wild Elephant Conservation & Management Policy was reviewed and has been send to the Ministry of sustainable development, Wildlife & Rural Development for the approval of the Cabinet of Ministers and public views. Preparation of strategic frameworks for management of other wild animals is ongoing.

- Base on biodiversity baseline survey biodiversity integrated land use maps for the Kala oya basin were developed. Out of the 10 ESAs identified in the Kala Oya basin, there are three ESAs were prioritized and the management plans for them are being prepared.





Preparation of the Biodiversity integrated Land Use Plans.



Proposed 10 ESAs in the Kala Oya basin

- Completed the survey to identify critical biodiversity habitats outside protected areas in ESA Site, 08 management plans were Prepared and validated. (Ritigala/ Kudakanda/Kalawewa/ Nidigama/Kadiyangalla/ Nelliyagama/ Kaduboda forest complex / Kahalla-Pallekele forest complex) ("Nelliyakanda" and "Kadiyangalla" un-demarcated forests, Kanduboda, Kahalla, Nelliyagama) being demarcated.

Identified forest clusters with high biodiversity of the Kala Wewa basin being demarcated.

- "Habarawatta"Cascade System was 100% rehabilitated. (Kanupichchiyagama wewa/ Wetakoluwagama wewa, Pahala Habarawatta wewa, Ihala habarawatta wewa). Tanks reservation survey and boundary demarcation initiated. Micro land uses establishment activities of the tanks being started.

Rehabilitation of the "Habarawatta"Cascade System

- Assisted Natural Regeneration (ANR) at Palagala DSD (Kahalle-Pallekele forest cluster) was started 50ha.

- Awareness programs on Establishing an Early Warning System for Elephants (EWSE) for community being conducted. Launch a pilot project around the Village of "Thewanuwara" in the Puttlam district.

The Early Warning System for Elephants and Awareness programs on EWSE for the Community

- Awareness programs to promote social entrepreneurship for the community in the Kala Oya basin being conducted and launching the projects. (Medicinal oil extraction project implemented by community based organizations in Manewe Kanda area / Encouraging women entrepreneurs)

Rehabilitation of Degraded Agricultural Lands Project (RDALP) in the Central Highlands

This project is being implemented in Doluwa and Delthota Divisional Secretariat (DS) divisions of the Kandy district, Hali Ela, Welimada, Uvaparanagama and Bandarawela DS divisions in the Badulla District and Wapalane and Nuwara Eliya DS divisions in the Nuwara Eliya District.

A guideline on participatory land use planning has to be developed under the component 1 of the project and its first draft has been completed.

Preliminary studies have been completed in identifying issues in the policies, regulatory and institutional frameworks for sustainable land management.

In the implementation of demonstration sites on application of SLM, 80 farmers have been selected and of them soil conservation of the lands of 10 farmers has been started. Conservation of other lands to be started soon. Conservation work of 8 micro catchments has been started. Participatory land use plans of these 8 micro catchments have been completed. Awareness and education programs on SLM have been started under the project.

Activity	Progress
A guideline on participatory land use planning	Draft is completed
Identifying issues in the policies, regulatory and institutional frameworks for sustainable land management and propose solutions.	Preliminary studies completed
Preparation of land information database	Preliminary planning completed
Preparation of the training manual on SLM	Preliminary planning completed
Establishment of demonstration sites	Work has been commenced in 3 government institutes and 8 micro catchment areas.
Evaluation of ecosystem	Preliminary planning completed has been launched with IUCN
Community awareness programs	Five programs have been conducted

Environmentally Sound Management and Disposal of Polychlorinated Biphenyles (PCBs) waste & PCB contaminated equipment Project

Polychlorinated Biphenyles (PCBs) are Persistent Organic Pollutants. These chemicals caused many health impacts including cancers and developmental disorders. This chemical was banned in1980 s and at present this chemical is present in old utility sector transformers of the Ceylon Electricity Board and other related agencies. Transformer oil is used in welding plants and a certain percentage of welding transformers are contaminated with PCBs.
The objective of this project is to identify PCB in the utility and welding sector transformers and develop inventories in order to dispose PCB containing transformer oil and discarded transformers in an environment friendly manner.

Development of the PCB inventory in order to identify the PCB contaminated utility transformers were initiated and testing of oil samples of welding transformers were carried out to complete the PCB inventory of the welding sector . Welding sector inventory draft has been completed.

Training conducted for technical staff by International Expert Dr Carlo Lupi

Sample collection by trainees

Label of a transformer

Transformer Yard – Kahathuduwa

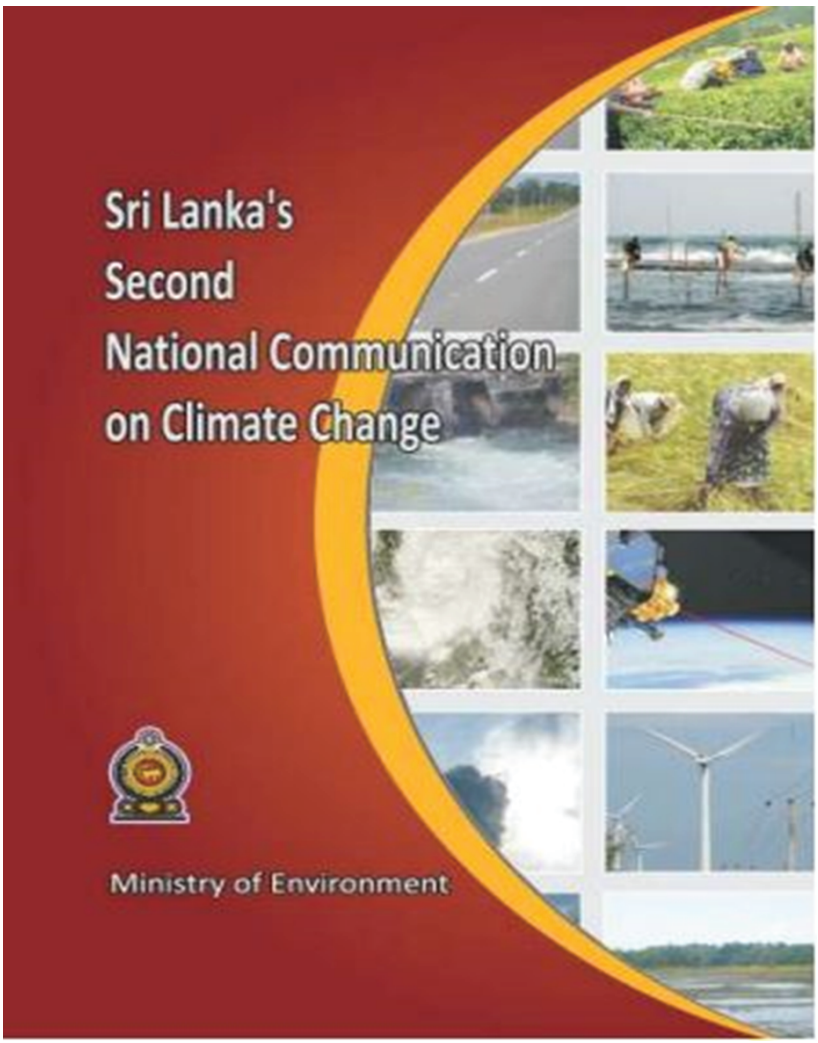
- A web site and a video were developed on PCB for information dissemination among the general public.

Launching of the web site by Secretary(MMD&E)

PCB video

- Workshops and consultations were held, and curricular on persistent, bio accumulative and toxic chemicals were developed for schools, universities and NVQ level courses in order to

create awareness on toxic chemicals, its proper usage, storage, disposal, transportation and disposal.



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. However, due to the constraints encountered on collecting and analyzing required data all the planned activities will remain to be completed in 2019. Therefore, the extension of the Third National Communication on Climate Change Project has been granted till end of December 2019.
The fundamental objective of this project is to strengthen Sri Lanka's technical and institutional capacity to respond effectively to climate change challenges effectively and meet the countries' its obligations under the United Nations Framework Convention on Climate Change (UNFCCC), The project will 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. Preparation of the TNC report will take place of US$ 500,000 with a grant of GEF through UNDP.

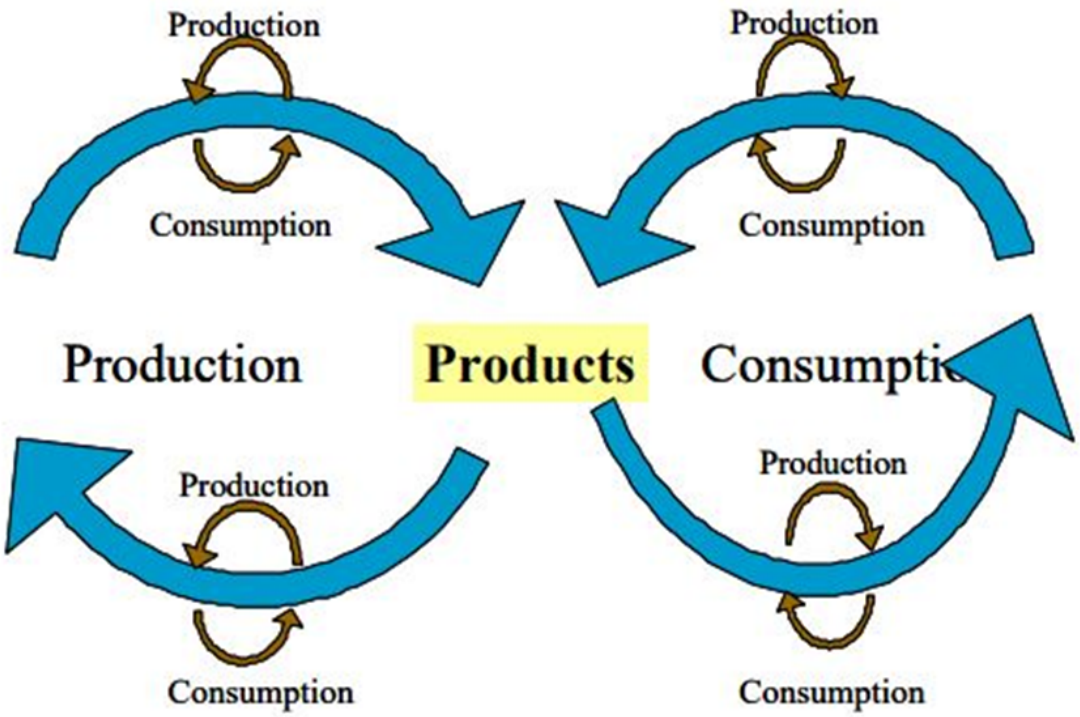
During the progress reporting period,

- The suitable experts and expert teams were appointed and final draft deliverables for the key components were submitted to the Project Management Unit.
- An Independent Review Panel was established and 08 progress meetings were held. Accordingly, inputs given by the Panel were incorporated to the final draft chapters and data collection. Further, inputs were obtained from the stakeholders for further improvement of the draft final reports.
- International Consultant has been selected and training programme was held for GHG Inventory preparation and other aspect related to TNC. The final draft reports were reviewed by the International Consultant and incorporated her comments into the final TNC Report.
- A Service Provider has been selected for Organizing Workshops, Symposiums, Seminars, and Knowledge Products & Communication Campaigns for TNC. Awareness Programmes were held for all the Provincial councils and data requirements was presented to establish a proper mechanism to collect data at provincial council level.
- Data base system for data collection and analysis is in progress.

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.

3. Projects directly implemented by United Nations affiliated institutions

1. **SWITCH-Asia Sustainable Consumption and Production (SCP) National Policy Support Component for Sri Lanka**
2. **Preperation of sixth National Report on Biological Diversity**
3. **Biodiversity Finance Initiatives (BIOFIN-2016-2018)**
4. **Implementation of the National Biosafety Framework in Accordance with the Cartagena Protocol on Biosafety**
5. **Nationally Appropriate Mitigation Actions (NAMAs)**
6. **Updating Climate Change Vulnerability Assessment and Piloting Mainstreaming Climate Change Adaptation into National Development Activities in Sri Lanka**

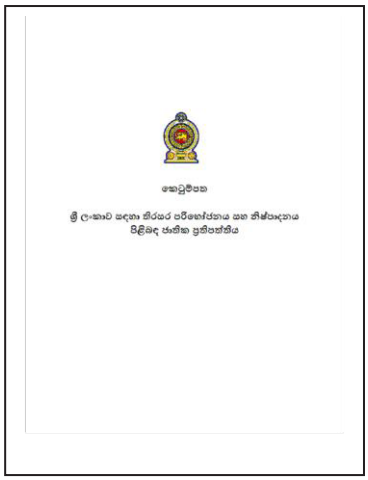


SWITCH-Asia Sustainable Consumption and Production (SCP) National Policy Support Component for Sri Lanka

This SWITCH-Asia Sustainable Consumption and Production National Policy Support Component for Sri Lanka is a 4-year (January 2015 – January 2019), EU funded project awarded upon request of the Ministry of Mahaweli Development and Environment (MoMDE) as a 'technical assistance programme' to support the strengthening of the overall government policy and institutional framework for implementation of SCP.

Under the four result areas SCP projects was achieved the targets and completed following activities during the project implementation period

1. Standardization of the Policy Formulation Process in Sri Lanka (Policy Format, Policy Protocol & Policy Screening / Assessment Tool)
2. Draft National SCP Policy and it is waiting for Cabinet approval.



3. National Indicators were developed for sustainable production and sustainable consumption
4. National SCP Education Plan including a SCP Resource Pack for the use of lecturers of University and Tertiary education system
5. Awareness Creation and capacity building on SCP. Offered one MSc and one postgraduate diploma opportunities for two officers from the MOMDE. Offered 10 days Professional Training Programme on SCP for 15 government and private sector officials at Asian Institution of Technology in Thailand.
6. National Sustainable Public Procurement Policy was improved. Action Plan and related Training modules developed
7. Awareness raising programmes for relevant agencies (MOMDE, SLIDA, IESL.University of Kelaniya)
8. Conducted SCP National Roundtable with the Sri Lanka NEXT Blue Green Era Programme
9. 19 Awareness programmes and training programmes on SCP and SDG were conducted for officials of M/Law and Peace and Western Province Solid Waste Management Authority
10. A Consultation Workshop on Eco Innovation and LCA was conducted
11. Training of Trainers programme was conducted to build the capacity to disseminate SCP concept and among people
12. A officer of Ministry of Housing carried out the Certificate Course on SCP in AIT, Thailand with the financial assistance of the project
13. SCP Study Tour in Europe was offered for 9 secretaries of key ministries to guide the respective ministries in the integration of SCP in Sri Lanka's development agenda

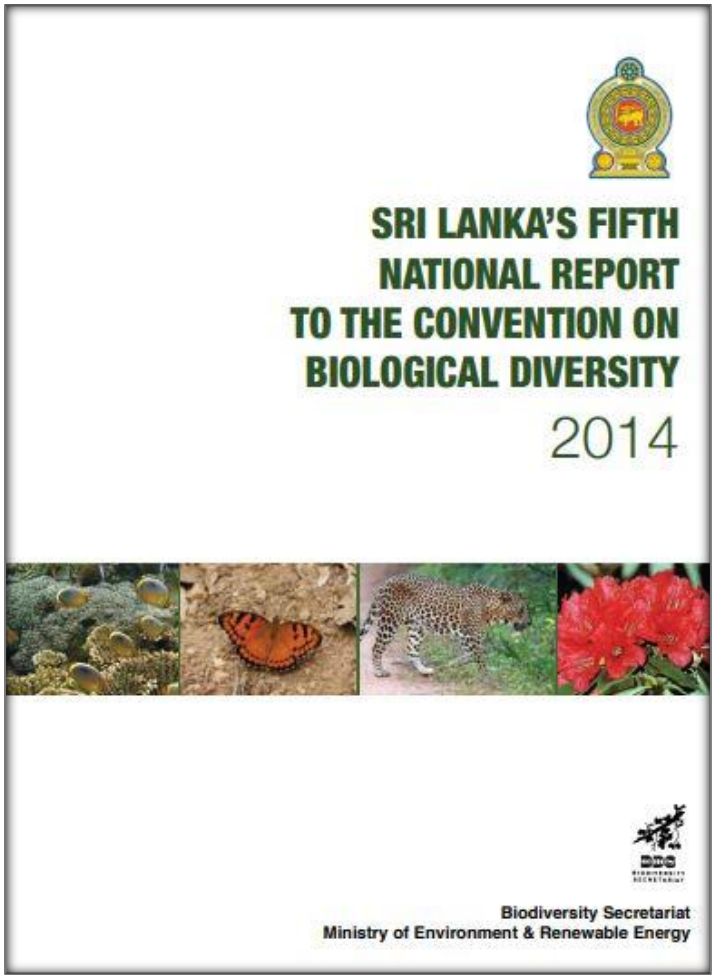
Study tour in Europe

build the capacity to disseminate SCP concept

14. SCP Coordination Mechanism was developed and SCP cell will be established in the Ministry of Mahaweli Development and Environment in order to implement the SCP initiatives with the guidance and assistance of SCP Forum and other stakeholders.
15. Awareness creation programme was conducted for media officers
16. information management database, SCP website and an e-learning platform were developed

17. Developed vedio documentary on SCP in three languages
18. Developed action plan for three selected sectors (Tea, rice and dairy)
19. Developed financial instrument on SCP
20. Introducing Eco-labeling Platform
21. Introducing Eco innovation and Life Cycle assessment

Preperation of sixth National Report on Biological Diversity



The decision of the Conference of Parties (COP) 13, United Nations Convention on Biological Diversity (UNCBD) has announced to parties to take actions to prepare their Sixth National Report before December 2018 to report the progress of the National Biodiversity Strategic Action Plan (NBSAP).

Accordingly, Biodiversity Division has initiated to prepare the 6th National Report of Sri Lanka to the UNCBD. All parties obliged to submit the national report to the Secretariat of the Convention on Biological Diversity once in four year. 6th National Report was drafted by using information through national & regional level workshops, as well as information collected from relevant researches and submitted to the United Nations Biological Diversity Secretariat in December 2018.

Biodiversity Finance Initiatives (BIOFIN-2016-2018)

This project has been initiated under the decision of Conference of Parties (COP) 11. Project period is 2016-2018. This is a short term project so funds provided by the European Union (EU) through direct modality for the United Nations Development Programme (UNDP) and this project is implementing under the supervision and technical support of the Biodiversity Secretariat, Ministry of Mahaweli Development & Environment. The focal point in Sri Lanka is Ministry of Mahaweli Development & Environment

Under this, 04 reports were completed. These are Policy and Institutional Review, Biodiversity Expenditure Review, Finance Needs Assessment and Biodiversity Finance Plan. In Biodiversity Finance Plan, it was identified three main financial solutions. Such as; Green Financing, Sustainable Tourism Certification and Payment for Ecosystem Services.

Implementation of the National Biosafety Framework in Accordance with the Cartagena Protocol on Biosafety

This project is a GEF funded project implemented by the Ministry of Mahaweli Development & Environment through the Food and Agriculture organization of the United Nations (FAO).
This project is implementing under four main components. They are Strengthening policy, Institutional and regulatory frameworks for biosafety, Enhancing system for risk assessment (RA), risk management (RM) and risk communication (RC).

- ✓ A media workshop on Biosafety

A media workshop on Biosafety was conducted in 29th March 2018 with the objective of disseminate information about the project as well as Biosafety in general. It allowed the media to clarify doubts about the country context of Genetically Modifies Organisms (GMOs) in Sri Lanka.
To implement the Component 1 "Strengthening policy, Institutional and regulatory frameworks for biosafety" of this project two national consultants and an international consultant was appointed. And also, the working groups have been established with the institutions working in relation to the subject of biosafety. 4 group meetings were conducted and developed the Biosafety Regulations of Sri Lanka, National Biosafety Master Plan of Sri Lanka and the Manual on Administrative and Operational Procedures for Handling of Living Modified Organisms / Genetically Modified Organisms of Sri Lanka.

- ✓ **Development of the Biosafety Act**

Recognizing the need for ensuring the safety of environment, biodiversity and human health from possible adverse effects of LMOs, the Biosafety Act was drafted by the Legal Draftsman's Department with the consultation of all stakeholders and forwarded to the Attorney General Department for obtain the approval.

- ✓ **Awareness Materials on Biosafety**

Books, leaflets and magazines were published and circulate among the relevant institutions.

Nationally Appropriate Mitigation Actions (NAMAs)

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 the 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 the 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.

The major achievements as follows;

- NAMA Institutional Framework and NAMA Approval Procedure were prepared and approval of Cabinet of Ministers
- The approved mechanism has been printed as a booklet to create awareness of the relevant stakeholders in this regard
- MRV framework for Energy sector and three monitoring protocols were developed
- Poster and leaflet on NAMAs were printed
- A Resource Pool to conduct MRV assessments was established
- NAMA web site and Web based National NAMA Registry developed and NAMA web portal is being developed
- Conducted sector wise meeting to relevant stakeholders to aware the NAMA process in Sri Lanka
- Conducted Proposal Development workshop with International Consultant and developed the 6 project concepts

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,

- Increased resilience to climate change impacts through improved government capacity in mainstreaming climate change adaptation into national development policies.
- 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.
- Prepare a set of tools for climate change adaptation policy
- and planning for the subproject areas.

During the progress reporting period, conducted consultative meetings with respective agencies and experts and analysis for map development were carried out. Also, completed final draft of the Sector Risk Profiles namely;

1. Food Security (Agriculture, Fisheries and Livestocks)
2. Water Security
3. Biodiversity and Ecosystem Services
4. Human Health
5. Urban Development, Housing Settlement and Economic Infrastructure and

the final draft of the Climate Change Risk Data Book.

Also, drafted two separate vulnerability assessments profiles on Coastal Region and the Mountain Region.

Part III

Progress of Institutions under the purview of Ministry of Mahaweli Development and Environment

I. **Mahaweli Authority of Sri Lanka**

II. **Department of Forest Conservation**

III. **Coast Conservation And Coastal Resource Management Department**

IV. **Central Environmental Authority**

V. **National Gem & Jewellery Authority**

VI. **Gem and Jewellery Research and Training Institute**

VII. Marine Environment Protection Authority

VIII. **State Timber Corporation**

IX. **Geological Survey And Mines Bureau**

X. **Central Engineering Consultancy Bureau**

XI. **Mahaweli Consultancy Bureau**

Mahaweli Authority of Sri Lanka

Development Activities carried out in year

Financial Progress

The total capital budget for the financial year 2018 was SLRM **2,733.50.** Financial progress for the period is given below.

Description	Rs. Million	
	Budget Provision 2018	Expenditure 31 December 2018
Mahaweli Projects	**1,158.00**	**1,080.00**
Mahaweli Consolidated Project (CF)	290.00	290.00
System B Maduru oya RB Development project (CF)	60.00	60.00
Redeemaliyadda Integrated Development Project (CF)	76.00	64.00
Rambakenoya Integrated Development Project (CF)	108.00	94.00
Welioya Integrated Development Project -System L (CF)	260.00	260.00
Rehabilitation of Major and Medium Irrigation Schemes including emergency infrastructure rehabilitation works (CF)	150.00	137.00
Agriculture & Livestock Development Project (CF)	214.00	175.00
Administration and Maintenance (CF)	**1,575.50**	**1,498.18**
Total	**2,733.50**	**2,578.18**

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 2018 was SLRM 290 (Revised) and the allocation has been effectively fully utilized during the year.

No.	Description	Physical Progress as at 31.12.2018
01	Construction/Rehabilitation of Distributary Canal	13.2 km
02	Construction/Rehabilitation of Field Canal	70.4 km
03	Rehabilitation of Causeway	3 Nos
06	Repair & Improvement Building	2.5 Nos
09	Participatory Rehabilitation of FC Canals	2.1 Km

- **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 Sighapura 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 Mahawelithenna Tank and related irrigation channels.

Financial allocation for the year 2018 was SLRM 60 (Revised) and it's fully utilized during the year.

No.	Description	Physical Progresses as at 31.12.2018
01	Construction of FC Canal	6.8 km
02	Construction of D Canal	3 km

03	Construction of Hamlet road	4 Km
04	Reforestation- Plants	2000 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 2018 was SLRM 76 (Revised) and out of which SLRM 64 has been utilized during 2018 Jan. – December.

No.	Description	Physical Progresses as at 31.12.2018
01	Rehabilitation of Irrigation Infrastructure	2 anicuts completed
		3.3 Km irrigation canal completed
02	Rehabilitation of Roads	5.2 Km macadam road
		150 m Concrete road

03	Construction & Maintenance of common Buildings	9 Nos
04	Training Programmes	74 Nos
05	Agriculture and Livestock Development	Extension services for 1,439 families

- **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 2018 was SLRM 108 and Financial allocation out of which SLRM 94 has been utilized during this year.

No.	Description	Physical Progresses as at 31.12.2018
01	Rehabilitation of Irrigation Infrastructure	2 Nos anicut
		1.925 km F Canal & D canal
02	Rehabilitation of Roads	0.55 Km macadam road
		4.0 Km Asphalt road
03	Construction & Maintenance of common Buildings	6 Nos
04	Land and Land Improvements (Paid compensation)	22 lots
05	Agriculture and Livestock Development	Extension services for 1,557 families

- **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.

Allocation for the year 2018 was SLRM 260 (Revised) and it was fully utilized during this period.

No.	Description	Physical Progresses as at 31.12.2018
01	Land Marking and survey	2000 lots
01	Rehabilitation of irrigation canals	5 km
02	Construction of Building	23 Nos
03	Construction of roads	55 Km
04	Construction of Agro wells	19 Nos
05	Construction of water supply scheme	80 over head tanks
06	Training Programmes	157 Prg
07	Agriculture Development	Extension services for 3,000 families

- **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 2018 is SLRM 150 (Revised) out of which SLRM 137 has been utilized during this year.

No.	Description	Physical Progresses as at 31.12.2018
01	Rehabilitation works of major reservoirs related infrastructure works	98 % of 8 major reservoirs
02	Rehabilitation of downstream irrigation related infrastructure for the year 2018	100%

- **Agriculture & Livestock Development Project**

Source of Funds : Domestic Funds
Total Estimated Investment : SLRM 214 (Revised Budget)
Project Period : Annual (01.01.2018 – 31.12.2018)

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 priories in 2018 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 2018 was SLRM 214 (Revised) out of which SLRM 175 utilized during January – December 2018.

Agricultural Crop Cultivation

Extent of paddy cultivation in Mahaweli areas recorded 84,460 ha with production of 469,176 mt of paddy production were recorded in 2017/2018 Maha season. The extent of paddy cultivation in 2018 Yala season were 80,960 ha with the production of paddy were recorded as 436,875 Mt. The total paddy production for 2017/2018 Maha and 2018 Yala were 906,052 Metric Tons. The average yield in terms of paddy was 5.5 mt/ha in Mahaweli areas.
The extent of Other Crop Cultivation (Other Field Crops, Fruits, Vegetables and Perennial crops) were approximately 36,164 ha consist 1,510 ha of Soya Bean, 3,805 ha of Maize, 535 ha of Big Onion,683 ha of Chili, 137 ha of Black Gram, 443 ha of Cowpea, 704 ha of Ground Nuts. Further 13,557 ha of Fruits and 6,312 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 24% of Paddy, 85 % of Soya bean, 6 % of Groundnut production and 9% of Chilies 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 109, 060 Cattle population in the Mahaweli areas while produced 27.1 million liters of milk during January – December 2018.

During this year, 98 cattle sheds were built and upgrade while 2 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 42 animal clinics and vaccination programs were held.

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. 13.7 Metric Tons of inland fish production reported during this year. In order to improve the fish production, 20 breeding centers were constructed.
In order to improve the ornamental fish production 41 mud ponds and 26 cement tanks were constructed during the period. Furthermore, to strengthen the fishery communities 36 training programmes were conducted during this year.

Maintenance and Development

Mahaweli Authority of Sri Lanka responsible for the Operation and Maintenance of approximately 10,202 km of irrigation channel network, 484 large, medium and minor tanks and reservoirs to ensure the efficient irrigation water management and supply for 106,971 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 330,000 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. Financial allocation for the year 2018 is SLRM 1,575.50 out of which SLRM 1,498.18 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. Financial allocation for the year 2018 is SLRM 482.65 out of which SLRM 430.31 utilized during this year.
1,014 registered farmer organizations are operating in the Mahaweli areas and operation and maintenance of distribution channel network. Programmes conducted upgrading for 16 farmer organizations to the commercial level during the year 2018 under the guidance of Institutional development division.

Land Alienation

Deed granting Programme

System	Target (2018)	Progress up to 2018.12.31 Grants/Permit/Long term lease
B	9,174	8,270
C	8,440	8,440
D	1,198	1,990
H	5,230	4,240
L	2,750	2,750
Moragahakanda	1,857	1,857
Victoria	920	255
Huruluwew	1,302	1,300
Walawa	8,570	8,570
Rambakenoya	1,500	1,500
Total	**41,741**	**39,172**

Institutional Development

Upgrading socio – economic conditions of Mahaweli settlers through providing entrepreneurship opportunities, capacity building, institutional strengthening, women empowerment, social and cultural development were major initiatives implemented as post settlement programme of MASL. Accordingly, Institutional Development Division of MASL has organized series of programmes and workshops covering above subject areas for the betterment of second and third generations of Mahaweli settlers.
It was able to conduct 3,090 institutional development programmes, 651 Community development programmes and 88 programmes related to women development during the period of 2018 January – December.

Forest & Environment

- **Forest & Environment Conservation**

Environment Division continues to manage and coordinate all environmental activities within Mahaweli areas. Assigning priorities for the “Punurudhaya (පුනරුදය)” 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.
Financial allocation for the 2018 was SLRM 35 out of which SLRM 30.66 utilized at the end of this year.
Under the natural resource conservation for the soil conservation 15367 mm of on farm soil conservation were completed. During the year, 357,934 plants were produced under the nursery

management and plant production programme while 33,595 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 23 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 24 tanks in Mahaweli areas. To control the human elephant conflicts of the Mahaweli areas 18.6 Km of elephant fence were constructed and 666 Km of elephant fence were maintained (299 Km in Moragahakanda Project) during the end of year 2018.

- **Renewable Energy Production Enhancement (Mini Hydro Power Projects)**

Letters of intents have been issued for the construction of 21 mini hydropower stations in Mahaweli areas with a total capacity of 56.03 MW of hydropower. 12 projects have been already commenced for commercial operation up to end of December2018 with the capacity of 39.85 MW.

Business Development

Renovation of 08 circuit bungalows with modern furniture has already been completed and 4 circuit bungalows furnish completed without renovation.12 bungalows were already available on online booking.

Kothmale

Maduruoya

Ruhunuketha

Mahaweli Hela Bojun Hala

Established 03 “Mahaweli Hela Bojun Hala” with commodity sales outlets in Welikanda, Dehiaththakandiya, Moragahakanda.

Investments opportunities for Private Sector in Mahaweli Areas

Approvals were granted to 36 new Investment and other development projects in Mahaweli lands during January to December 2018.

Investment Projects	*29*
Renewable Energy Projects (Solar/ Dendro)	*07*

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

With the collaboration of Regional Development Bank (RDB) MASL was able to assist 1722 entrepreneurs in Mahawali areas amounting of SLRM 285 under the "Mahawali Saviya" (මහවැලි සවිය) special loan programme. Under the new SME programme of "Moragahakanda Athwala " (මොරගහකන්ද අත්වැල) it was able to assist 33 entrepreneurs for their business development accounted SLRM 9.6 since 2017 up to end of 2018.

Boat Services

Environment friendly boat services are another key income generation project of business development division. There are 6 boat services in operation up to end of 2018 in Victoria, Polgolla, Dambuluoya and Loggal oya under the authority of Mahawali which are generating SLRM 1.1 income based on year levy.

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 during the period of January to December 2018.

Number of Vacancies Fulfilled		Promotions	
Senior Management (HM)	1	Senior Management (HM)	1
Middle Management (MM)	26	Middle Management (MM)	26
Junior Management (JM)	5	Junior Management (JM)	5
Management Staff (MA 3, MA 2-2, MA 1-2)	109	Management Staff (MA 3, MA 2-2, MA 1-2)	109
Primary Level (PL)	70	Primary Level (PL)	70
Total	**211**	**Total**	**211**

- **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.

Training Programmes Conducted (Jan. – Dec, 2018)		
	Programmes	Participants
Senior Management (HM)	10	40
Middle Management (MM)	27	151
Junior Management (JM)	24	218
Management Staff	35	447
PL	4	202
Total	**100**	**1058**

Legal Enforcement

During this period, 160 court cases were following up by the legal division under the guidance of Attorney General Department while the head works division involved in 32 case hearings were conducted to solve some of the pending legal cases of MASL. Furthermore 03 new cases have been filed.

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

Power Station	Live Storage (MCM) (2018.12.31)	Active Storage (MCM) (2018.12.31)
Kotmale	143.5	121.3
Victoria	593.8	559.8
Randenigala	770.1	376.7
Rantembe	5.2	0.8
Bowatenne	17.2	14.9
Udawalawa	266.2	237.9
Moragahakanda	556.3	503.7
Dambulu Oya	10.8	5.4
Kandalama	31.4	27.6
Kalawewa	116.9	101.9
Ulhitiya/Rathkinda	124.6	61.2
Maduru Oya	521.3	402.3
Total	**3,157.3**	**2,413.5**

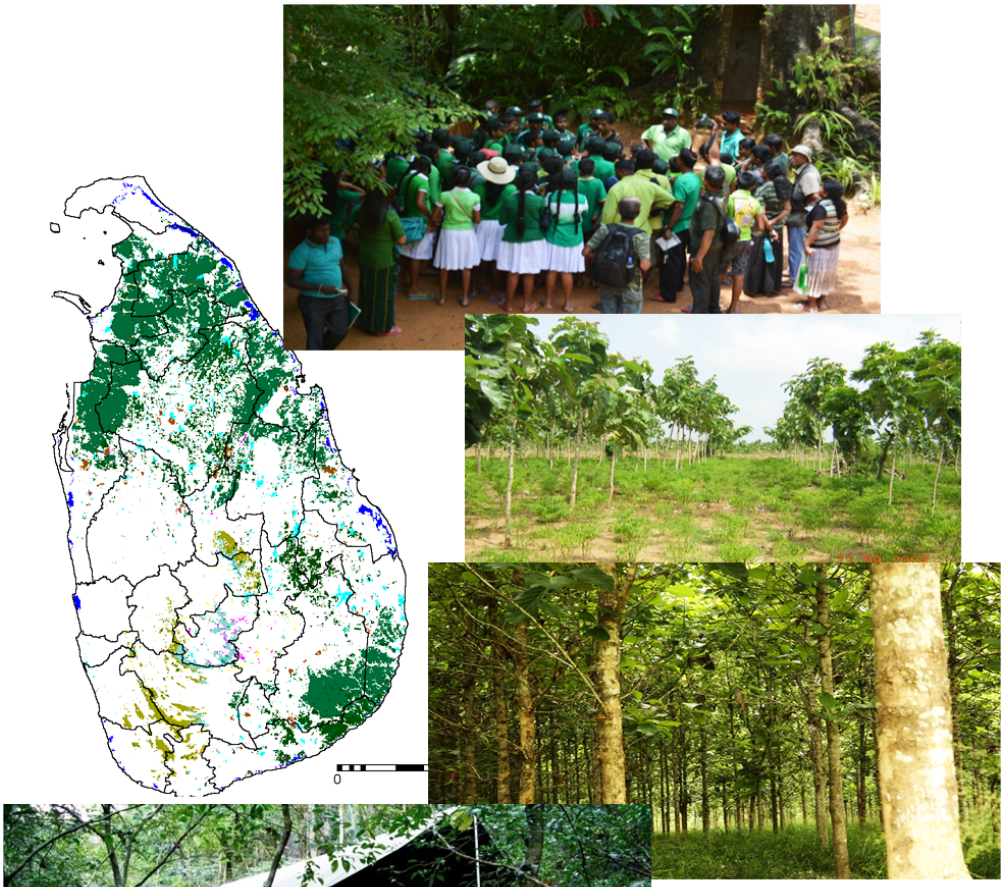
Internal Audit

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

Power Generation Capacity of Mahaweli Reservoirs

Reservoir	Gross Storage (MCM)	Generating Capacity (MW)	Power Generation July - December 2017	Power Generation Jan - June 2018
Kotmale	174	201 (67 x 3)	230.44	208.79
Victoria	722	210 (70x3)	193.59	250.48
Randenigala	860	126 (63x2)	53.53	118.36
Rantambe	7.001	49 (24.5x2)	38.37	66.26
Ulhitiya/Rathkinda	146	-	-	-
Maduru Oya	596	-	-	-

Reservoir	Gross Storage (MCM)	Generating Capacity (MW)	Power Generation July - December 2017	Power Generation Jan - June 2018
Bowetenna	23.5	40 (40x1)	47.21	23.13
Udawalawe	268.65	6 (LB- 2x2+RB- 2x1)	1.25	8.98
Ukuwela	-	40 (20x2)	99.36	84.44
Polgolla	4.112	-		
Moragahakanda	570	25	-	28.57
Sub Total	**3,371**	**697**	**664**	**789**



Department of Forest Conservation

"To conserve and develop national forest resources to ensure the prosperity of the nation"

The Mission of the Forest Department is to "conserve and develop forest resources in Sri Lanka to ensure the prosperity of the nation". Forest Department carried out activities indicated in this report during the year 2018 to accomplish this mission.

SOCIAL FORESTRY & FOREST EXTENSION ACTIVITIES

- **Seedling Production**

The total number of seedlings produced during the year 2018 was 558,850. Out of this total number of seedlings produced, 124,686 seedlings were sold and 283,382 seedlings were issued free of charge to the government and other institutions for their tree planting programs. The rest were used for the Forest Department extension programs such as various tree planting activities, including "Wana Ropa" National Tree Planting Program and home garden development activities.

- **Awareness and Extension Programs (From 2018.01.01 to 2018.02.31)**

The following awareness and extension programs were carried out during the reporting period.

Program	Number
Awareness programs	1322
Tree Planting Programs	786
Competitions and other programs	247
Total	2355

- **Participatory Tree Planting Programs**

Forest Department is one of the key institutions responsible for the implementation of the "Wana Ropa" National Tree Planting Program.

Tree Planting Activities (01/01/2018 – 31//12/2018)

Activity	No of programs
Road side planting	26
Catchment planting and river bank planting	53
Tree planting in schools	203
Tree planting in other government institutions	75
Tree Planting Programs in religious Places	41
Other tree planting programs	388
Total	786

- **Establishment of New Farmers' Woodlots**

101.2 ha of farmers' woodlots were established during the year 2018 and 170 farmers participated in this activity. 241 ha of farmer's wood lots established in year 2016 & 2017 were scientifically managed.

- **Home Garden Development**

6,087 home gardens were developed in year 2018 by providing seedlings and technical assistance. 106 tree management programs were also implemented.

SILVICULTURE & FOREST MANAGEMENT ACTIVITIES

- **Enhancement of the Quality of the Forests**

In order to increase the percentage of forest cover of Sri Lanka up to **32%** from **29.7 %** of the land area, Forest Department started forest enhancement program in **2014**. Silviculture and forest management division has the responsibility of achieving the above aim by implementing various activities. Three main strategies have been recognized 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 the above strategies, environmental restoration, reforestation and maintenance of reforested plantations were implemented during years 2017 and 2018. 7583 ha of reforested areas of 2014, 2015 and 2016 with mixed indigenous species were re – planted with mixed ingenious Species. Maintenance of 420 ha of plantations.

- **Maintenance of Re-Planted Areas**

The areas which were restored in years 2015, 2016 and 2017 were maintained during this year, under this, 7583 of land were maintained.

- **Reforestation**

During this period, 951.7 ha of forest plantations were clear felled and replanted.

Reforestation Program

District	Former Species	Newly Planted species	Progress Ha
Ampara	*Teak/ Kaya*	*Teak/ Kaya*	142
Anuradhapura	*Teak*	*Teak/ Kaya/ Halmilla*	109.5
Polonnaruwa	*Teak*	*Teak*	62
Batticaloa	*Teak*	*Kaya*	150
Mulathive	*Teak*	*Teak*	50
Vavniya	*Teak*	*Teak*	35
Matale	*Teak*	*Kaya*	33
Monaragala	*Teak*	*Teak*	52.4
Badulla	*Eu:/ pinus*	*Eu:*	67.6
Nuwara-Eliya	*Eu:/ pinus*	*Eu*	43.2
Kalutara	*Pinus/ Mix*	*Hora Mix*	37.5
Kurunegala	*Teak*	*Teak*	59.1
Gampaha	Acacia	*Indegenious Species*	10
Puttlam	*Kaya/ Teak*	*Kumbuk*	40
Rathnapura	*Kaya/ Halmilla*	*Eucalyptus/ Acacia*	30
Matara	*Pinus*	*Hora Mix*	30.4
Total			**951.7**

- **Seedling Production**

1,748,639 numbers of seedlings were produced for the reforestation programs in the year 2017. Major species used for reforestation were Teak, Eucalyptus and local species.

- **Young Plantation Maintenance**

Weeding, application of fertilizer, fire prevention and vacancy planting were the main activities carried out under the forest plantation maintenance program. During the reporting year 2349.44 ha of plantations were maintained.

- **Silvicultural Operations in Forest Plantations**

Pre-commercial thinning was carried out in 532.32 ha of Teak, Eucalyptus and Khaya plantations in 08 districts. Thinning was carried out in teat and Eucalyptus Plantations in 08 Districts. Cleaning activities were carried out in 152.6 ha. Coffees management was carried out in 92 ha

- **Conservation of Hill Top Areas**

103.9 ha of hill top Plantations were Maintained, which were established in 2015 and 2017

- **Oleo Resin Extraction from Pine Plantations**

Mature *Pinus carebia* plantations were leased out to five private sector organizations for Oleo Resin extraction and these activities were monitored. Commercial scale resin tapping agreements of five private sector organizations were extended for continuous operation. 966.64 ha of land were leased out and Rs. 6008830.05 was recovered during that year.

- **Yield form Forest Plantations (For the year of 2018)**

01. Yield from thinning - 123736 cubic meters
02. Yield from regeneration felling - 190352 cubic meters
03. Yield from development projects - 51782 cubic meters
04. Yield from treated timber - 37824 cubic meters
05. Yield from forest offences - 4515 cubic meters

- **Income from Circuit Bungalows**

Revenue collected from renting out Circuit Bungalows, Conservation Centers, Observation Cabins and Camping Sites to the public in year 2018 amounted to **Rs. 8,828,099.01**

- **Forest Inventory Activities**

Full enumeration of plantations released to State Timber Corporation in 2018 was undertaken. Enumeration of 700 ha of plantations was completed in the year 2018.

- **National Forest Inventory (NFI) Database**

This was started with the help of UN – REDD program and the data collected for 900 sample plots was entered and updated in a dedicated computer database.

- **Survey and Boundary Demarcation**

Given target for the boundary demarcation was 996.83 km and 996.83 km were completed. Target for the surveying was 35 km and 35 km were successfully surveyed.

- **Environment Conservation & Management Activities**

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

- **Management of Conservation Centers**

Maintenance and improvement activities were carried out regarding necessary facilities in Kanneliya, Kottawa, Udawattakele, Oliygankele and Kurulukele conservation centers and Haputale arboretum.

- **Revenue Collected as Entry Fees (01/01/2018 – 31/12/2018)**

	No. of visitors	Revenue collected as entry fees (Rs.)
Udawattakele forest (Kandy)	34126	7,683,258.85
Knuckles forest (Deenston)	5399	1,115,765.00
Knuckles forest (Pitawalapathana)	58706	1,716,185.17
Sinharaja forest (Pitadeniya)	23859	3,730,889.49
Sinharaja forest (Kudawa)	33839	5,349,397.00
Hurulu Eco Park (Habarana)	57292	48,581,204.31
Kottawa forest (Galle)	2172	257,550.00
Kanneliya forest (Galle)	64779	2,680,819.50
Maakandawa forest (Kegalle)	3559	791,779.35
Total		71,906,848.67

Total revenue recovered is Rs. 71,906,848.67

- **Revenue from Filming Inside Forests**

Revenue earned from video filming inside Forest Reserves managed by the Department from January to December 2018 amounted to Rs. 662,250.00

- Official website of forest department was launched on April 2018. This website won the performance award in “best web” competition 2018. https://www.forestdept.gov.lk /index.php/en/
- Internet E service began to receive Eco lodges and camping sites via internet. https://eservice.forestdept.gov.lk/dof/#/view-home-page
- Forest song was launched on international forest day, which was celebrated on 21st of march 2018. https://www.youtube.com/watch?v=5hp0Q10EQX0

- **Stumpage for payable for treasury in 2018**

The total Stumpage value of all the timber extracted from the state forests by state timber Co-operation during year 2018 amounted to Rs. **1,033,853,193.16**

RESEARCH, EDUCATION & DEVELOPMENT ACTIVITIES

1 Study on suitable establishment methods in teak plantations for climate change adaptation
2 Study on effective weed control methods through appropriate silvicultural improvements in teak plantation establishment
3 Study on different species mix models for forest restoration
4 Silvicultural improvement of selected local tree species for timber production
5 Study on mangrove soil carbon estimation
6 Grafting of teak and Kumbuk

- **Maintenance of Research Trials**

01. Forty – two field experiments in 9 districts were maintained during the year by the divisional staff and research staff, and data were collected from relevant studies as planned.
02. Three seed orchards in Kurunegala (teak and khaya) of about 40 ha were maintained by the Research Centre Kurunegala. Around 500 Kg of teak seeds were collected during the year from seed orchards. 7.2 Kg of Eucalyptus grand is seeds were collected

- **Forestry Education**

Following Training programs were conducted at Sri Lanka Forestry Institute

01. Forest Diploma Course – 2018 (NVQ Level)
    47 Range Forest Officers were trained during the year.
02. Short term training courses for the officers in the Forest Department
03. One short term courses for other institutions.

FOREST PROTECTION AND LAW ENFORCEMENT ACTIVITIES

The main task of protection activities was done by the territorial staff attached to the 23 divisions. Total of 3757 forest offences were detected by the staff during the year 2018.

In 2018, Six Extra Ordinary Gazette was issued for declaring forests. One Conservation forest was declared, Nine Reserve Forests were declared.

- **Private Timber Based Industries**

364 Saw mills, **550** Timber sales depots, **724** carpentry workshops, **627** furniture shops, 51 Firewood sale outlets,**17** Timber seasoning and processing factories, and **417** Mobile timber saw mills were newly registered during the year 2018
The total number of registered private timber enterprises was **28731** at the end of 2018.

Export of Forest Products Obtained from Sources other than Forests (01/01/2018 – 31/12/2018)

Granting of permission for export of plants, seeds and other forest products were carried out. A total of **Rs. 168,906.25** from the normal service and Rs. **1,755,187.50** from the express service for the issue of export permits for plants/ plants materials and seed was earned. **Rs. 2,273,062.50** from express service and **Rs. 762,593.75** from normal service for the issue of export permits for Furniture, Handicrafts, Toys and value added timber products was earned. The total of **Rs.**

1,790,032.50 has been earned from one day service. The total revenue from all above services was Rs. **6,749,782.50**.

PLANNING & MONITORING ACTIVITIES

- **Construction of Buildings**

Construction of Range Forest office Mihirigama and Range Forest officer Quartus Kilinochchiya

- **Maintenance of Buildings**

120 Building maintenance works were carried out under building maintenance programs during the year.

Coast Conservation and Coastal Resource Management Department

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. The Director General of Coast Conservation and Coastal Resource Management was appointed and the department name changed as Coast Conservation and Coastal Zone Management department in June 2009, was empower under the amendment of Act No: 49 of 2011

Objectives

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

Main Challenges:

- Execution of immediate actions for coastal erosion due to weather changes.
- Environment impact in the coastal zone due to development activities and climate changes
- Implementation of immediate actions against unauthorized developments in the coastal zone due to social factors

Achieved Major activities

Coast line Management (1st January to 31st December 2018)

Construction of coast protective structures

Sri Lanka, an island situated in the Indian Ocean is greatly influenced by island location. In addition, development within coastal areas has increased interest in erosion problems; over 30 years, it has led to major efforts to manage coastal erosion problems and to restore coastal capacity to accommodate short-term and long-term changes.
With using available of rock material implementation of hard coastal protection scheme is one alternative solution to address coastal erosion problem. With these coast protection schemes, developments of adjacent shore front lands are constructed as beach parks and path ways. However, sand nourishment schemes, and other soft solution methods are also being introduced for suitable places.

- **Off shore Breakwater**

Construction work completed 50m long breakwater in Kappaladi

Construction completed,

- Mandathive in Jaffna - 80m long T breakwater
- Duwa watta in Marawila and Kolinjadiya - 3 nos of 80m long breakwate
- Kappaladi – 50m long breakwater

- 89m long breakwater construction is in process in Marawila.

80m long T breakwater in Mandathive

Total investment for construction of breakwaters in 2018 Rs.*84,211,807.70*

- **Revetments**

150m long revetment in Thotagamuwa, Galle

- Revetment construction completed,
- 60m in Dungalpitiya
- 150m in Thotagamuwa, Galle
- 35m in Paramulla,
- 50m in Pallikuda, Tangalle

construction work is in progress
230m revetment in Madilla and 120m revetment in Unawatuna Dalawella, Galle

600m Coastal length was protected by constructing revetments in 2018
Total investment for construction of revetments - Rs.54,497,897.03

- **Groyne series**

Groyne series in Barudalpola

Groyne construction completed,

- 2 groynes in Beruwala
- 8 groynes in Barudalpola
- 6 groynes in Kudamaduwella
- 8 groynes in Illanthadiya, Norochcholai
- 10 groynes in Muthupanthiya
- 2 groynes in Udappuwa

Coastal erosion in Muthupanthiya

Construction of three groynes are in process in Dungalpitiya, Uswetakeiyawa

Total investment for construction of revetments - Rs 103,797,647.39

- **Emergency coastal protection**

Coastal stretches where erosion trend has increased due to high rate of human settlement and increased development activities. Emergency coast protection work is being handling where high erosion occur due to sudden changes of weather condition.

Construction of Gabion wall at Moragalle – Beruwala was completed which was continued from 2017.
Emergency coast protection work was completed in coastal stretches, where Thaldiyawatta, Navi Camp & nearby area, Abroo road and Kalido beach in Kalutara, Muthupanthiya, Patuwatha- Dodanduwa, Karukapane, Katuneriya, Kosgoda, Thalalla, Thoduwawa, Ambakandawila, Kuttiduwa, Uswetakeiyawa and Dungalpitiya
Total expenditure for emergency work- Rs. 49,073,159.67

- **Maintenance of Coastal Protective Structures**

After monitoring the present conditions and functions of existing coast protective structures, implementation of necessary improvements & maintenance are being carried out according to the requirement.

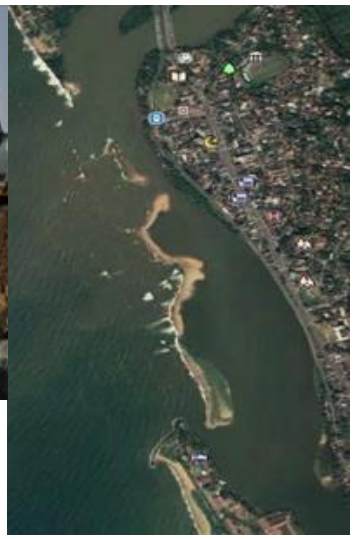
400m revetment in Mudukatuwa

Repair of 400m revetment in Mudukatuwa and improvement of Groyne and landscaping at Mahamodara completed.
Repairs of Area engineer's office in Matara and Batticaloa were completed
Total investment - Rs. 5,757,845.83

- **Sand nourishment as soft solution for coastal protection**.

As per coastal engineering concept beach nourishment by offshore sand is considered as the best environmental friendly solution for the coastal erosion. Rs. 800 million financial allocation has

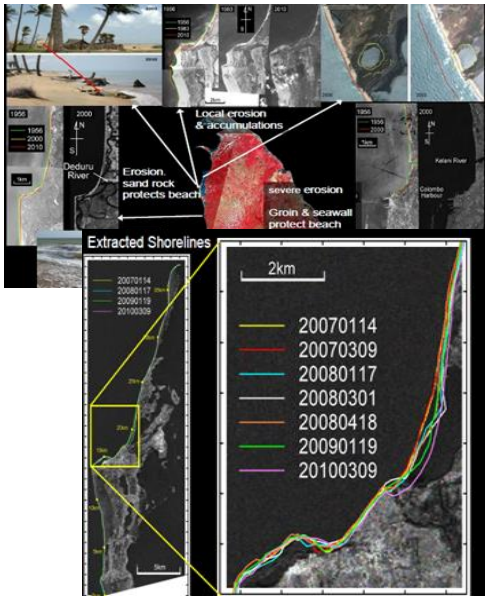
been provided in the national Budget in 2018 for the programme under the Budget proposal No. 42 and part of 43.



6Km coastal stretch from Ratmalana to Mountlavinia had been identified to implement the programme initially. However restoration of disturbed sand bar at Kalutara River mouth was subsequently recognised as an urgent requirement, cabinet approval has been granted on October 18, 2018 for calling bids from the dredging contractors who are currently working in Sri Lanka.
Procurement procedure was started in December 2018,

- **Coastal Engineering Investigations**

Main objective of this programme is to initiate solutions where coastal problems take place. Identifying, determining and design of suitable coastal structures for coastal engineering projects and coastal protective schemes through studies and investigations, 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 under the programme, in addition, refreshing, sharing knowledge and experience in coastal engineering are also conducted under the programme.



- Completed programmes

Bathymetric survey for coast line from Mountlevinia to Hambantota
Designs for coast protective structures,
identified for the 2018 in the coastal stretches Barudalpola, Kuda Maduwella, Udappuwa, Illanthadiya-Norochcholai, Dungalpitiya, Paramulla, Madilla, Pallikudawa, Maradana/ Beruwala, Beruwala, Thotagamuwa, Katuneriya and Mudukatuwa
Annual coastal engineering symposium and training programme for Global Positioning System.

- Ongoing programmes

Bathymetric survey for coast line from Hambantota to Panama
Construction of Koggala beach park has been started. Procurement work has been completed for implementing coast protection work using sand bags.
Sediment transport study in East coast and south coast

- Water quality monitoring programme

Field work for water quality monitoring conducted at 06 locations, Mount Lavinia, Nilaweli, Arugambay, Polhena, Unawatuna and Hikkaduwa coastal stretches were completed. Technical evaluation for collected data is now in progress.
Total investment - Rs *44,958,839.62*

Coastal Zone Management Programme

Coastal zone management program is implemented annually to balance the degradation of environment and its habitats, and the development activities within the zone.
Implementation of green coastal belt, beach access program, control and demolish unauthorised structures, implementation of permit procedure with environmental impact assessment, identification of conservation areas where conserved and identification of special management areas are being carried out under this programme.

Implementation of Coastal Green Belt

- Plantation of mangroves at Puttlam, Mannar and Chilaw lagoons
- Implement about 1 Km coastal green belt by Planting of sooriya, kasa coconut and mudilla etc.
- Maintenance of completed projects

Total investment - Rs 3,976,138.80

Coastal green belt - Kalmunei

Tree planting programme - Seenigama

Implementation of coastal beach access programme

- Field work for identification of beach access and analysis of data in Hambantota, Matara and Galle was completed.
- Field work fpr identification of beach access was completed and analysis of data is in process now for Colombo and Kalutara districts.

Total investment Rs, 1,629,138.59

Demolition of unauthorized structures and beach cleaning programs

- 51 nauthorised constructed structures were removed in Negambo, Mirissa, Induruwa, Hambantota and Beruwala.
- Legal action was taken for 162 identified unauthorised constructed structures.
- 25 beach cleaning programmes were carried out in identified coastal stenches.
- Total investment Rs..4,221,665.07

Beach cleaning programme – Paramulla, Matara

- Permission was granted for 19 and 9 development projects after assessing the studies of Initial environmental examination and Environmental impact assessment respectively
- Permission was granted 1763 of development activities which do not require environmental assessment
- 90% of progress achieved for development of software for e-permit procedure in 2018.

Total investment Rs. 9,475,368.14

Special Management area programme

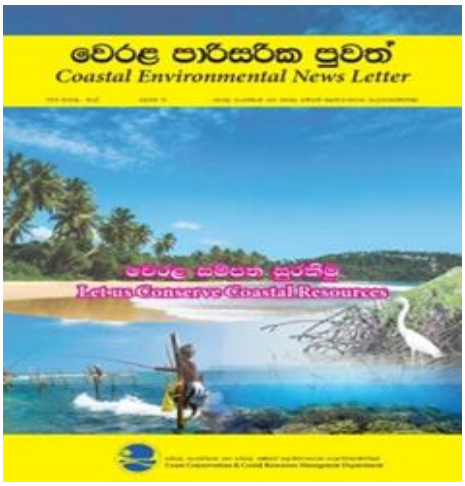
Panama sand dune was declared as affected area under the programme in 2018. The gazette notification has been issued on this declaration. Formulation of regulations is now in process

Total investment Rs. 5,236,086.40

Environmental Education Program

Main objective of this programme is to improve the awareness of the coastal zone management and its regulations among 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 countrywide schools of the Island. Minimize damages to the coastal zone through educating stakeholders or coastal community is one of the strategies of coastal zone management.

- The news letter "Werala parisarika Puwath" which includes the development activities and other projects done by the department within coastal zone. The first and the second publications were done in June 2018 and in November 2018 respectively.
- Thirteen awareness programmes were conducted for government officers, school children police officers etc.
- Debates, education exhibition, art competition, also street drama, and cultural show etc. for school children in Gampaha district, was conducted for a week from June 5, 2018 in support of Environmental day programme.



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- Redevelopment of video documentary film for coral, mangrove and sand dunes etc. was completed.

Total investment Rs. 4,579,891.05

Establish Special Mechanism for Integrated Coastal Resource Management from Negambo to Mirissa Coast

Rs. 25 million financial allocation has been provided in the national Budget in 2018 for establish special mechanism for integrated coastal resource management from Negambo to Mirissa coast under the Budget proposal No. 40. Under this programme, It was identified two main activities, preparation of master plan for tourism development by conserving the coastal zone from Mirissa to Negambo and construction of beach park at Koggala as short term activity.

- Preparation of master plan for tourism development by conserving the coastal zone from Mirissa to Negambo – final report has been submitted after studying the present situation of the coastal stretch by the selected consultancy firm.

- Construction of Beach Park at Koggala- construction work has been started

Total investment - Rs. 9,372,266.30

Central Environmental Authority

The Central Environmental Authority (CEA) is one of the main implementing arms 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-seven years' service by 2018.

This performance report contains the performance of the CEA including 09 Provincial Offices, 14 District Offices and Special Projects implemented by the CEA during 2018. This report provides a better view of the works carried out by the Authority during the corresponding year.

Objective

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

Summary of the Financial and Physical progress

Capital and Recurrent budgets

Budget	Allocation for 2018 (Rs. Mn.)	Progress as at 31.12.2018 (Rs. Mn.)	Financial Progress as a %
Capital Budget	57.00	57.174	100%
Recurrent Budget	17.75	15.8698	89.41%

Special Projects Undertaken by the CEA

Name of the Project	Allocation for 2018 (Rs. Mn.)	Progress as at 31.12.2018 (Rs. Mn.)	Financial Progress as a %	Physical progress as a %
Environmental Pioneer Programme	19.00	18.485	97.28	100
Education Awareness and Green Awards	17.00	16.787	98.75	100
Monitoring of water quality of the major water bodies (JICA)	1.00	0.964	96.4	100
Pilisaru Project	190.00	188.00	98.94	100
EDCF Project	39.00	37.152	95.26	100
Pethiyakanda Integrated Solid waste Management Project	25.00	25.00	100	100
Monitoring of Ground Water Quality of the Gampaha District	6.355	6.25	98.35	100

"Punurudaya" Environmental Protection Programme

Activity	Allocation for 2018 (Rs. Mn.)	Progress as at 31.12.2018 (Rs. Mn.)	Financial Progress as a %	Physical progress as a %
Production of EPP & ECO club materials (cap, medals, certificates, Note books)	14.70	14.65	99	100
EPP National camp	6.00	5.89	98	100
Preparation of guide Book for teachers & Presidential medal holders	0.30	0.17	57	100
Environmental Education & awareness program for Presidential medal holders	0.50	0.34	68	100
Production of Exhibits for environmental awareness	1.00	0.73	73	100
Dissemination the environment knowledge through the public libraries	0.90	0.90	100	100
Gampaha district integrated solid waste management project - Construction of Compost yard	64.97	60.29	93	100
Total	**88.37**	**82.96**	**93.9**	**100**

Environmental Pollution Control

Environmental Pollution Control Unit

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 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 2018

- ***Preparation of polices, regulations, standards and guidelines***
  - Obtaining support from the JICA project CEA was able to develop ambient water quality standards and final draft was submitted to the legal draftsman department for gazetting.
- ***Site recommendation procedure for new establishments / industrial activities***
  CEA has issued 1331environment recommendations for new industrial establishments' island wide providing guidance to control their emissions and discharges.
- ***Environmental Protection License Scheme***
  - Complying standards and norms by industrial activities reduces waste load to the environment by more than 90% from its waste generation. This task has been carried out by regulating 8914 high polluting industries and 8752 medium polluting industries through the EPL process and that is about 68% and 83% of the total high and medium type polluting industries respectively.
  - CEA controlled the pollution of 859 BOI industries providing guidance through concurrence procedure and its 76% of the total BOI industries located outside the EPZs.
  - 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.

- ***Training Programmes***
  A special technical training on air pollution control systems has given to the CEA staff and 6 training programmes on effective implementation of EPL scheme were given to the selected Local Authorities.
- ***Pollution Source Inventory***
  CEA has developed a database for Pollution Source Inventory on industrial activities under the JICA project and started to implement in the year 2018 onwards. However, it is still in testing stage and further developments to be done for proper application.
- ***Technical Intervention and Industrial Facilitation***
  - There is a cabinet memorandum giving some limitations on locating high and medium polluting industries in sensitive areas of Kelani river basin to protect the Kelani River from industrial discharges. To implement the memorandum, the CEA formed a committee to provide recommendations on siting new industries. In year 2018, CEA conducted 9 meetings and evaluated 51 project proposals.
  - Two technical guidebooks on pollution control was prepared for Bakeries and Limekilns with the technical support from Industrial Technology Institute (ITI) and National Engineering Research and Development (NERD)
  - Ministry of Industries and Commerce (MOIC) was initiated a soft loan scheme for environmental improvements in industrial activities and CEA facilitated and supported to the MOIC for this programme. The interest is 6.5% with 2 years grace period and limit is up to Rs. 30 million. The CEA facilitated to grant 98 number of loans for industrial activities to upgrade or construct their pollution control systems. This will finally contribute to minimize the pollution load to the environment and maintain quality of the environment.
- ***Annual registration programme for environmental consultants and analytical laboratories***
  - 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 53 consultants were registered for the year 2017/2018 to provide better consultancy/ laboratory service for industrialists.
- ***Special Projects and Programms***
  - The CEA started a public private partnership programme to initiate a real time water quality monitoring system at Ambatale water intake in Kelani River in the year 2018.
  - Few important water bodies namely Kalu, Nilvala, Maha Oya and Badulu Oya were selected and important monitoring points were identified by using GIS systems and site visits, for water quality monitoring purposes in the year 2018.
  - A financial grant of Rs. 7.2 million was granted to the CEA from Water Environment Partnership in Asia programme for the **Project of Monitoring of the Ground Water Quality of Gampaha District**. A study was conducted on how industrial discharges can affect to the ground water pollution. Under the project, 13 wastewater generating industries were selected and analyzed their pollution control strategies and final disposal methods. Also, 96 ground water sources (shallow dug wells) were selected and water samples were collected in four different seasons (monsoon & inter monsoon periods) and 09 water data loggers were placed in selected wells to check the water level and temperature. Data collection was completed at the end of December 2018.

Air Resource Management and Monitoring Unit (ARM&M)

Ambient air quality management and environmental noise pollution management are the major functions of the unit.

- ***Amendment of National Environmental (Air Emission, Fuel and Vehicle Importation Standards) Regulations No. 1 of 2003***
  Vehicular Exhaust Emission Standards for Importation, manufacturing or assembling of vehicles were amended in compatible with the Euro IV standards and the Japanese standards and such amendments were published in the Gazette Extraordinary No 2079/42 dated 12.07.2018 and No 2083/03 dated 06.08.2018 respectively.

- ***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.
- ***Guideline for Traffic Noise Assessment Criteria for Expressways***
  The ARM&M unit took action to publish the Guideline on Traffic Noise Assessment Criteria for Expressways.
- ***Guideline for Rail Noise Assessment Criteria for Rapid Rail Transit Systems***
  The Guideline on Rail noise Assessment Criteria for Rapid Rail Transit System was prepared and published.
- ***Implementation of Vehicle Horn Noise Regulations***
  The CEA appointed a technical committee and based on the recommendation of the technical committee, the Department of Motor Traffic nominated an officer for effective implementation of the horn noise regulations.
- ***Ambient air quality monitoring***
  During the year 2018, 97 samples were analyzed for Sulphur Dioxide (SO_2) & Nitrogen Dioxide (NO_2) and 88 samples were analyzed for PM_{10} (Particulates of Aerodynamic diameter less than 10 micron) at Colombo Fort monitoring station.

- ***National Ambient Air Quality Monitoring Programme***
  Vehicle Emission Trust Fund of the Department of Motor Traffic procured two fixed Ambient Air Quality Monitoring Stations and one mobile station. Fixed stations were commissioned at Battramulla & Kandy city and test was going on successfully. It was decided to use mobile station to determine air quality of selected cities of the country.
- ***Providing technological guidance & assistance for handling complaints and checking compliance***
  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.
- ***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 Transboundary Effects for South Asia. The ARM&M Unit carries out the trans-boundary air pollution monitoring programme at Doramadalawa site, Anuradhapura. 10 Samples were collected and analyzed for SO2, NO2 and PM10 until mid of March, 2018

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

- ***Analysis of surface water sample***
  The laboratory could be able to collect and analyzes 1168 water and wastewater samples for different parameters in 2018. During this period, the WQM unit collected and analyzed surface water samples from selected water bodies such as Kelani River, Benthota River, Ma Oya & Diawanna Oya for monitoring purposes, periodically on a monthly basis for 17 pre-determined parameters.
- ***Acquisition of accredited status to the Water Quality Monitoring unit from Sri Lanka Accreditation Board***
  WQM unit of Laboratory Services obtained ISO/IEC 17025 accreditation for Testing, on 15th November 2018 after successfully fulfilling the technical and management requirements of the Sri Lanka Accreditation Board (SLAB). Also, all the necessary equipment was calibrated as per the Accreditation requirement. Internal training programs for laboratory officials were also conducted for the capacity building of them as a requirement of the SLAB accreditation.

Waste Management

Chemical and Hazardous Waste Management Unit

The Chemical and Hazardous Waste Management 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 chemical management as identified in the Action Plan 2018.

Physical progress of the activities carried out during the year 2018

- ***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), 343 licenses were issued during year 2018.
  - Unavailability of up dated database on hazardous waste as a major obstacle for the effective hazardous waste management process. Therefore, a Field Survey to collect data on Hazardous waste generated within the country and quantification of the Hazardous waste was carried out through Industrial Technological Institute (ITI) of Sri Lanka. The draft report of this survey was submitted by the ITI to the CEA.
- ***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.
  - As part of the implementing regulations with respect to importation of hazardous chemicals and hazardous waste materials to the country, 230 numbers of clearances were issued for importation of hazardous chemicals and hazardous waste materials listed in the list "B" of the Basel Convention during the year 2018.
  - Being the competent authority for the implementation of Basel Convention in Sri Lanka, CEA has given the approvals for 47 transits and 08 exportations (transboundary movement) of waste materials listed in the List "A" of the Basel Convention during the year 2018.
- ***Chemical Management***
  As a part of implementing chemical management issued 128 environmental recommendations for chemical storages and issued 293 clearances for certain chemical importations.

- ***Implementation of Rotterdam Convention***
  Three Technical Advisory Committee Meetings for Industrial Chemicals (TACMIC) were held for the management of chemicals and according to the TACMIC meetings 32 import approvals were granted to import white Asbestos.

- ***Electronic Waste Management***
  Chemical and Hazardous Waste Management Unit has planned to conduct awareness campaigns in order to make aware the people engage in informal sector electronic waste management. Accordingly, an awareness workshop was held for the people who are engaged in informal sector operations in Kalutara district.

- ***Preparation of awareness materials***
  Following brochure and booklets are printed in 2018.

  - 5000 copies of guideline booklets in Sinhala medium on Asbestos Management
  - 5000 copies of Leaflet on Healthcare waste management
  - 7000 copies of Leaflet on Mercury management

Environmental Management & Assessment

Environmental Impact Assessment Unit (EIA Unit)

The Environmental Impact Assessment (EIA) Unit of the Central Environmental Authority (CEA) continued its major regulatory function of administering the EIA/IEE process for all prescribed projects with the intention of mitigating the adverse environmental impacts of these projects.

- ***Administering the EIA/IEE process for Prescribed Projects***
  During the year 2018, a total number of 50 projects for which approval under Part 1VC of the National Environmental Act is required were processed by the EIA unit. Approval for 17 projects was granted and 33 projects were pending decision. 19 projects require approval under EIA process were referred to designated Project Approving Agencies (PAA) under the provision of the National Environmental Act.

- ***Provide Technical Assistance to other agencies in administrating the EIAs/IEEs***
  EIA unit has provided technical assistance to 50 prescribed projects. Accordingly, 14 Environmental Consultation Committee meetings were attended by the EIA unit.

- ***Streamlining and improving existing EIA laws, regulations and procedures for smooth functioning***
  EIA unit took necessary actions to amend the existing prescribed project list together with the EIA regulations and the list of Project Approving Agencies having several meetings and discussions with the relevant stakeholders including the Legal Draftsmen Department. The final draft of the above documents was submitted to the Legal Draftsmen Department to be published as gazette notifications.

- ***Ensure compliance of approved projects***
  The EIA unit continued the regular compliance monitoring of already approved projects by the CEA in order to ensure compliance with the approval conditions. During the year 2018, 30 projects were monitored.

- ***Guideline Booklet for Determination of Environmental Flows (E-Flows) for Development Projects***
  EIA unit of CEA initiated a study to evaluate a wide range of projects that involve water impounding and diversion in Sri Lanka. As a result, a handbook has been developed and published by the EIA unit including a set of guideline and criteria that should be followed in determination of e-flows

Natural Resources Management Unit

Main functions of the NRM Unit includes declaration and management of Environmental Protection Areas (EPAs), management of natural resources management and implementation of strategies and recommendations of the National Wetland Policy of 2006

- ***Educational materials***
  The following educational materials have been prepared within the year 2018, by the NRM unit.
  - Tamil translation of “Trainers manual on Sand Resource” (125 hard copies and CDs) were printed and distributed among the PO’s/DO’s
  - "Thethbim Asiriya" Tamil Translation was printed (125 Copies)
  - Leaflet on Bolgoda EPA was prepared and printed (5000 copies)
  - Prepared the leaflets on Pansalathanna & Warathanna Hakkinda EPAs and printing of the leaflets is in progress.
  - Prepared a set of guidelines including, a Check list, Inspection Report format, common format of an Environmental Recommendation letter to be used when issuing ER by the Provincial Office of CEA
  - Seven research papers on wetlands has received for the “Wetland Sri Lanka” magazine and were edited by the chief editor and 500 copies of the magazine has been printed.
- ***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 10 EPAs up to 2018. During the year 2018, the NRM Unit has taken actions to declare Pansalathenna-Maussawa in Matale District as an Environmental Protection Area by the Gazette Extra Ordinary No. 2075/15 dated 11th June 2018.

- ***Management Activities of EPA***
  - A report on conservation of the Muthurajawela wetland ecosystem was prepared and sent to the all relevant institutions for necessary actions.
  - List of waterfalls (547) was updated and completed in coordination with the Divisional Secretaries
  - Preparation of the documentary on Pansalathenna EPA, jointly with Wijeya Newspapers (Ltd), was completed in 2018.
  - Draft report on the Knuckles Conservation forest was prepared.

NRM unit has been taken necessary actions to declare Gin Oya, Pathanakanda, Hali-Ela catchment area, Dadigamuwa Kanda and Gonumariyawa water spring as EPAs.

- ***Surveying & boundary demarcation of declared EPA***
  A track survey to prepare final survey plan on revised boundary of Maragala Kanda EPA with the Survey Department has been carry out.

- ***World Wetland Day programmes***
  National Program to commemorate the World Wetlands Day was held on 2nd February 2018, at Bathtaramulla "Ape Gama" Premises. His Excellency the President Maithripala Sirisena and Minister of Mega polis & Western Development were participated as the chief guest of this ceremony. In parallel to this programme, following activities were carried out. In parallel to the above, 25 World Wetlands Day provincial programmes were carried out in District level under the direct coordination with POs/DOs.
- ***Complaints on Natural Resource***
  28 complaints related to natural resources have been received directly and through "Tell President" programme, and the NRM Unit has been taken actions to resolve 28 such complaints.

Strategic Environmental Assessment Unit
This unit was newly established and the objective of the unit is implementation of Strategic Environmental Assessments for policies, plans and programs that can have significant environmental impacts.

- ***Setting up of Legal Framework for carrying out SEAs in Sri Lanka***
  - On the request of Ministry of Mahaweli Development and Environment, Cabinet of Ministers has instructed the Legal Draftsman's Department to enact legislations to introduce of SEA for policies, plans and programmes that can have significant environmental impacts.
  - Two consultative meetings were held with the officers of the Attorney General's Department, to discuss matters pertaining to introduction of provisions for SEA in the National Environmental Act.

➢ ***Mobilizing Stakeholders for Implementation of SEAs on Pilot Basis***
  - Ministry of Irrigation and Water Resources Management (MIWRM) carried out a SEA study for Irrigation and Water Resources Sector Plan that consisted of 76 projects in consultation with the CEA. The CEA provided guidance to MIWRM to finalize the SEA report and for Irrigation and Water Resources Sector.
  - Climate Resilience Improvement Programme (CRIP) of the Ministry of Irrigation and Water Resources Management carried out 4 SEAs for climate resilience improvement plans of 4 river basins. The CEA provided guidance and involved in the evaluation of those SEA reports.
  - CEA initiated a SEA for metal quarries at Diddeniya area in Hanwella Divisional Secretariat Division to study cumulative impacts and to prepare an extraction plan for remaining minable resource without causing significant impacts on the neighboring community and groundwater availability of the area.

- Under the direction of Ministry of Mahaweli Development & Environment, the CEA has provided guidance to Sri Lanka Sustainable Energy Authority (SLSEA) to carry out SEA for setting up of mini hydro power plants in river basins.

Environmental Education & Awareness

Environment Education and Awareness Unit

Environment Education and Awareness unit (EE&A) is responsible for creating and improving awareness and providing education among the various target groups of the society towards obtaining their active participation for the conservation of environment and to make environment friendly management process. This unit is mainly contributing to the National Environmental Pioneer programme.

- ***All Island Competition on Ozone Layer, Climate Change and Air Pollution for School Students (Ozone Sisu Pena)***

  In the year 2018, with the assistance of CEA, Air Resources Management and National Ozone Unit of the Ministry of Mahaweli Development and Environment conducted national level programs for gold and silver medal environmental pioneers covering both Sinhala and Tamil medium.

- ***Awareness (camp) programs for Ozone Depleting and other Environmental sensitive subjects***
  These programs were held during the year 2018 for gold medalists who obtained higher ranks along with the Environment Pioneer Program which implemented by Central environmental Authority, 05 camps were organized at provincial level.

Environment Promotion

This unit is newly established for implement the project of Environmental Education & Awareness and Green Award

- ***Developing and Reprinting of Educational materials (Posters, Leaflets & Booklets)***
  Considering the importance of dissemination of knowledge, 9 types of leaflets on 3 topics in 3 languages (Sinhala, Tamil and English) have been printed and published.
- ***Production of Exhibits***
  New exhibits which can be used for public exhibitions, such as a model of Bio gas unit with a cooker, Mineral Box with rocks and minerals, Energy saving stove and a collection of a Plant Herbarium Sheets have been produced.
- ***Implementing Programs at NFCs***
  Four Nature Field Centres are functioning at Roomassala, Kundasale, Kegalle and Attidiya to provide opportunities to build awareness. 77 programmes were conducted for school children and other target groups
- ***Awareness programs on current issues (Dengue and Waste Management)***
  21 awareness programmes were conducted on Dengue and Waste Management

- ***Programs for Cultural events (Kandy, Anuradhapura, Polonnaruwa, Katharagama, Nallur and Thalawila)***
  Cleaning program and awareness programs have been conducted with community participation programs in collaboration with POs/DOs and Environmental Pioneer students

- ***World Environment Day program***
  - The National program was held at Kegalle town on 4th June 2018 with the participation of huge gathering around 3000 individuals, representing schools' students, government and non-government organizations and various other community groups, under the patronage of His Excellency the president Mithreepala Sirisena.
  - In addition, 25 district programs were conducted such as tree planting, solid waste management, distribution of posters and leaflets and awareness programs with parallel to the World Environment Day 2018.
- ***National Tree Planting Program (Wanaropa)***

  25 tree planting programs conducted to celebrate National Tree Planting Day during the month of October throughout the island, planting fruit and forest trees in school premises, catchment areas etc.

- ***Environment Awareness Program for Government officials***

  In order to provide a better service of Government officials towards the environmental protection,755 awareness programs were conducted at rural and urban level.

- ***Presidential Environmental Awards program***

  Presidential Environment Awards program was implemented to identify 19 categories of Eco-friendly industries covering different categories, schools and media. The Levels of performance were categorized as Gold, Silver, Bronze and Merit and awarded 60 medals for the winners. Gold medal winners were selected in 5 categories. Ceremony was held on 19th October 2018 at BMICH with the participation of around 1500 participants representing the various government and non-governmental organizations and the representative of the applicants as well.

- ***"Sobaketha" Radio Program***

  44 Sobaketha Radio Program were broadcasted during this period. For these programs, 44 resource persons and 41 Environmental Pioneers participated and nearly 132 news items broadcasted during the program.

- ***Registration of Non -Government Organization***

  There were 47 New NGO's registered. In order to discuss on the prevailing issues and to make them aware about the CEA activities, registered NGOs were invited for a workshop. 150 members participated representing 94 organizations in this forum, covering important all areas.

- ***Environmental Newsletter***

  Environmental Newsletter in twice a year were published covering area of environmental activities of Environmental pioneers and other Environmental related activities. It was published in June and December 2018.

Research and Development

The main goals of the Research and Development unit are to: Conduct, promote and coordinate research/studies/surveys in relation to the any aspect of the environmental degradation or prevention thereof and disseminate such information and Ensure sustainable management of natural resources through application of Geographical Information System (GIS) & Remote Sensing (RS) technologies.

- ***Building up of Trans-Disciplinary research team***

  This process is conducted under the guidance of the Research Advisory Committee of the CEA. Out of 06 proposal received in 2018, 04 proposals were selected for providing financial & technical assistance considering their relevancy to the mandate of the CEA. Two Research Projects were completed and 08 research projects are ongoing.

  - ***Development of Biodiversity Ecosystem Services Indicators and Guidelines for Environmental Assessment***

The study is focused to develop spatial information of biodiversity and ecosystem services in the country, in order to fill the void of services rendered by different eco systems when assessing the environment. The development of methodology of the proposed study has been completed

- ***A study to identify environmental and social issues of Oil Palm cultivation in Sri Lanka (Observation and Recommendations)***

The final report of this study was prepared with recommendations and published. The National Economic council held on 11.09.2018 has decided to implement the recommendations of the report. A cabinet paper in this regard has been submitted.

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

Working Group Meetings under the sectors of Natural Resources Management, Environmental Pollution Control, Waste Management, Environment Education and Awareness and Environmental Law were held with participation of resource persons of each sector and Senior Officials of the CEA in order to finalize the identified research priority areas (issues and, research topics). Draft report has been prepared.

- ***Air Surveillance operations for Environmental Conservation & Management***

A collaborative programme has been initiated with the Sri Lanka Air Force for Conservation & Management of Environment of the country using Air Surveillance Operations. Awareness/training programs in this regard were conducted on 12th Sept and 14th Dec., at the CEA for Senior Management and other officials of the CEA by a team of Air Force.

- ***Development of Online Spatial Database for Sustainable Management of Environmental Resources of Sri Lanka***

Online Spatial Database has been updated with several data layers such as administrative boundaries, wildlife reserves, forest reserves, archeological etc. GPS locations of industries in 15 districts were updated and incorporated those data into the online data base.

- ***Updating of Spatially Referenced Database on Prescribed activities/services***

Geo-spatial database on prescribed activities/services is being updated monthly by the R&D unit. Accordingly, total number of High polluting industries in Sri Lanka is about 13,058 and medium polluting industries are 10,601.

- ***Development and Updating GIS Based Environmental Information System***

This is the central environmental database of the country and assists in environmental planning, management, monitoring, and analysis, identification of suitable sites for development projects, disaster preparedness plans and awareness activities in Sri Lanka.

- ***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 2018, District resource profiles of Matale, Ampara, Vavuniya, Mannar and Mullaitivu Districts have been developed and printed into CD media.

Compliance Monitoring Unit

Compliance Monitoring is one of the key components of Licensing/ Approval procedure of this Authority and it is necessary to establish a regular mechanism to monitor performance of prescribed activities/ Scheduled waste management activities/ Prescribed projects with respect to standards/conditions stated in EPLs/ SWMLs/ EIAs/ IEEs.

- ***Establish a regular Compliance Monitoring network and implement***
  - In 2018, compliance monitoring activities mainly focused on EPL scheme and 12941 No. of EPL monitoring carried out by Regional/District offices. To check the effectiveness of monitoring done by regional/ district offices, initially Compliance Monitoring Unit selected and monitored the industries located along the Kelani River basin and Kalu Ganga Basin. In addition, monitoring was carried out for prescribed activities related to complaints informed by higher management of CEA with coordination of other relevant technical units.
  - Initial steps were taken to design compliance monitoring plans for Initial Environmental Examinations (IEEs) and Scheduled waste management licenses (SWML).

Investigations Unit

The main goal of the Investigation Unit is: implement the regulations pertaining to banned polythene and special investigations on crucial environmental issues.

- ***Enforcement of Polythene Regulations***
  - Raids were conducted covering the entire island by Head office and all provincial /district offices of the CEA with the assistance of Sri Lanka Police. During January to December 2018, a total of 10327 raids have been conducted. 810 number of violations were detected and 250 cases filed against violators
  - During the production process is being carried out to manufacture illegal food wrappers, 17 industries have been raided jointly with the Consumer Affairs Authority (CAA) and the production stocks were arrested under the provisions of the Consumer Affairs Act and such products were recycled or destroyed as per the orders of the magistrates once the accused was fined. The details of these joint raids were published through electronic and printed media to make the public aware on the illegal products.
  - The canteens of being operated within the state institutions were also raided and it found illegal food wrappers are used. They were warned in writing not to use such products and monitored their adherence to the law. The number of such institutions was 78 and further monitoring of them were also conducted.
  - In order to further strengthen the investigations on illegal products it was decided to delegate the powers of the CEA to Sri Lanka Police enabling to arrest illegal products under section 71 of the Police ordinance and accordingly the draft documents have been sent for comments jointly with the Legal Unit.

Complaint Unit

CEA has a mechanism to attend complaints effectively and the progress is reviewed at the Management Committee meetings of the CEA monthly.

- ***Management of complaints directly received by CEA***
  In the year 2018, 2770 number of complaints were received directly to the CEA and 2131 number of complaints (77%) were resolved, and others are in the process of resolving
- ***Management of Public Complaints received through "Public Grievance Management System"***
  In the year 2018, the 495 number of complaints were received through the Public Grievance Management System, 348 number of complaints (70%) were resolved, 05 number of complaints were closed due to lack of information to attend.142 number of complaints received through this system are in the process of resolving.

Legal Unit

Main objective of the Legal Unit is to facilitate litigation process under the National Environmental Act

- ***Cases filed***
  - The Legal Unit has filed and finalized a number of cases during the year 2018. Accordingly, 445 cases were handled and that indicates the cases filed against the CEA & the cases filed by the CEA. More than 364 cases have been freshly filed during the year 2018.

- Sixty (60) cases were pending against the CEA in year 2018 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 pollution caused by the industries, the CEA has taken steps to cancel the Environmental Protection License (EPL) issued to 56 industries 152 letters have been sent refusing to issue the EPL.

- ***Legal Notices***

  Legal Notices were sent to 195 industries which had been causing environmental pollution.

- ***Consultations***

  Officers of the Legal Unit attended 81 consultations at the Attorney General's Department in order to prepare objections, Answers, Written Submissions relating to the cases filed against the CEA and for the cases filed by the CEA at the trial stage of the court cases.

- ***Amendments to the National Environmental Act***

  The Legal Unit of the CEA has taken steps to introduce the novel concepts such as the "Polluter Pay Principle" by introducing Load Based Licensing Scheme, chapters on Wetland and Hazardous Waste to the proposed NEA amendments and the penalty provisions have been improved. Cabinet approval has been obtained and the approved Cabinet Paper has been sent to the Legal Draftsman's Department to draft the proposed Amendments.

Special Projects Undertaken by the CEA

"Pilisaru" National Solid Waste Management project

Pilisaru Project has been entrusted with the planning and implementing of solid waste management projects for all the local government bodies as a sustainable solution.

Physical progress of the activities carried out during the year 2018

- ***Provisions of Necessary Improvements for Existing Compost Sites, New Compost Sites & Other SWM Facilities***
  - A new bio gas unit and a new waste management project funded to establish based on LAs and other governments institutions requests.
  - Previously started 28 numbers of compost sites, 01 number of Bio gas unit & 01 number of Plastic Recycling Center were funded for the improvements.

- ***Provision of Equipment, Machineries and Waste Transport Vehicles for Local Authorities***

  06 Baler Machines, 05 Tractors & Trailers and 11 Compost Sieving Machines were procured and distributed among local authorities.

- ***Provide Home Composting Bins and Waste Separation Bins***
  - 300 Home Composting Bins were distributed among Officers under the ministry of Mahaweli Development & Environment
  - 1161 Waste Separation Bins were distributed among Schools, Religious Places, Government Institutions and Government Defense Force

- ***Awareness and Training programs***
  - 9 Awareness and Educational Programs were conducted
  - 10 Special Events covering programs were conducted
  - 2 Training Programs for relevant officers in the project were conducted

- ***Gampaha District Integrated Waste Management Project –Pethiyakanda***

Pilisaru project is being implemented an Integrated Waste Management Project at Pethiyakanda in Gampaha District. The following activities were implemented by the Integrated waste management project at pethiyakanda.

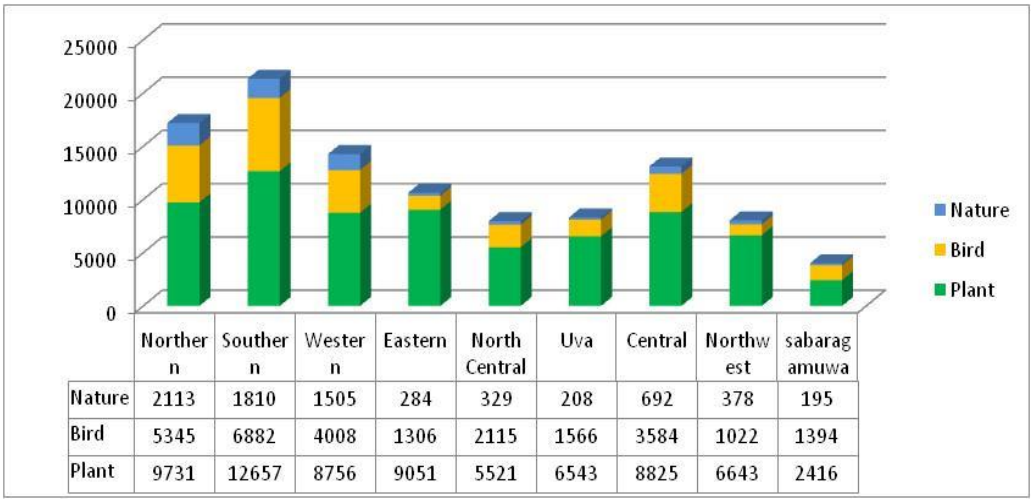
- Composting yard with the capacity of 5 MT per day has been constructed

- Composting yard with the capacity of 15 MT per day has been constructed under the "Punarudaya" fund
- Funds were provided to Waste Management Authority for purchasing necessary machines and equipment
- Leachate collection tank & treatment system were constructed

National Environmental Pioneer Program (EPP)

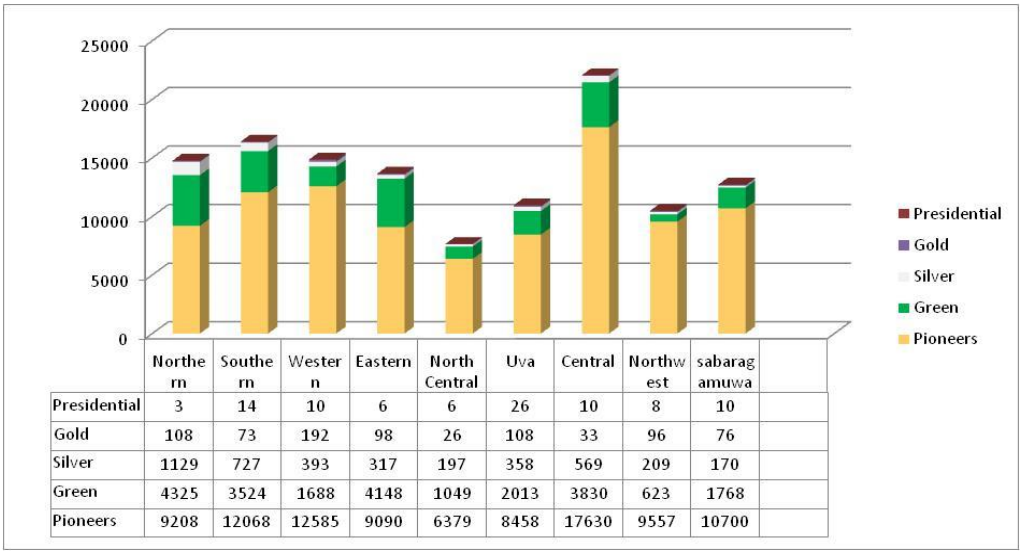
National Environmental Pioneer Programme (NEPP) is an innovative environmental conservation initiative for the young generation introduced through the school system by the CEA in collaboration with the Ministry of Education. ජාතික පරිසර නියමු වැඩසටහන (NEPP)

- ***Details on awarded certificates under the Eco Club program***



	Northern	Southern	Western	Eastern	North Central	Uva	Central	Northwest	sabaragamuwa
Nature	2113	1810	1505	284	329	208	692	378	195
Bird	5345	6882	4008	1306	2115	1566	3584	1022	1394
Plant	9731	12657	8756	9051	5521	6543	8825	6643	2416

- ***Details on awarded medals under the EPP program***



	Northern	Southern	Western	Eastern	North Central	Uva	Central	Northwest	sabaragamuwa
Presidential	3	14	10	6	6	26	10	8	10
Gold	108	73	192	98	26	108	33	96	76
Silver	1129	727	393	317	197	358	569	209	170
Green	4325	3524	1688	4148	1049	2013	3830	623	1768
Pioneers	9208	12068	12585	9090	6379	8458	17630	9557	10700

- ***Training programs***

Following training programs were conducted during the year 2018

- 12 training programs for principals
- 2 training programs for teachers of EPP in charge in zonal level
- 5 training programs for EPP Leaders in district level
- 5 residential training programs for the ISA (EPP Commissioners) in provincial level
- 6 teacher training programs for National College of Education
- 2 residential training programs for best performance EPP teachers

- ***Newly Introduced programs***
  - Environmental Education programs were introduced for University Students, Technical college, Pirivens and other religious organization
  - EPP concept was introduced for syllabus of National College of Education

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

This project is planned to construct sanitary landfills at Keerikkulama in Anuradhapura District, Monroviawatta in Galle District, Meegaswewa in Polonnaruwa District and Keerimalai in Jaffna District.

- Steps were taken to provide the infrastructure facilities to the four sites. In addition, an electric fence and a bio fence are being constructed at Meegaswewa due to elephant threats.
- Two researches were awarded to Rajarata University of Sri Lanka and Jaffnna University of Sri Lanka to carry out Social Baseline Studies and Public Consultation & Disclosure program" for Meegaswewa and for Keerimalei Project. Rajarata University of Sri Lanka completed the work successfully and submitted the final report on 21.09. 2018. Jaffna University of Sri Lanka submitted the Draft Final Report on 15.12.2018.
- A Mission from Korean Eximbank was in Sri Lanka during 26th to 29th November 2018 and the progress of the project was discussed in detail on the 26th Nov 2018 at the Ministry of Finance & Economics Affairs, especially with regard to the award of Civil Works Contract.
- In addition, a one-day workshop for environmental journalists was organized on 21.08.2018 at Dompe Sanitary Landfill Site in collaboration with Pilisaru Project and the Media Unit of CEA.

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

This project had been considered under technical cooperation project and team of JICA expertise had engaged for the project activities for the period of March 2015 to February 2018 as per their work schedule. Under this project it was expected to strengthen the enforcement capacity of CEA and its regional branch offices of the Kelani river basin on water quality management.

Following are the major outcome received by the CEA for the period of three years

- Gazetting of the Ambient water quality standards
- Procurement of Laboratory Equipment and other necessary requirements for the Central laboratory
- Training of 36 Nos of counterpart member of CEA for 10 days period on water management laboratory accreditation and water pollution control during three years periods in Japan
- Obtaining ISO17025 laboratory accreditation for Central Laboratory,
- Preparation and implementation of PSI database for the purpose of the new EPL management
- Establishment of Information Management System
- For 2018 Rs 1.0 million had been allocated from the consolidated funds. Project closed up workshop had been held by February 2018.

Green Park Waste Management Center - CEA

Green park Integrated waste management centre which located in Dompe Kirindiwela is the 1st ever Sri Lanka experienced Land Fill Site managed by the CEA. This centre consists with sanitary landfill site, composting site and training centre.

- In 2018 land fill site accepted wastes, 866.3 tons from Dompe PS, 4522 tons from Colombo M.C. & 1686.4 tons from local authorities located in Gampaha District (Biyagama PS, Katana PS, Athhanagalla PS & Gampaga MC) as government institutions and, nearly 656 tons of non-hazardous industrial wastes from Dompe PS area also were dumped to the land fill site.
- Glass wool dumping from some institutions also taken place and accepted about 25 tons to the land

fill site. Other than the industries belong to Dompe PS area, CEA was able to agreement to dump specific waste categories from industries upon requests received from institutions and accepted about 185.2 tons of wastes.

- Also, with re-strengthening the meaning of word “Green Park”, site Landscaping and Organic vegetable production is continued with higher success. Income received from vegetable production sales which earned about Rs. 215,000 is directing to benefit site staff by low interest loan issuing and organizing events.

National Gem & Jewellery Authority

The National Gem & Jewellery Authority was enacted to develop, Promote and Regulate the Sri Lankan Gem & Jewellery Industry.In that regard Authority carry out its duties and function to facilitate Gem & Jewellery exporters by providing service through Gem testing, certifications and valuation, Assaying and hallmarking uplifting, issuance of licensing, exploration and determination of new gem deposits, upgrading technology involving gem industry as well as the Jewellery industry.

Main Duties and Functions of the National Gem & Jewellery Authority
(1st of January 2018 to 31th of December 2018)

Enforcement and Issuance of License

The National Gem & Jewellery Authority is issuing below stated license and Certificates to regulate the Sri Lankan Gem & Jewellery Industry.

- Gem Mining License
- Dealer License
- Gem Cutting License
- Gem Auction Permits
- Carry out Raids and impose settlement fees to prevent illegal mining

Enforcement Activities & Raids:

Description	2018 1st Q	2018 2nd Q	2018 3rd Q	2018 4th Q	2018 Year Total	2018 1st Q	2018 2nd Q	2018 3rd Q	2018 4th Q	2018 Year Total
	Physical Progress (No: of License)					Financial Progress (Income Rs.Mn)				
Gemming License	1189	862	1273	2208	**5532**	**7**	**7**	**9**	**12**	**35**
Dealers License	2160	785	827	1023	**4795**	**25**	**8**	**5**	**11**	**49**
Lapidary License	111	50	16	34	**211**	**0.15**	**0.03**	**0.03**	**0.15**	**0.36**
Gem Auction License	153	63	103	96	**415**	**0.3**	**0.14**	**0.24**	**0.32**	**1**
Raids	490	313	473	353	**1629**	**0.89**	**4.91**	**4.2**	**7**	**17**

Issuing License and Conducting Raids
Source – Statistical Division,NGJA

Total Export Performance

Export of Gem & Jewellery from Sri Lanka includes export of Gems, Jewellery, Geuda & Geuda Katta, Re-export of imported gems from other countries after adding value by-cutting and polishing, export of Diamond and Diamond Jewellery re-exports. This Export process is carrying out at export department in Colombo head office, Kattunayake airport centers and Rathnapura export centre. Export value means the total export value figure out by the Valuation department of National Gem & Jewellery Authority.

National Gem & Jewellery Authority charges 0.5% of total valuation as a service fee for facilitating gem & Jewellery exports and this amount is a considerable income source of the National Gem & Jewellery Authority.

U.S.S, Switzerland, Japan, Germany and China are the five leading countries for Sri Lankan Gem & Jewellery exports within the year 2017.

Description	2018 1st Q	2018 2nd Q	2018 3rd Q	2018 4th Q	2018 Year Total	2018 1st Q	2018 2nd Q	2018 3rd Q	2018 4th Q	2018 Year Total
	Export Value (Rs.Mn)					Export Service Fee/Commission (Rs.Mn)				
Gems	8615	4254	4156	4678	**21,703**	48	38	22	38	**146**
Jewellery	475	539	484	564	**2062**					
Rough Import Re exports	139	120	197	145	**601**					
Diamond Re exports	4326	4670	5134	5263	**19,393**					
Diamond Jewellery Re Exports	65	43	34	48	**190**					
Geuda/ Geuda Katta	5	5	5	4	**19**					

Export Performance
Source – Statistical Division,NGJA

Export Promotion Performance

Ensure the promotion of Sri Lankan Gem & Jewellery in international market & local market while encouraging the new entrance to international market, promotion. It has been identified the current global trends and conducted training programmes to develop skills, Following benefits are derived from organizing of International exhibitions.

1. To consolidate the relationships between international Gem & Jewellery associations and Sri lankan Government Institutes for the purpose of development of Sri Lankan Gem & Jewellery industry.
2. To create a profitable business environment
3. To consolidate the brand name of "Sri Lanka the Sapphire Capital" in international market
4. To educate the current status of International business.
5. To gather business opportunities to gain foreign currency earnings.

International jewellery London (IJL)

- **New Markets – Within the given time frame the National Gem & Jewellery Authority was able to facilitate Sri Lankan Gem & Jewellery exporters to enter into Gem & Jewellery Market Munich, Germany.**

2018.01.01 to 2018.12.31 International Exhibitions

- International Jewellery Tokyo - IJT Japan
- HKTDC Hong Kong internationa Diamond , Gem & Pearl Show
- CK Las Vegas Show
- South and South East Asia commidity expo - Kunming Show
- Shanghai Jewellery Fair - 2018
- The Munich Show -Germany
- China international Jewellery fair Beijing
- International jewellery London (IJL)
- 15th CAEXPO Naning
- China International Import Expo (CIIE)

2018.01.01 to 2018.12.31 Local Exhibitions

- Aayu Lanka Exhibition
- "Didula Prabha" Educational Exhibition
- Science and Educational Exhibition at Sirimavo Bandaranayake Vidyalaya
- Aurveda Expo 2018
- V2020 Enterprises Srilanka
- Educational Exhibition in Gampaha bandaranayaka vidyalaya
- Facets 2018
- Jewels 2018
- Educational Exhibition Leeds International Collage

International Jewellery Show –Tokyo

The President's Award Ceremony was held on the 23rd of November 2018 at the Shangri-La hotel Colombo for celebrate the 25th anniversary of the National Gem & Jewellery Authority.

The awards and certificates were presented to the winners of the island wide school children for the Essays, poems and paintings. Gold, silver and bronze awards were granted for the winners of gem and jewellery industry skill holders by hand of His Excellency the President Maithripala Sirisena.

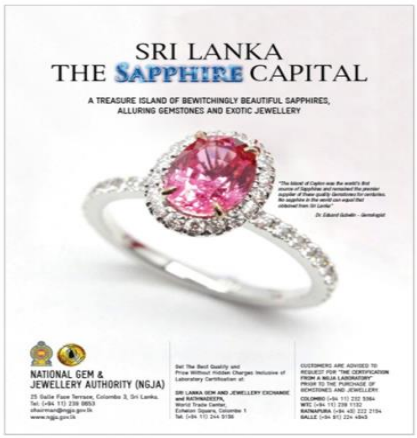
Silver Jubilee
2018
NATIONAL GEM AND JEWELLERY

Meetings with foreign delegations with regard to development of Sri Lankan Gem & Jewellery Industry

- Meeting with Indonesia Delegation
- Meeting with Myanmar Delegation
- Japan Delegation is visit to the National Gem & Jewellery Authority
- Get-together with Nippon Maru Delegation

Delegation of Nippon-Maru

Monthly publishing advertisements on "Serendib" magazine



Workshops with regard to the industry Development

- Work shop on Gem & Jewellery marketing sector for employees in Sri lankan Gem & Jewellery research and training Institute.
- Work shop held for Jewellery manufactures in Mullatiyanna
- Workshop held for Sri Lankan Lapidarist at Bandaranayaka Memorial centre for 60 participants, Resource Person was (Mr. Johannes Orstadius) .
-

Workshop held for Sri Lankan Lapidarist

Performance of Land, Mining and Environment

Practicing Environmental Friendly Gem mining techniques in Gem Land & Gravel Auctioning.

01st of Jan 2018 to 31st of December 2018

- Balangoda kalthota road bridge 22/4 gem gravel auction
- Kahawatte palmadulla gem gravel auction
- Karada-sirisamanpure road gem ravel auction
- Kehewatte arawa,kubukkan oya gem gravel auction
- Welikadagama mahathanna hydro power gem gravel auction
- Balangoda Kalthota road & hangamuwa gem gravel auction
- Kehelowitiyagama gem gravel auction
- Gabala gem gravel auction
- Millakade gem gravel auction
- Kolamba ara gem gravel auction
- Kanugalla gem gravel auction
- Kalugana gem gravel auction
- Erabada gem gravel auction
- Naula Gem Gravel Auction
- Bakamuna gem gravel auction
- Hangamuwa-Rambukkanda road Gem Gravel auction
- Nuwaraeliya Norwood Cannel Gem Gravel Auction
- St. Jokim Watta 2 Land blocks Auctioning
- Auctioning 2 Gravel lots in Ratnapura Kalawana area
- Eheliyagoda sri Samanpura Gem Gravel Auction
- Auctioning 10 Gem Gravel lots in Eheliyagoda Matuwagala Area
- St.Jokim watta Auction

The National Gem & Jewellery Authority involves in conducting special Gem Mining projects in below listed area which were identified as highly environmentally sensitive areas however with highly valuable gem deposits.

- - Udawallawa
- - Hadduwa watte
- - Bagawanthalawa

Special Mining Project - Hadduwawatta

Giving Consultancy Services for private gem mines

Rehabilitation of following environmentally destructed areas due to gem mining

- Bagawanthalawa Chapelton Gem pits
- Kuruwita Hunugaldeniya Gem pits
- Bagawantalawa Shanthajokimwatta Gem pits
- Conducted an educational programmes on Environment in Matara Kakunadura Wijayaba vidyalaya

Uplifting the livelihood of Gem miners by granting scholarships for their school going children. 272 school going children were donated with scholarships within the period of 1st of Jan to 31st of December in year 2018 it was recorded as 126 school going children.

Within the Period of 1st of January 2018 to 31st December 2018 three families has been paid with compensation for loss of their family member's life while engage in Gemming.

Development activities carried out to promote Gem & Jewellery industry

1. 1. A gathering took placed in Rathnapure, Naula and Uva Province to discuss the issues faced by the Gem & Jewellery traders. As per the matters aroused in those meetings following steps had been taken placed.
   - 610 Gem mining applications have been issued in mobile service carried out in Elahere, Bakamuna and Laggal areas.

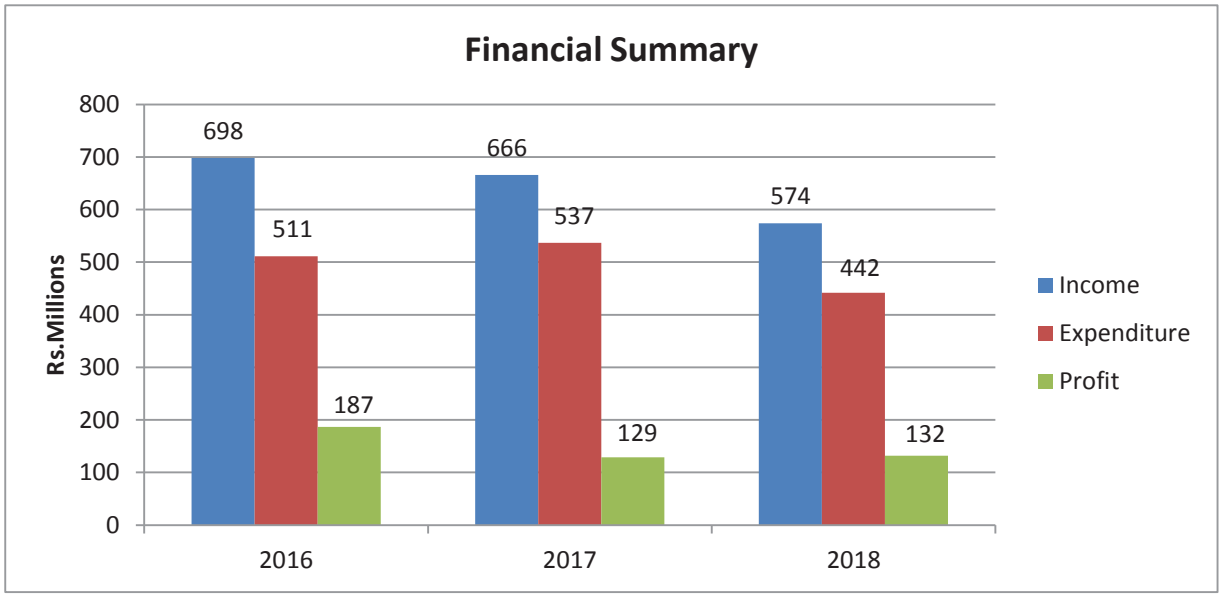
2. A workshop has been conducted by the Government Auditor General to educate employees of the National Gem & Jewellery Authority.

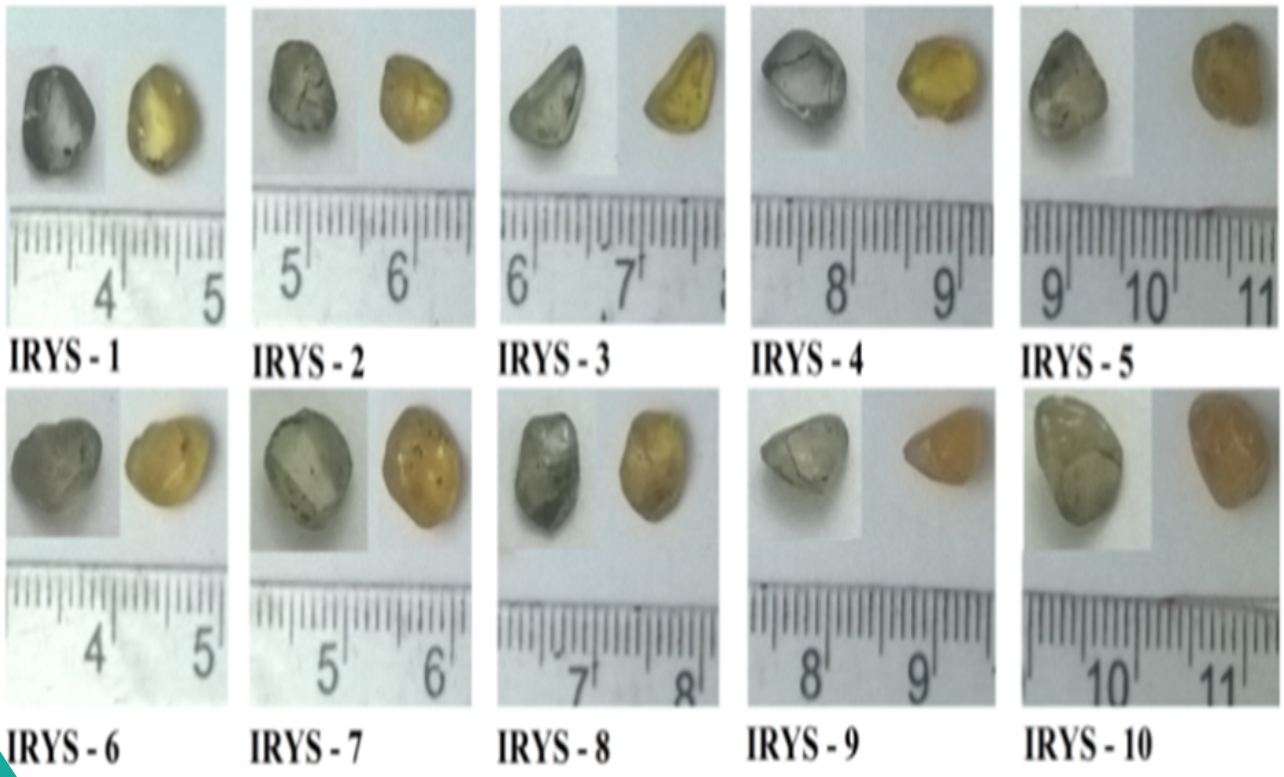
3. A meeting was held with the University of Peradeniya to Map out Gem Deposits in Sri Lanka.

4. A proposal has been drafted and forwarded to the National Budget year 2019 with regards to establishment of new service centers to expand the services rendered by the National Gem & Jewellery Authority.

5. Preliminary approvals have been sought to establish a new gem tower with all modern facilities at the head office premises of Galle face Colombo.

Financial Summary





Gem and Jewellery Research and Training Institute

The research division has conducted following projects and programs so as to support the development of gem and jewellery industry in accordance with the gazette no 882 dated 1995.07.28 of Democratic Socialist Republic of Sri Lanka which established the Gem and Jewellery Research and Training Institute.

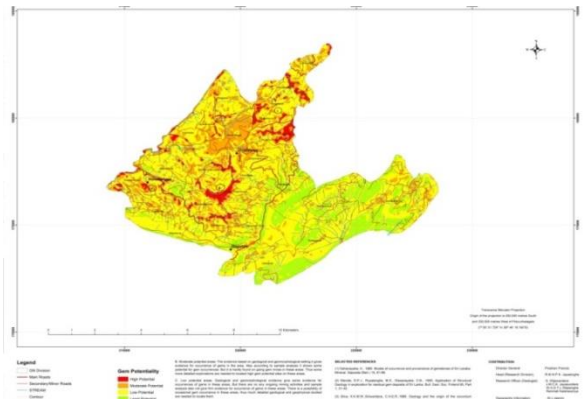
- Surveying on Sri Lankan gem minerals.
- Conducting research on value addition of gem stones and gemology.
- Innovations to develop the gem and jewellery industry
- Conducting workshops, conferences and publication of books

Exploration and Assessment of Gem Deposits in Sri Lanka

Gem and jewellery is an age old industry of Sri Lanka and we have a non-parallel prestige as high quality gem producing country in the global market. It has been recorded as one of the five industries with highest export income. Therefore it is crucial to identify the gem deposits spread throughout the country to furthermore strengthen the economy.
This cabinet approved project is conducted for identifying the places where gemstones originate, identifying places where gem deposits are located, for mapping it with potential maps as well as preparing the correct methods for treating environmental friendly gem mining and for sustainable extraction. Gem potential maps were created for five selected Divisional Secretariat Divisions in 2018.

Haputale Divisional Secretariat Division

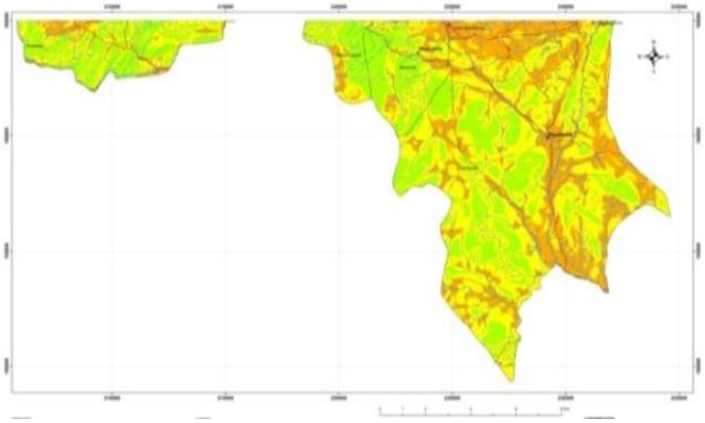
The areas with high gem potentiality are concentrated in western, north eastern and central parts of the division. Secondary deposits are encountered around the tributaries of Uma oya and Weli oya and Ellagama, Aluthwela, Diyathalawa, Thotulagala, Horadorowwa are among those localities. The 'Menik kanda' area in Ranjellawa can be considered as a primary deposit and coluuvial deposits derived from it are found in 'wewa' area lying at its foot. The gem potential map of Haputale DSD is shown.



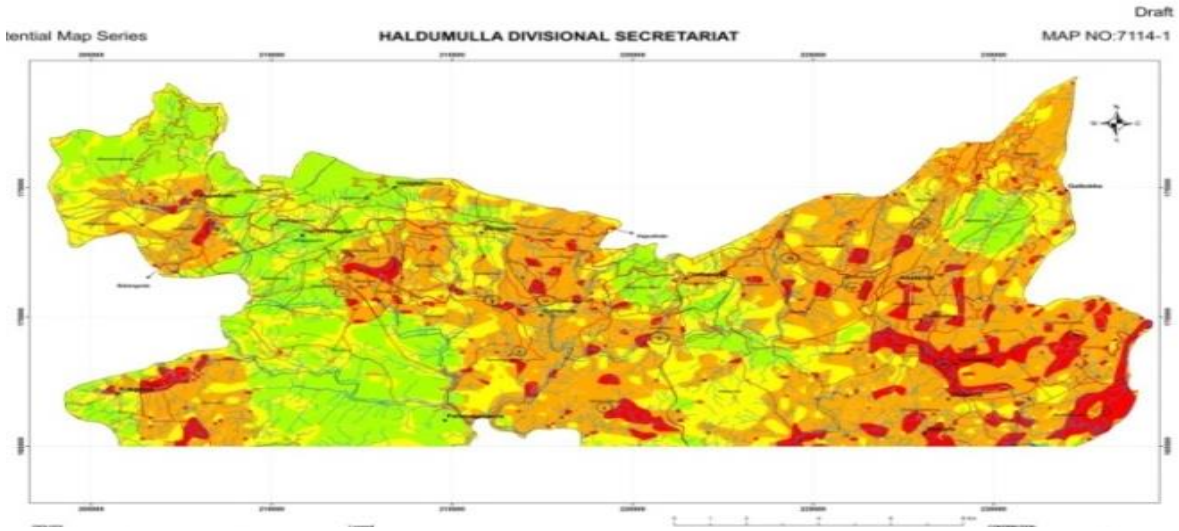
Haldummulla Divisional Secretariat Division

Field maps were developed based on field exploration, study, and experiments, where the following gem fields were detected

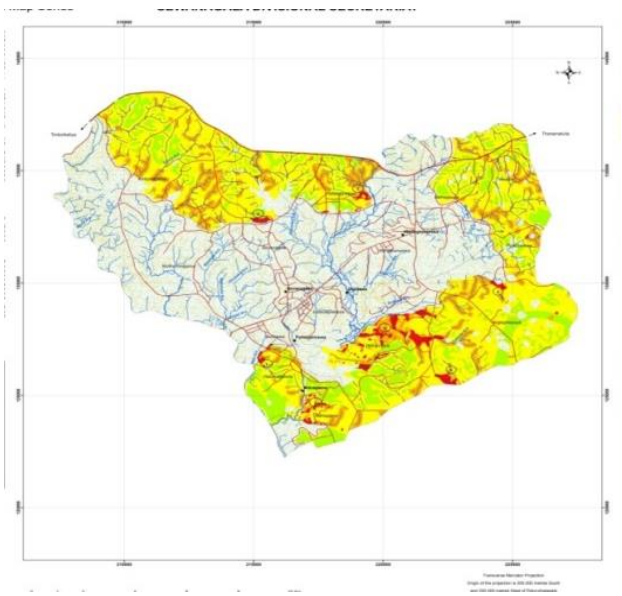
1. Kotabakma gem field
2. Weli Oya Gems Field
3. Gampaha Gampaha game
4. Nikapotha gem field
5. Akkara seeya gem field
6. Divulgasmulla gem field
7. Kosgama gem field
8. Harankahawa gem field
9. Koslanda Gem Field
10. Ranasingha gem industry



There is further confirmation of identified gemstones and the completion of the final gem potential map.



Sevanagala Divisional Secretariat Division



In Sevenagala it was found a rock of Sepentinite with an economic value in the Ginigalpelessa area. The repository is scattered like small rock fragments within a 10 m range and ranges up to 10 feet in some areas. It seems that these rocks are open to the surface of the repository and become extinct in extreme conditions, but it may be assumed that the stony rocks are not subject to external influence, since they are not neat. Moreover, most of the crystals of the crystals were found in the crystals, and a green mineral was also made at certain locations. The Gem potential Map was developed based on information collected from field research and laboratory testing. There were seven fields identified with high gem potential.

01 Weli ara gem field
.02 Mahagama gem field
03 Haburugala ara-gem field
04Galwala ara gem field
05 Habalulu wewa gem field
06 Nugagalaya gem field
07 Habaralu Ara gem Field

Kataragama Divisional Secretariat Division

According to the latest studies, the secondary gem deposits are more common than the primary deposits in Kataragama Division. The source of deposits is the Manik River. The banks of it have Kumbuk trees and they completely cover the banks of the River and the bottom of the river is made of inundation. Therefore only very limited quantities of sediments around the Menik River are found. However, there are deposits of significant sediment amounts in the depths of the river.

Further, most of the mines are found at the foot of the Wedihiti Kanda mountain, and there are signs that there are ancient canals.

Thanamalwila Divisional Secretariat Division

The preliminary and secondary field research in the Thanamalwila Divisional Secretary Division has been completed and laboratory studies have been carried out. Although there is a delay in obtaining the geological maps required to prepare the gem potential map, the maps too have been obtained. Accordingly, the gem potential Map of the Thanamalwila Divisional Secretariat will be completed by the end of this year and the report will be completed.

Harnessing Gem Resources in a Sustainable Manner

Chemical and Mineralogical Characterization of Gem Deposits of Sri Lanka

Objectives of this study are to carrying out mineralogical and geochemical studies in gem deposits in the Mahaweli river and in the Kalu Ganga and to introduce a novel scientific method to delineate gem potential areas using geochemical signature, mineralogy composition of gem bearing sediments and geochemistry of indicator minerals.
Study of the relationship between the elements revealed that Ba: Zr, Ba: Co, Nb: Cr, Nb: Sr, Th: Ba, Ba: Cu, Cu: Th, Rb: Zr, Rb: Th, Rb: Ni have higher correlation value > 0.75. These inter-relations can be used for studying the gem potentiality and need to be confirmed by studying large number of samples.

Benefits

The above study confirmed that the chemical method is capable of identifying gem potentials. Accordingly, this study can be used as a tool to distinguish gem locations accurately after a validation using a large number of samples.

Formulation of nutrient enriched coir brick with low gem quality minerals for indoor gardening

We have shown that the lactic acid fermentation of sugar rich medium like diluted solution of molasses had produced acidic medium that could be employed to increase bioavailability of micronutrients. In contrast to the low pH value offered by partially decomposed organics, lactic acid fermented medium offer even lower pH value that is more favourable for releasing both macro and micronutrients.
Few preliminary data have presented text below.As can have portryed the 2 and table 1 be seen in table
$^{-}{}_{4}{}^{3}$and PO $^{+2}$enhanced relesaing kinetics of Ca
Further developments .corroborating the our conjecture and experimentations are in progress in our lab to
.produce coir and minerals bricks for industrials uses

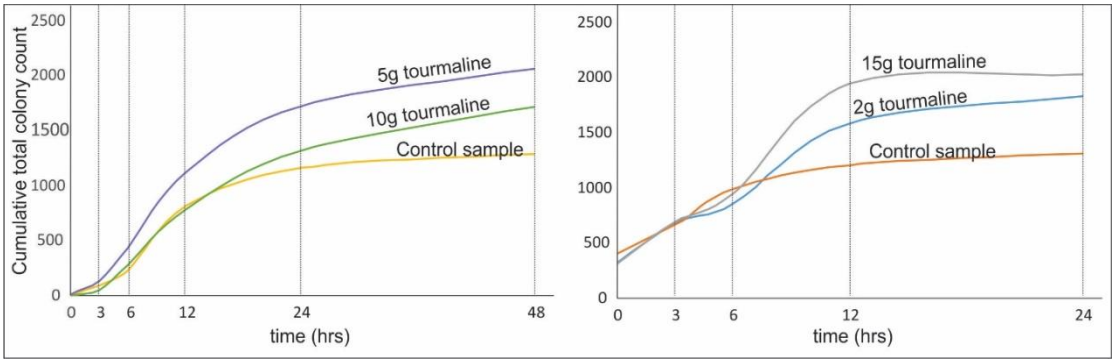
Coir and minerals brick

Promote Variety of Gem Stone Value Addition Techniques

Study the effect of tourmaline particle on growth of microorganisms

Objectives of the research work was to get maximum benefits of untapped tourmaline mineral available in Sri Lanka through biological applications and to study growth rate stimulation of *B. bifidum* by tourmaline micro particles.

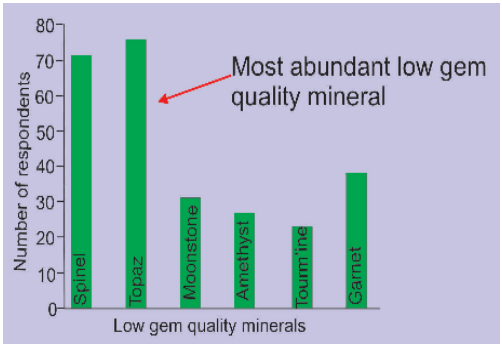
Results clearly shown that, total colony counts were higher in tourmaline powder added samples than control. Moreover, growth pattern of this study implies that BB-has 12 taken 6 hrs lauge time and after that growth rate is considerably increased in tourmaline added samples. Previous studies revealed that, piezoelectricity of tourmaline effect to increase of permeability of cell membrane. However, biological cells exposed to low electric field to long time, permeability of the cell membrane is increased. Therefore, this lauge time take to increased in permeability of cell membrane by tourmaline. The results are clearly revealed that, micro particles of underutilized tourmaline stimulated the growth of *B. Bifidum* bacteria.
Results of this ongoing study is shown that, there is a great potential to apply tourmaline particles to fermentation process in the food industry



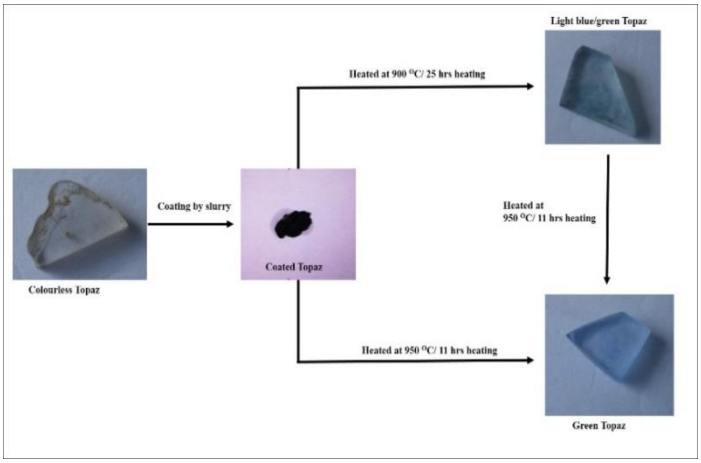
Bifidum growth curve pattern in tourmaline media

Blue colouration of colourles Sri Lankan Topaz

In Sri Lanka second most frequently found low quality gem mineral in the Ratnapura gem market is topaz (Illangasinghe et al., 2019, Figure 2.1). Normal practice of gem traders in Sri Lanka, these colourless topaz is exported without any colour enhancement. Therefore, to get optimum benefits from gem resource in Sri Lanka, value addition to colourless topaz through colouring process is paramount important. Thus, the main objective of this research work was to find out easy, low cost and non-harmful colour enhancement method to colourless topaz.



Low gem-quality minerals distribution in Ratnapura, Sri Lanka



Summarized Heat treatment procedure

Co diffused blue topaz

The results are clearly revealed that, there existing a great potential to colouration of blue, green and greenish blue colour for colourless topaz by Co diffusion. The blue colour for colourless topaz is simply obtained by Co diffusion at 950 °C for 11 hrs. The blue colour intensity mainly controlled by diffused Co concentration. Subsequently, results of this study will be useful to harvesting of gem resource at optimum level through colouring of colourless topaz.

Detail investigation of gamma-irradiated Sri Lankan yellow sapphire.

Results of radioactivity test clearly show there is no harmful irradiation of the irradiated samples (19.35 CPM). Irradiation is changed colour from light yellow with very slight saturation to strong orangish yellow. The colour of irradiated yellow sapphire is stable under the UV light while revised to original colour within 30 min in sunlight. The UV-visible and FTIR spectra of irradiated and natural samples take the typical absorption pattern. Raman spectra of natural and irradiated samples show typical absorption bands corresponding to Al-O (378, 418, 578, 645 and 750 cm^{-1}).

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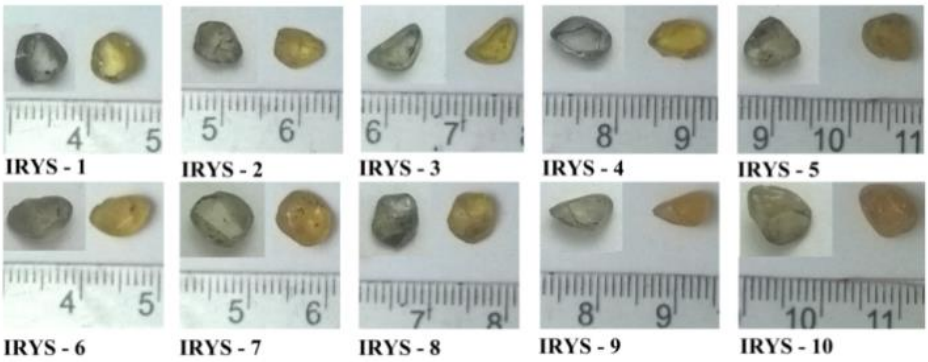


Before and after apearence of treated sample**.**

Intensity of all peaks are comparatively high in irradiated sapphire. Moreover, irradiated samples show new peak in 380 and 640 cm^{-1}. Subsequently, results clearly revealed that, irradiated yellow sapphire is not emitting harmful radiation and colour is not stable. Resulted Raman spectrum revealed slight lattice modification occurred in sapphire by irradiation.

Value addition to low quality gems

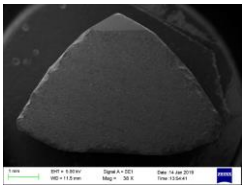
Optimum blue color was formed for reddish brown zircon at 1100 ºC for 3 hour soaking time in reducing atmosphere. However, clarity of the blue color was not much significant. Transparent light green color was formed at 900 ºC annealing temperature for 3 hour oxidizing atmosphere from less clarity dark green rough samples. Yellowish brown zircon was formed at 900 ºC under reducing conditions after heating for 3 hours. But any enhancement in transparency was not identified.

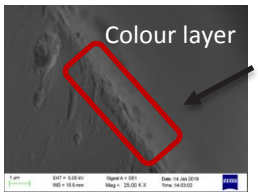
Characterization of Corundum in different Gem fields and their potential for value addition.

Mining sites were selected from Elahera, Eheliyagoda, Ratnapura and Monaragala. Geuda were purchased from these four common areas in Sri Lanka. Soil samples were collected from the same place where geuda were obtained. The results of these experiments provide insight into the optimum conditions for heat treatment to different types of geuda. By doing so, you can identify the potentials for adding value to them.

Value Addition of Topaz Using Nano technology

To this finding patent has been applied, under the name of "Epitaxial layer on gemstones is capable of adding value to low quality gem materials" and Patent-LK / P / 20172 has been obtained for this invention.





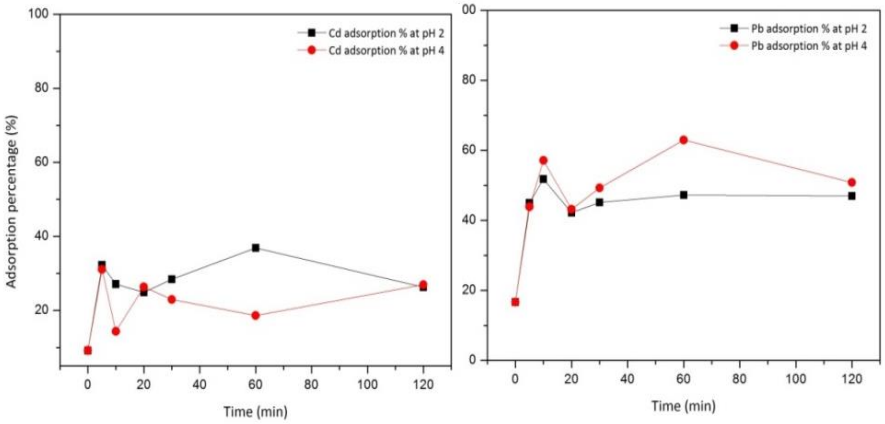
C layer under/olor coatingSEM

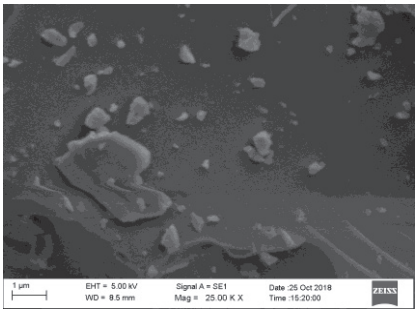
Value addition of quartz as a material for ornaments

Quartz is an abundant mineral in Sri Lanka. But only 5% of it is utilized in jewellery in an effective way. The major reason for it is the lack of value addition methods of it and the ignorance of it being a semi-precious gem with less value.
Quartz varieties were heat treated at different temperatures and FTIR analysis was done to study chemical transformations.
Amethyst crystals were preformed and heat treated in electric furnace under three phases. Smokey quartz: The brown colour of smokey quartz diminishes upon heating upto 230C. Chalcedony: A non-crystalline quartz, turned into red colour carnelian when heated to 450C, and the reason was the presence of iron in its structure. Also it was possible to form crackled quartz by heating upto 250C followed by sudden cooling.
This minimizes the wastage of quartz mineral by value addition as a material for jewellery, ornaments and carvings.

Carry Out World Class Divers Innovation Research relating to Gem Minerals

Assessing the suitability of natural minerals as novel sorbent materials to remove toxic elements from aqueous solutions
Kinetic study of adsorption of Pb(II) and Cd(II) ions by tourmaline; adsorbent dose 0.5 g of tourmaline/ 50 mL, Pb and Cd concentration 50 mg L^{-1}, temp 25 ^{o}C.





It was also identified that the materials used can be easily regenerated by using a diluted acid. According to the results it was revealed that the above materials can be effectively use in water and waste water treatment. Further, a manuscript is in preparation to be submitted to an SCI Journal.

Study for a sustainable alternative material/ method for replacing timber and kakilla which are used for the structure of the a gem pit

PET bottles flaks were melted up to 260 0C for 3hr and then mix with the sand and the nano silica powder for produced the composite bricks. Testing and other preparation must be done the project is going on.

SEM micrographs of produced silica samples

Study on use of Gem Cutting Dust for improvement of physical properties of clay products.

According to the observations after burning, there were no cracks in the crystalline powder-mixed experimental samples, and cracks were detected in samples prepared without any crystalline powder.

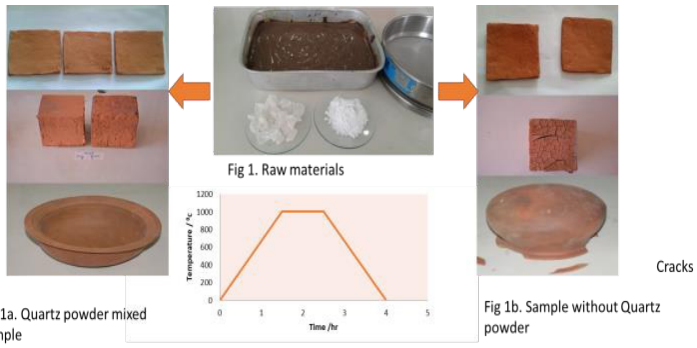


Fig 2. Temperature Vs burning time

Training And Development Programe

As a dynamic semi government institute our aspiration is to address national requirement related to gem & jewellery industry by providing quality training according to the national and international standards.
In this year our institute was able to conduct many training programs with covering vast range of subject areas relevant to gem & jewellery field and recorded an ever highest student intake compared to the previous years.

Training Dessimnation

GJRTI stepped to establish three novel training centers (i.e. Naula, Batticaloa, Rathmalana) in this year. Accordingly, altogether 11 centers were successfully functioned to the dissemination of training activities throughout the country wide. These centers were operated in the areas such as Ratnapura, Colombo, Kandy, Galle, Jaffna, Awissawella, Aththanagalla and Nivithigala. The recorded student enrollment during the year was 1220 is the ever highest intake achievement.The Institute established a new Center in Deaf school Rathmalana aiming at empowering young disabled students to find careers in gem cutting.In addition, the Institute has established new centers in Awissawella, Batticaloa and Naula to disseminate formal gem and jewellery education in those districts.

Adequate supply of skilled personnel

To overcome severe skilled craftsman shortage still facing by the gem and jewellery industry, a specially designed training program was introduced with the collaboration of National Gem and Jewellery Authority (NGJA) and Gem and Jewellery Association of Sri

Lanka (GJASL) to train and absorb jobless youth for the gem cutting and polishing and jewellery industry.

The institute regularly introduces courses in order to develop professionalism of the gem and jewellery industry. Accordingly, launched Gemmology diploma program was launched following SLQF 03 standards. This is to uplift the formal education level in gem field. Furthermore, Jewellery Design and Manufacturing Technology curriculum has been developed upon the NVQL 5 standards and scheduled to offer within second quarter of 2019. These all efforts will enable our students to receive globally recognized qualifications to work in gem and jewellery field.

Existing curricula have reviewed and updated to include latest technologies and empower trainee to meet up current industrial demand.

Category – Syllabuses related to gem field	**Category – Syllabuses related to jewellery field**
Basic Gemmology	Jewellery Manufacturing (NVQL 03)
Gemmology	Jewellery Manufacturing (NVQL 04)
Geuda Heat Treatment	Jewellery Designing (04 months)
Basic Gem Cutting Technology	Jewellery Designing (06 months)
Gem Cutting and Polishing (NVQL 03)	Computer Aided Jewellery Designing (CAD)
Gem Cutting and Polishing (NVQL 04)	Casting and Electroplating
Colour Grading and Marketing	Stone Setting
Gem Carving	Costume Jewellery Manufacturing (Jaffna)
	Costume Jewellery Manufacturing

Art of Technology Transferring Facilities

Institute runs very modern training workshops and laboratories which are used to give up dated trainings for students. These were continuously upgraded introducing with latest art – of-technology applications used by the industry today. Accordingly, GJRTI introduced following courses for the first time to trigger product diversification aware industrialists regarding the novel technological applications. i.e. Gem CAD, Computer Aided Jewellery Manufacturing and 3D Printing (CAM), Fantasy Cutting, Bead Making etc.

Research and Development/ Surveys

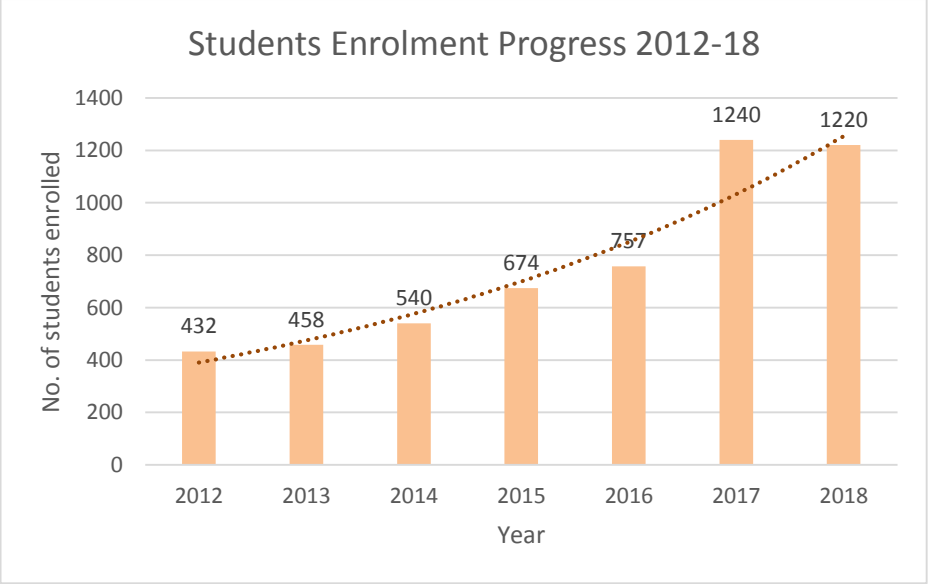
Institute has started to carry out a Market Survey with the collaboration of Uva Wellassa University to do a scientific study on gem and jewellery industry with the objective of identifying industry distribution, labor/ craftsman shortage, training need, precious metal consumption etc. Hence, the industry has no scientifically adopted data base to use for the policy decision marking.

Student Empowering Programmes

As an entrepreneur support, GJRTI has initiated a project to promote students' Product Sale. Through this project, the institute has introduced the products of passed out students to the gem and jewellery market. These products sale were facilitated in sale centers (WTC, GJRTI-Kaduwela, GJRTI –Rathnapura) and local/international exhibitions such as FACETS, JEWELS etc.

Progress of students training activities are follow listed

	Training Programme	No Of Students		
		Recruited	Pass Out	Ongoing
01	Diploma in Gemmology	25		25
04	Basic Gemmology	146	45	80
02	Gemmology	78	26	35
05	Geuda Heat Treatment	138	68	34
06	Gem Cutting & Polishing	294	140	85
07	Colour Grading & Marketing	62	46	09
08	Gem Carving	06	00	06
09	Jewellery Designing	101	55	27
10	Jewellery Manufacturing	70	9	50
11	Costume Jewel Manufacturing	115	86	00
12	Stone setting	85	42	26
13	CAD	61	28	15
14	Rough Gem Identification	-	00	00
15	Casting and Plating	6	4	02
16	Short Course In Basic Lapidary Techniques	19	9	8
17	Foreign Students	04	00	04
18	Tailor made Students	10	07	03
Grand Total		**1220**	**569**	**390**



Marine Environment Protection Authority

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

Improved marine pollution control mechanisms

Improvement of sea bathing sites and beaches

For making decisions on marine pollution prevention, it is very important to maintain a water quality database of sea bathing sites and long sea outfalls. Based on data collected, marine pollution minimizing measures have been taken in coastal areas of Sri Lanka.

Grading of water quality at Bathing Sites in Sri Lanka – 2018

SN	Bathing Site	District	Index Value	Designation	Class
1	Moragalla	Kaluthara	100	Excellent	I
2	Unawatuna	Galle	86.62	Very Good	II
3	Mirissa	Matara	100	Excellent	I
4	Tangalle	Hambanthota	100	Excellent	I
5	Arugambe	Ampara	100	Excellent	I
6	Passikudah	Batticaloa	100	Excellent	I
7	Chilaw Beach Park	Puttlam	71.24	Good	III
8	Wennappuwa	Puttlam	100	Excellent	I
9	Negombo Beach Park	Gampaha	100	Excellent	I
10	Mt. Lavinia	Colombo	100	Excellent	I
11	Wellawatte	Colombo	65.31	Fair	IV
12	Marble Beach	Trincomalee	100	Excellent	I
13	Trincomalee Beach	Trincomalee	100	Excellent	I
14	Nilaweli Beach	Trincomalee	100	Excellent	I
15	Pigeon Island	Trincomalee	100	Excellent	I
16	Charty	Jaffna	100	Excellent	I
17	Casurina	Jaffna	100	Excellent	I
18	Thondamanaru	Jaffna	100	Excellent	I
19	Talaimannar	Mannar	100	Excellent	I

Pollution prevention from fisheries sector

To reduce marine pollution from fishery harbours and to manage waste associated with fishery harbours, MEPA has established waste management plans for 16 fishery harbours in Sri Lanka. Further MEPA conducted 20 harbour cleanups, 7 meetings and 4 awareness programmes for fishery communities & other fishery harbor stakeholders throughout the year 2018.

Coastal and marine pollution control

Issuing dumping permits

For minimizing disposal of waste in the ocean and encouraging the disposal of waste only after treating, all regional offices of MEPA are carrying out regional inspections.

Progress on issuing dumping permits

	2015	2016	2017	2018
Income Rs. Mn.	0.71	2.9	3.79	4.2
No of permits	39	95	177	266

Clean Sea Project

- ***Beach Care Taker Program***

  MEPA has taken another big step to establish beach caretakers ensuring the sustainable usage of beach stretches in the island. This obtains public assistance to minimize marine pollution while creating an income generation pathway to low income communities. The program was officially launched by H.E. President on 16th September 2018 at Dadalla beach, Galle. For the smooth functioning of the programme MOU has been signed between MEPA and Department of Samurdhi Development in December 2018. Accordingly 39 beach caretakers have cleaned approximately 40 km beach stretch daily basis. Further it is planned to increase the number of beach caretakers up to 112 for the year 2019.

- Further MEPA conducted a baseline survey for identifying pollution sources of Kalani river banks (up to 2 km perpendicular to the river mouth) to establish a waste management plan for the river. Coastal environmental profiles were created for Colombo coastal area, Ma Oya to Kalptiya, Vedithalativu, Kudawella to Kumbukkan Oya, Ahangama to Hikkaduwa and Matara coastal belts.

Studies on marine ecosystems

For determination of invasiveness of identified marine alien species in Colombo and Galle commercial harbours, several surveys have been conducted in 2018. For restoration of coral reef ecosystems, coral boulders were established in Trincomalee coastal waters. Further reef monitoring programs for artificially restored coral reefs were conducted at Mirissa and Trincomalee. Fifty no of mangrove plants have been restored at the Gin Ganga banks. To establish Kayankerni reef area as a protected area a workshop has been conducted to establish an integrated agency coordination mechanism. Also two surveys were conducted and zoning of the area was done.

Improved marine pollution preventive measures

Implementation of regulations and international conventions

For improving marine pollution preventive measures in 2018, MEPA conducted workshop to amend Bunker regulation, Exploration to include natural resources workshop, Oil spill dispersant regulation workshop, Oil record book regulation workshop, National workshop for London Protocol and Regional workshop for sensitivity sea areas.

Minimizing the pollution caused by ships

- Providing reception facilities for ship generated wastes

In order to prevent marine pollution caused by ship generated wastes, MEPA provides 24x7 waste reception service through 24 no of registered service providers who are responsible for proper disposal of onboard oil waste, solid waste and sewage. In 2018 1660 no of permits have been issued and Rs.Mn 22.53 as income has been generated in WRS provided by MEPA.

- Issuing bunker license to bunker service providers

Licenses were mainly issued for supplying bunker fuel to ships that calling to Colombo port and Hambantota port. In year 2018, 9 suppliers have been registered and Rs.Mn 1.72 income has been generated.

Establishment of an institutional framework for marine related issues

MEPA has prepared the national document of Policy Strategies and National Action Plan for Marine Environment Protection in Sri Lanka. Policies, strategies and detailed activities have been set up to the year 2030 by the document.

Organizing and conducting National Events

National Coastal & Marine Resources Conservation Week and National Beach Cleaning Programme, 16 September 2018

Sri Lanka government declared a week from 15th September as "National Coastal and Marine Resources Conservation Week". Marine Environment Protection Authority (MEPA) organized the 10th National Coastal Cleanup main programme on 16th September 2018 at "Dadalla beach, Galle" with total of 1500 participants. In addition to that Sri Lanka marks the "International Coastal Cleanup Day" by organizing 80 beach cleaning programs with total of 15,000 participants covering 14 coastal districts during this week.

World Ocean Day 2018

An awareness workshop and an underwater coral cleanup program have been conducted for 60 no of print and electronic media persons at Sober Island & Pigeon Island, Trincomalee on 7th, 8th and 9th of June 2018.

Furthermore a beach clean up program at Poruthota beach Gampaha with 620 no of participants and another beach cleanup program at Thirukkovil Ampara with 402 no of participants have been conducted.

Awareness programs and awareness walk have been conducted centralizing school children at Ampara district. 648 No of School children have been participated for the programme.

Fourth National Symposium on Marine Environment

Marine Environment Protection Authority conducted the fourth national symposium on marine environment on 20th October 2018 at BMICH, Colombo 07. Twenty seven research findings were published in research symposium which was conducted under four sessions namely; Marine environment, sensitive marine ecosystems & marine protected areas, Ecotourism & coastal management, Fisheries, aquaculture & marine environment and Shipping, marine pollution & related legislation.

Expert Dialogue Forum on Marine Environment

Sri Lanka Next – 2018, Expert Dialogue Forum was organized by Marine Environment Protection Authority on 20th October 2018 at BMICH, Colombo 07, in order to make platform to all expertise of the marine field to discuss immerging issues on " Development of shipping sector towards Blue Economy". This forum includes five scientific sessions with Key note speech by an expert followed by an open forum in each session with about 150 participants.

National Environment Week Programme 2018

Under the theme of "Beat plastic pollution", MEPA has conducted main program to commemorate World Environment Day held on 05th of June at Gampaha district. In environment week programmes 2053 no of participants have participated for the awareness programmes regarding environment protection & marine environment and 3184 no of participants have actively joined with fishery harbour cleanup & beach cleanup programmes.

Wanaropa National Programme

In 2018 Marine Environment Protection Authority organized two tree plantation programs at Puttalama district.

- Ten thousand no of native plants such as Kumbuk, Magul karada, Watakeiya, Mee and etc. were planted at Norochcholai power plant premises with collaboration of Norochcholai Power Plant and Lions Club of Negombo Orient.
- Two thousand no of mangrove plants were planted at Narikudawa, Kalpitiya with collaboration of Kalpitiya Divisional Secretariat
- Forest Department. Another tree planting programme was conducted at Mannar, planting 500 mangrove plants.

Efficient implementation of National Oil Spill Contingency Plan (NOSCOP)

In the year 2018, Marine Environment Protection Authority has conducted 3 NOSCOP drills at Trincomalee, Puttalam and Ampara districts. Seven workshops and one training for oil response team were conducted for enhancing their capacity and immediate response against a sudden oil and

chemical spill, ensuring a minimized damage to the marine and coastal environment in such situation. In 2018 two oil spill events were successfully managed to minimize adverse effects.

Oil spill events occurred in 2018

Place where the oil spill occurred	Type and amount
Thaldiyawatta	Furnace oil 39 ton with contaminated water
Kolonnawa Oil Storage Terminal	Furnace oil 15 ton with contaminated water

Capacity building - Southern Building Opening

The newly built Office complex at Dadalla, Galle, which is the first permanent building owned by Marine Environment Protection Authority was opened by H.E. the President Maithreepala Sirisena on 16th September 2018. The Office complex consists of fully equipped laboratory, Galle district office, Southern Provincial office and accommodation facility.

Income Progress -2018

Description	Target Income	Actual Income	Percentage
Income	33.7	33.4	99%

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

- ❖ Extraction of Timber from Forests, conversion of such timber into sawn timber and finished products. Sale of logs, sawn timber and finished products and construction of forest roads required for the above purpose.
- ❖ Acquisition, construction and operation of logging units, sawmills, impregnation and preservation plants, seasoning and drying kilns and other equipment and installations.
- ❖ Operation of Timber and Firewood Sales depots.
- ❖ Manufacture and marketing of by-products from timber.
- ❖ Import of timber.
- ❖ Aforestation, Reforestation and scientific management of forests and forest plantations.
- ❖ Agriculture production.
- ❖ Export of timber related finished products.
- ❖ Purchase of timber from private lands.
- ❖ 10. Processing of forest related products.
- ❖ 11. Import of Cane
- ❖ 12. Identification and certification of local and imported timber species through sample testing
- ❖ 13. Conduct training programs on timber industry related subjects and issue certificate and undertake environmental awareness programs to contribute towards developing and environmental conscious society
- ❖ 14. Planning and making investments so as to optimize the return from the lands and buildings owned by the corporation

Major Challenges of the State Timber Corporation

- Risk of getting local timber particularly for the construction industry as a result of non availability of required types in areas released by the Forest Department for harvesting.
- Due to the scarcity and high cost of hard wood, alternative materials have been introduced to complement timber such as plastics, cement, ceramics, steel, aluminum and ferrous materials.
- Competition from timber importers and small timber producers.
- To offer the products at an affordable price

Several Programs were conducted in World Environmental Day

- Donation of 14 Agric. Equipment sets worth Rs.79,281.97 and set of books for 10 schools in Kegalle and 4schools in Kurunegala districts through “Thurujana Sisu Bank tree planting program”.
- Conducting tree planting programs in 10 schools in Kegalle districts through “Thurujana Sisu Bank tree planting program”.
- Main event conducted by STC for environmental day program in Mellakanda forest expenditure Rs.65,349.50 and events conducted by other regions expenditure Rs.37,200.00
- Contributing 70 tree guards worth Rs.91,000.00 for Ampara Haritha Jana Padanama and event in Forest Department, Kurunegala.

Activity	Target		Progress	
	Physical	Financial Rs. M	Physical	Financial Rs. M
Logs M^3	126,861	2,896,106	130,040	3,249,155
Sawn Timber M^3	5,064	238,467	4,389	249,791
Imported Timber M^3	1,000	120,750		18,752
Transmission Poles No.	27,800	277,444	9,850	120,116
Sleepers No.	41,500	373,085	43,651	499,163
Round Poles No.	72,700	5,608	112,837	20,408
Fence Posts No.	65,700	3,942	125,967	11,707
Firewood M^3	79,000	39,450	101,172	57,739
Elephant Poles No.	428	590,876	232.2	356,280
Furniture Rs.Mill.	28,800	72,864	17,155	131,485

Active contribution to "Wanaropa" national tree planting program.

- STC produced about 130,000 saplings and distributed from STC nurseries among the government, semi-government, non-government institutes and private organizations free of charge under the “Wanaropa”.
- Contribute to the 2018 National event was inaugurated in Mannar District.
- STC has organized the main event in Nakkawatta National School in Kurunegala District.
- STC has contributed to make stall in exhibition “X- ban” and repairing the Auditorium and Podium in Bandaranayeka College at Gampaha.
- Tree planting programs were conducted in several regions.

Awareness Programs were conducted in the year of 2018

- Workshops including were conducted to aware school teachers related on Sustainable Consumption of Timber and Timber conservation.
- Workshops including were conducted to aware school teachers.
- Altogether 12 programs were conducted to aware the school teachers on the sustainable utilization of timber and timber related products and distributed timber related leaflets among them.

Research publications in 2018

Muthumala, C.K., De Silva Sudhira, Alwis P. L. A. G., and Arunakumara K. K. I. U., 2018,; Identify the Strength Grade for Finger Jointed Timber Species According to BS 5268-2:2002 ; 23rd *International Forestry Symposium 2018, Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Sri Lanka; State Timber Corporation, Sri Lanka.*

Siriwardana V.R.A. and Muthumala, C.K., 2018, Evaluation the Authenticity of Wood Species in Sri Lankan Timber Market; 23rd *International Forestry Symposium 2018, Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Sri Lanka; State Timber Corporation, Sri Lanka.*

Motagedara arachchi C.I.. and Muthumala, C.K., 2018,; A Survey and Usage and Imaged issues of Kaya Senegalese Timber Species in Kurunegala District in Sri Lanka; 23rd *International Forestry Symposium 2018, Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Sri Lanka; State Timber Corporation, Sri Lanka.*

Siriwardana V. R. A[1], Wickramasingha W N[2] 2018; Strength Classification for Sri Lankan Wood Species.; Annual research Symposium, University of Colombo, Sri Lanka.

Muthumala, C. K[1], De Silva Sudhira[2], Arunakumara K. K. I. U[3], Alwis P. L. A. G[4], 2018,; Identification of joint efficiencies in 13mm Finger Jointed Timber Species Used in Sri Lanka.; 9th International Conference on Sustainable Build Environment, University of Peradeniya, Sri Lanka.

Muthumala, C. K[1], De Silva Sudhira[2], Arunakumara K. K. I. U[3], Alwis P. L. A. G[4], 2018,; Investigation of the most suitable glue type for finger-joints production in Sri Lanka.; Research Journal of Agriculture and Forestry Science; International science Community Association, India.

Research conducted with university students

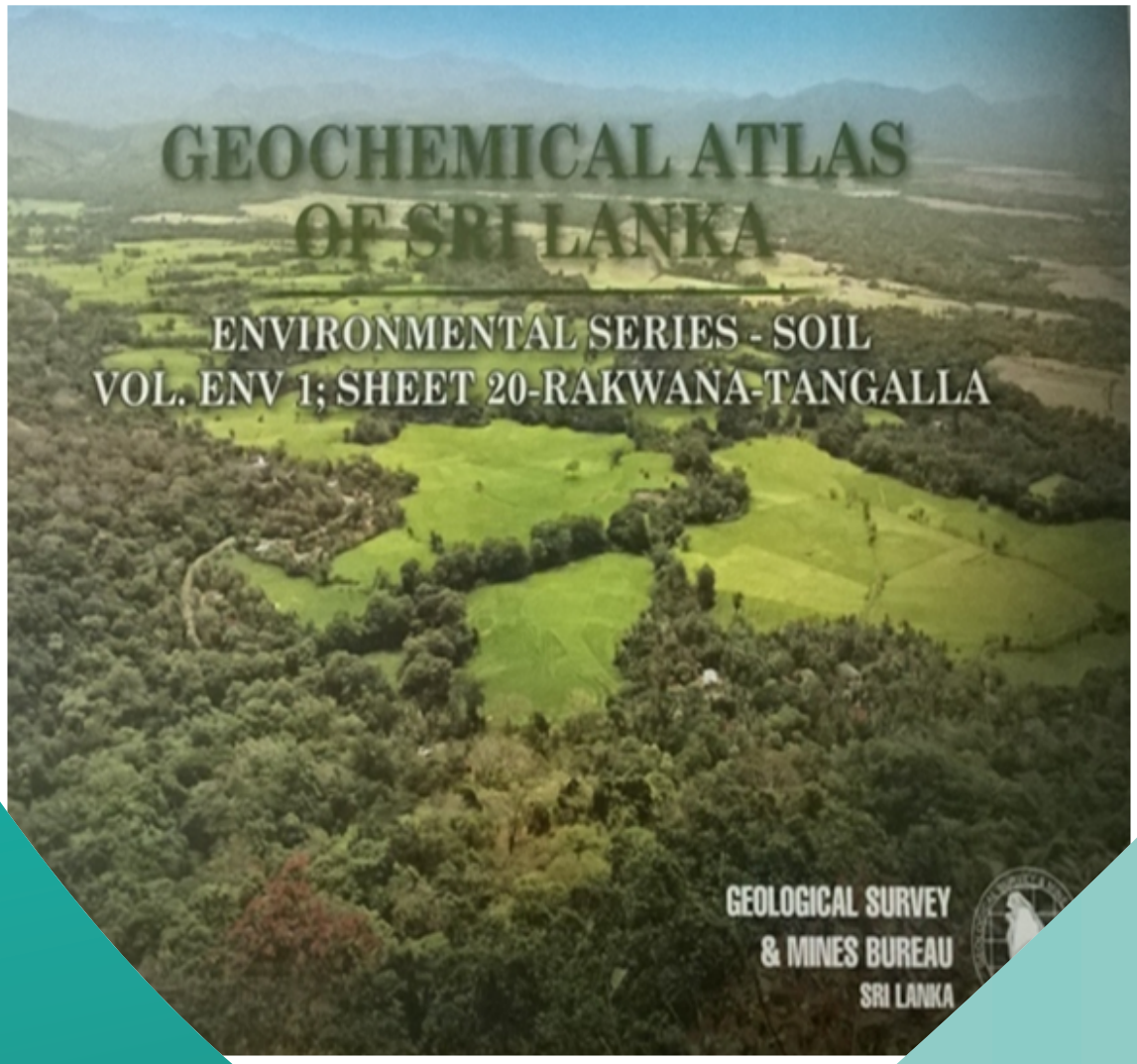
- Identification of Timber species using physical and anatomical features - *B M J S Basnayeka*
  Supervised by C K Muthumala – Manager (Reasarch & Training) - STC

- Determination of some wood properties and its uses in 50 lesser known timber in Sri Lanka – *J T S S Jayawardhana*
  Supervised by Dr Nimal Ruwanpathirana- Genaral Manager- STC

- Estimation Harvesting Cost of Pine Plantation by private sector and State Timber Corporation – *J M P C B Jayasundara*
  Supervised by Dr Nimal Ruwanpathirana- Genaral Manager- STC

- Effect of Volumetric Shrinkage for finger Joint Timber Production Technique in Different Exposure Conditions – *S M J P Dayawansha*
  Supervised by C K Muthumala – Manager (Reasarch & Training)-STC

- Development of Timber Classification System for Finger Joint Timber Production Using Strength Properties – *M A M Pamoda*
  Supervised by C K Muthumala – Manager (Reasarch & Training) - STC



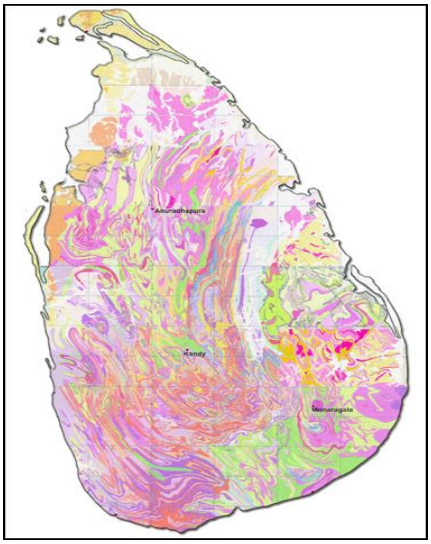
Geological Survey And Mines Bureau

"Contribute towards the socio economic development of Sri Lanka by understanding and managing earth and its dynamism to uplift people's living standards and livelihoods while upholding social, cultural and environmental values".

Management of natural resources and the environment by investing in research to understand earth and its dynamism, compiling a national portfolio of geological resources, regulating exploration and mining for minerals and processing, exploring sustainable strategic service provisions, providing expert earth-science information and strategically contributing towards the socio economic development of Sri Lanka in compliance with the techno- economic and scientific-sustainable development.

GEOLOGY DIVISION

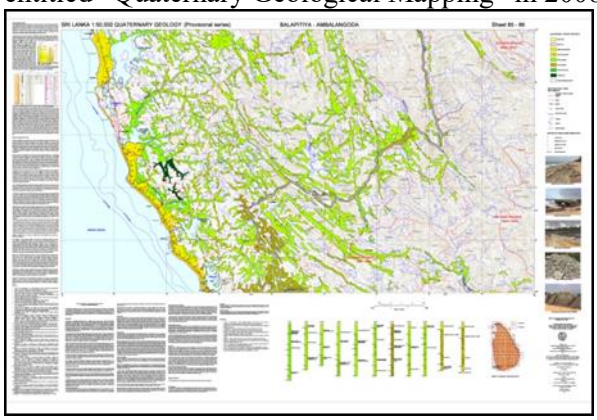
- **Printing of Geological Maps**

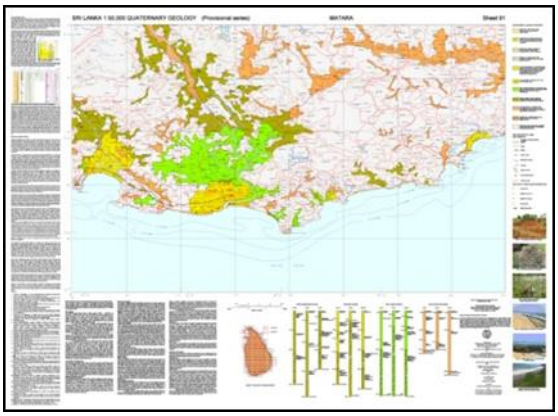


Publishing of the geological maps covering entire Sri Lanka is one of the major functions of the Bureau. The geological maps which contain the geo-information of the terrain are used in a wide range of activities including mineral and ground water exploration, major construction and civil engineering works and preparation of landslide hazard maps etc. The GSMB completed the printing of all 21 geological maps (1: 100,000 scale) covering the entire country in year 2014 and 04 no. of 1: 250,000 scale geological maps were published in year 2017. The preparation of 1:500 000 scale map of entire island is being prepared.

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

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





Map compilation of Puttalam, Silawatturai, Hambantota and Tissamaharama sheets were carried out. Detailed Drilling was carried out on Puttalam, Sillawaturai and Kalpitiya sheets and remaining 04 drill holes will be conducted in 2019.

- **Soil Geochemical Mapping Programme**

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

Compilation and Printing of Soil Geochemical Mapping Programme

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 within previous years and the Atlas of Sheet No.20 was published on October 2017. The compilation work of Sheet No. 08 was in progress.

Laboratory work of Soil Geochemical Mapping Programe

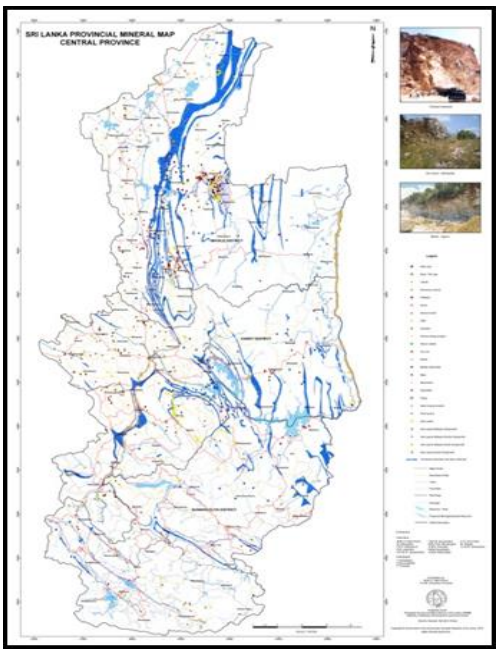
Analytical work Sheet No 08 (Anuradapura- Polonnarua) and sheet No 06 was being carried out during said period.

Field work of Soil Geochemical Mapping Programme

The field work of Sheet No. 23: Nilaweli & Sheet No. 6: Pankulam were completed and Sheet No. 28: Trincomalee was being carried out.

- **Brick & Tile clay Survey along Ma Oya to identify locations of industry**

Brick & Tile clay survey along Ma Oya to identify promising clay bearing areas was commenced within the last quarter of year 2017 and 90% of the field work has been completed. This field work was temporarily hold as the officer assigned had to attend Island wide Construction Raw Material Survey.



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

Field work of Sabaragamuwa, Uva & North Central Provinces was completed.

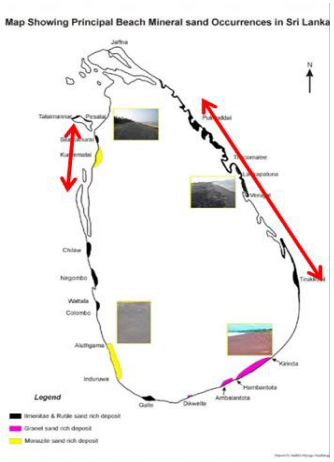
Data compilation on Uva province mineral map was completed and Sabaragamuwa was being carried out. These two maps will be published in year 2019.

- **The International Atomic Energy Agency (IAEA) Assisted Nuclear Raw Material Survey and Allied Activities**

Car-borne Gamma Ray Spectrometer Survey

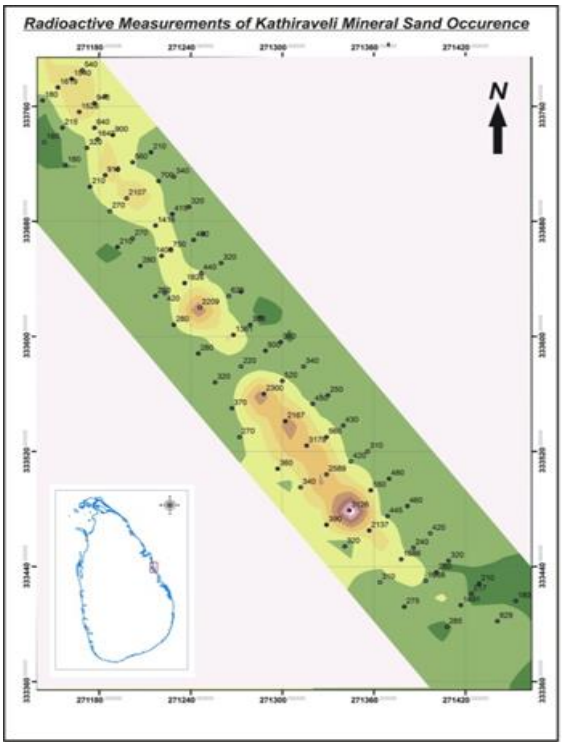
The detailed geological investigation of identified radioactive anomaly at Naula area was conducted and data analysis is in progress.

A map of major mineral deposits in the coastal strip in Sri Lanka



Nuclear Raw Material Survey along the Coastal Stretch from Talaimnnar to Galle

The nuclear raw material survey along the coastal stretch from Mannar to Galle was started and Field work is completed. Aluthgama – Galle field work is also completed. In these survey about 4 areas of radioactive anomaly zones were identified and detail survey within these identified zones will be conducted in due course.

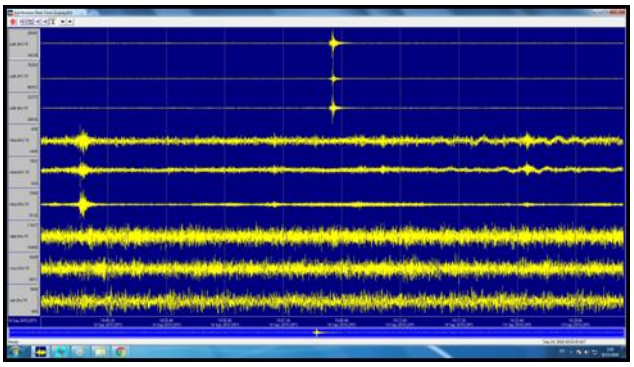


Radioactive measurements of Kathiraveli Mineral deposit

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

The three seismic stations installed by the GSMB together with other donor agencies were functioning smoothly and data from these stations were transmitted to the Data Center at the Head Office, GSMB without any major problem. The data availability of the three seismic stations was within the satisfactory level in 2018.

Tsunami Alert Centre at GSMB



Seismic record in PALK seismic station (recent earth quake occurred in Trincomalee on 14th Sep 2018)

In addition to the earthquake monitoring, the Seismic Data and Tsunami Alert Centre act as the receiving point of the public complaints on GSMB related mining activities through numbers of 011 2 862 862 and 1921. The duty officers at the data center recorded the complaints and forwarded to Mines Division.

- **Upgrading the GSMB-Library**

Purchasing Library Text Book

The Library Committee has finalized the list of textbooks to be purchased for the year 2018 and total of Rs. one million was allocated. However none of the book was purchased as the management considered about E-Book concept.

Museum Development 2018

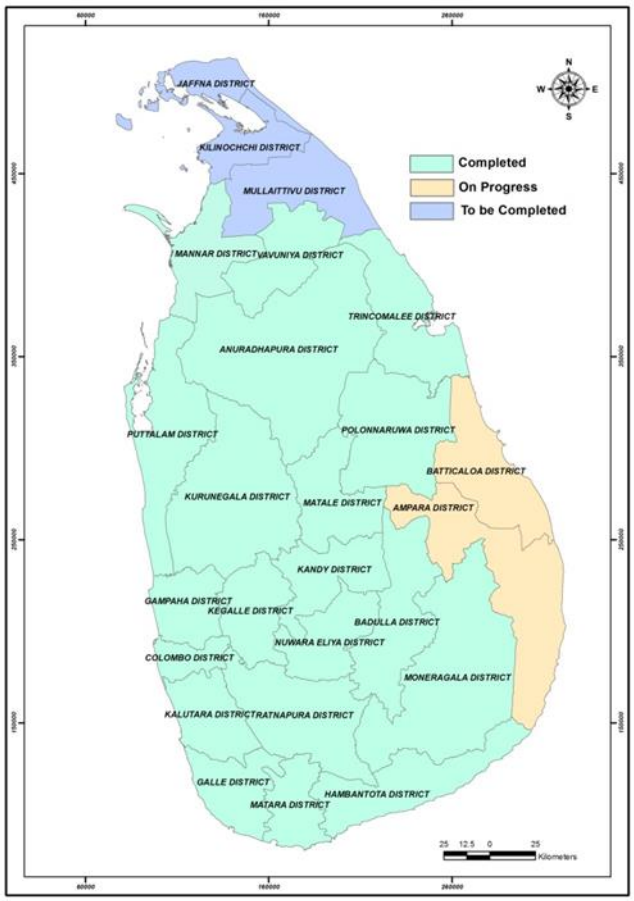
The Proposal of the museum development was submitted to the Director General through the Deputy Director (Geology). Library and Museum Committee selected the (85 specimens) crystals, Minerals and Rock Specimens from the catalogue of WARD'S Natural Science establishment USA and selected specimens were purchased. Several members of the Museum Development Committee was visited the National Museum and get their advised about how to create display cabinets, build a lightning system and others. These instructions are discussed with the museum development committee and proposal was submitted for approval.

Library Digitization Project 2016-2019

Geological Survey and Mines Bureau was started the Digital Library Project in collaborations with National Science Foundation in mid-year 2016 and phase III of this project was started in year 2017.

1. Selected documents (Documents types: Technical Reports and other reports, Newspaper Clipping) for scanning and 50200 number of pages selected to scan.
2. Created tag systems for above 50200 pages.
3. Documents scanning process was in progress.

- **Island wide 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. The aim of the survey is to identify suitable locations evaluating the quality and quantity to mine metal/rocks, gravel, soil and sand throughout the Island. Recommendations will be given for suitable sites with highly consideration of residential areas, water sources, landslide prone areas with the environment concern. The priority was given for Kandy Express Way, proposed road at Kurunegala, extended Southern Express Way from Matara, extended Express Way towards Negombo and constructions at Colombo under the Ministry of Megapolis. 19 Districts were completed and all final reports were handed over to Ministry of National Policies and Economic affairs.

Stream sediment survey at Walawe Ganga has been carried out and field work is completed. The report preparation is in progress.

• Petrology Laboratory

1. Direct income from the testing done for the individual clients

Number of sample	Income (Rs.)
579	3,764,183.00

2. Other analysis done for projects and field works on requests of the officers of GSMB (Free of Charge)

Sample nature	Number of samples	Value of the analysis (Rs.)
Rock	25	81,000.00
Sand	59	294,500.00
Total		375,500.00

- Participation at exhibitions and school science programs and preparation of sample sets (free of charge). About 75 sample sets were prepared and provide to School teachers and Students.
  - Jewels 2018 exhibition held at Taj Samudra on 17th and 18th November 2018.
  - "X-Ban Educational - Science and Technology exhibition 2018 held at Bandaranayake College Gampaha.
  - Educational exhibition held at Kegalu Balika Vidyalaya on 2nd - 3rd November 2018.
  - 20th Anniversary Educational exhibition held at Leeds International School on 25th 26th October 2018.
  - Zonal level Science exhibition 2018 held at Akkaraipattu Muslim Maha Vidyalaya from 10th to 14th October 2018.
  - Educational Exhibition held at St John's College Panadura on 5th October 2018
  - Educational exhibition held at D.S Senanayake Central College Meerigama on 28th February and 1st and 2nd March 2018.
  - Educational Exhibition held at Maliyadewa Balika Vidyalaya Kurunegala on 29th and 30th June 2018.
  - Annual Science day exhibition held at Gothami Balika Vidyalaya Colombo 10 on 29th June 2018
  - “Kithudewu Shilpa Prabha – 2018” Educational exhibition held at Kristudewa Balika widyalaya on 6th – 9th July 2018
  - Educational exhibition held at Sirimawo Bandaranaike Vidyalaya Colombo on 7th and 8th March 2018

1. Other Analysis done for Magistrate Court and Sri Lanka Custom

Analysis requested by	Sample Nature	Number of Samples	Value of the Analysis Rs.
Magistrate Courts	Sand/Rock	17	110,500.00
Custom	Sand	14	56,000.00
		Total	166,500.00

- **Analytical Laboratory**

Chemical Analyses carried out for outside clients

- Analysis of 300 samples consisting of limestone, quartz, dolomite, graphite, feldspar, soil, sand, cement, mica, mineral sand, clay, water, digested rocks, and other metal alloys and body mixtures of tiles and ceramic etc, were carried out by the laboratory on the requests made by various institutions and individuals. This brought Rs 2,144,500.00 (without taxes) as Analytical laboratory income.

CHEMICAL ANALYSES DONE FOR THE PROJECTS UNDERTAKEN BY GEOLOGY DIVISION.

** This income is included in the relevant project income of the geology division.

Name of the project	Number of samples	Income (Rs)
1. Tokyo Cement limestone project	83	581,000.00
2. M.G.M Mines & Minerals (Pvt) Ltd/ Sand	50	300,000.00

3. Cement raw material Survey for Tokyo Cement Lanka (Pvt) Ltd	110	1,320,000.00
4. Water Quality Testing of Dedduwa area for Southwest Coast Development Project	31	704,000.00
Total		**2,905,000.00**

- **CHEMICAL ANALYSES DONE ON THE REQUEST OF GSMB OFFICERS FOR THEIR RESEARCH/PROJECTS**

Analysis requested by/ project	Sample nature/ Number of samples	Type of the analysis carried out	Value of the analysis
1. Red Earth Sample Analysis	Clay/01 No Read Earth/03	Full analysis	48,000.00
2. Bolgoda sand survey	Sand/04	Pb,Cd,As,Hg	9,000.00
3. Stream sediment survey	Sediment/12Nos	Heavy metals including gold and silver	144,000.00
4. To check water quality for drinking after treatment	Water /05 Nos	Full analysis	45,000.00
5. To check the suitability for construction work	Sand/ 4 Nos	Salinity, Chloride, Organic matter and carbonates	20,000.00
6. Value addition work	Rock / 2 Nos Ilmenite/05Nos	Full analysis	99,000.00
7. Export Sample analysis	Quartz/02Nos	Full analysis	12,000.00
8. Hydrogeological impacts of rock quarrying on groundwater	Water/14Nos	Full analysis	63,000.00
9. Samples collected from Sri Lanka Customs by GSMB team	Mixture of soil/ Organic matter/14 samples	Gold only	28,000.00
Total value of the analysis			**450,000.00**

SAMPLES DONE FREE OF CHARGE FOR REGULATORY WORK

Analysis requested by/ project	Sample nature/ Number of samples	Type of the analysis carried out	Value of the analysis
1. Petrology laboratory/ Courts samples	Sand/ 10 nos	Salinity	Rs 10,000.00
2. Sri Lanka Customs	Soil /5Nos	For gold	Rs 10,000.00
3. Government Audit Department	Soil/ 4Nos	For gold	Rs 8000.00
Total value of the analysis			**Rs 28,000.00**

- **GEOCHEMICAL MAP PREPARATION**

(a) Sheet No 20: Rakwana- Tangalle

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.

(b) Sheet No 08: Anuradapura- Polonnaruwa.

Completed the chemical analysis of 250 samples collected from Kekirawa sheet for the preparation of Geochemical map Sheet No 08: Anuradapura- Polonnaruwa

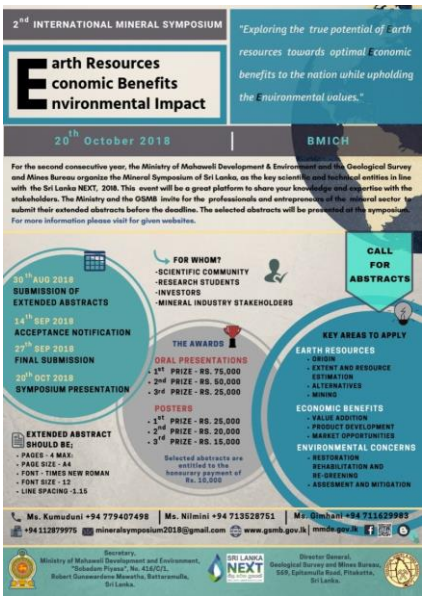
(c) Sheet No 06: Vauniya- Trincomalie

Completed the analysis of 500 samples collected from Madawachchiya & Horowpatana 1:50,000 Sheets for the preparation of Geochemical map Sheet No 06 and commenced the chemical analysis of Vauniya and Pankulam.

- **LABORATORY ACCREDITATION – ISO 17025.**

Completed the preparation of required documents (Quality Manual, Procedure Manual, Method Manual and audit reports) and the application was sent to Sri Lanka Accreditation Board with required documents to get ISO 17025 for Analytical Laboratory.

- **02nd INTERNATIONAL MINERAL SYMPOSIUM - 2018**

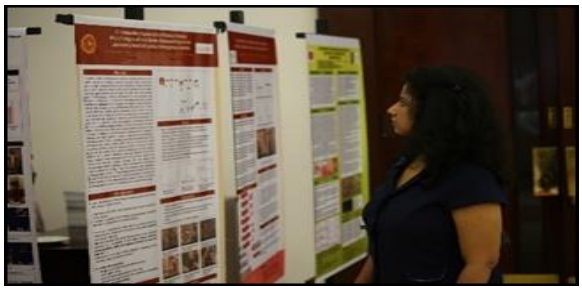


In response to the challenging economic and environmental setting in mineral sector, the Ministry of Mahaweli Development and Environment of Sri Lanka initiated Second International Mineral Symposium, with the collaboration of Geological Survey and Mines Bureau. It was concluded fruitfully in November 2018, with having positive impact on mineral sector.

The Mineral Symposium 2018 was coincide with the Sri Lanka NEXT: Blue Green Era is dedicated to a holistic approach of the **earth resources** of the nation, in a balanced manner weighing the **economic benefits** and the **environmental impact**. It was understood that there are so many small-scale researches are scattered throughout the country which are valuable for the development of mineral sector. However, when look back after two years, it is observed that some researches which were presented in the last year symposium are being used for the beneficiation of the countries' economy and the others have been extended for research further. Therefore, with realizing the importance of the forum on the stakeholders and the country, the Ministry is eager to continue the process on annual basis in an advanced manner based on the lessons learnt from the initial step.

- **FORMULATING MINERAL POLICY**

One of the main and important aspects that the GSMB engaged in was formulating of the Mineral Policy in year 2017/18. The initial DRAFT policy prepared by a committee appointed by the Science and Technology Ministry was further enhanced and necessary components were added in this process. The final DRAFT of the Mineral Policy has been presented to the Ministry of Mahweli and Environment and the Ministry of Science and Technology, which the both hierarchies of the two ministries agreed in principle and the defence before the public would be materialize shortly. GSMB carried out a Stakeholder meeting on draft mineral policy at Ministry of Mahaweli Development and Environment Auditorium on 18th October 2018.



GEOPHYSICAL WORK:

During this period the Exploration Geophysical unit involved in the following projects.

Itm.	Project	Objective	Progress
01	Bedrock Characters of River Mahaweli in sand mining regions **AP/2018/ EGPY/Mahaweli**	Identifying of possible impact due to sand mining on flood plains with reference to bedrock depths	08 days were spent on this work and 16 VES were completed. About 30% of fieldwork was concluded.
02	Mapping of dolerite dykes of Sri Lanka **AP/2018/EGPY/Dykes**	Complete the dyke map in academic and geothermal potential perspectives	Maduru Oya, Gomarankadawa areas has been mapped and locations were selected for magnetic mapping – 20% field work completed (08 days)
03	Development of geophysical instrument test site. **AP/2018/GEPY/Test site**	Provide a central facility for geophysical equipment testing and conduct of programs to disseminate knowledge on the same.	Discussions were initiated with military for possible site at Fox Hill.
04	Inventory on Vein Quartz **AP/2018/GEPY/VQ**	Compile a detailed database on vein quartz with available reserves and quality of the same.	Sites were visited and a questioner has been prepared to obtain information from the industries (Quartz) – 04 days
05	Eppawala Survey **AP/2018/GEPY/Eppawala**	Compile a map	Eppawala mapping has been completed. Dolorite samples were sent for age dating.

MINES DIVISION

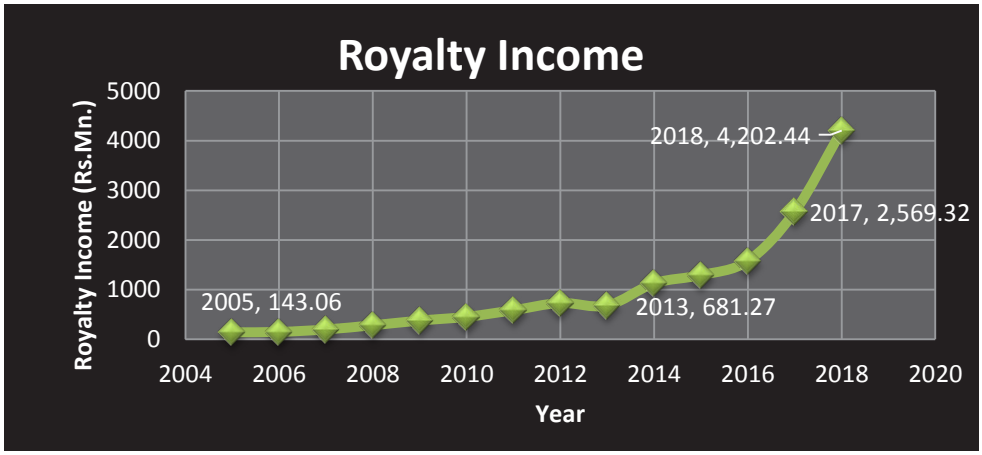
- **MAJOR FUNCTIONS OF THE MINES DIVISION**

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

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

Royalty – (Income)

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



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	2018	4202.44

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.

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	2018	243.54

Income generated by issuing Licenses

The amount of licenses issued by the bureau for various minerals in 2018 is depicted by the table below.

License type	License category	Unit License Fee	No. of Licenses issued	Total Charge
Exploration	EL		34	6,247,000.00
Mining	IML/A	20000	378	7,560,000.00
	IML/B	8000	1900	15,200,000.00
	IML/C	4000	493	1,972,000.00
	AL/A	3000	1747	5,241,000.00
	AL/B	1250	2395	2,993,750.00
Trading	TDL/A	7500	10	75,000.00
	TDL/B	5000	3729	18,645,000.00
	TDL/C	1000	6	6,000.00
Transport	TPL	90	936511	84,285,990.00
Export		5000	649	3,245,000.00
Total			**947,852**	**145,470,740.00**

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

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	2018	145.47

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

Geological Survey and Mines Bureau took some special steps towards Environment Protection and the implementation of Sustainable Mining. Projects such as Wanaropa and Jala Nimna Haritha arana, can be considered as Major movement towards encouraging the public and the private organizations, to protect the Environment. "Green Sand Ferry Project" is a special movement to promote sustainable Mining in Sri Lanka. In addition, GSMB conducted several other Community Building projects, as a step towards developing the living standards of the rural population.

Green Sand Ferry

A workshop on "green sand ferry" concept was held on the 29th and 30th of August at Mas Fabric Park, Thulhiriya. Later division wise and regional awareness programs were held for the License holders. Around 3000 applications were submitted to GSMB accordingly.

Wanaropa

"Jala Nimna Haritha Arana" project, in parallel with the "Wanaropa" program, commenced on 5th October 2018 at the Malwathu Oya Arippu bridge, in the Musali Divisional Secretariat Division of Mannar District, under the patronage of the Deputy Minister of Environment Mr. Ajith Mannapperuma and the Chairman of the Geological Survey and Mines Bureau Mr.Asela Iddawela.

"Wanaropa" program, organized by the Geological Survey and Mines Bureau, concurrently with the International Environmental Day, commenced at the Isurumuni Viharaya its gardens, on October 6, 2018, under the patronage of the Chief Court Incumbent of the Nuwara Gam palatha Ven.Mathawa Sri Sumangala Nayaka Thero.
Program continued at the Historical Somawathi Sacred site, on 02nd November 2018, under the patronage of President Mr. Maithripala Sirisena and the presence of the Chairman of the Geological Survey and Mines Bureau. Mr. Asela Iddawela and Director General CHER Siriwardena.

Reverse osmosis plant

RO project is a program to eradicate the kidney diseases in the North Central province where GSMB donates Water Purification plant operated by Reverse Osmosis technology at Mihindu monastery, Anuradhapura, are donated to villages.
Donation of the 500th RO plant was held on 21/09/2018, with the presence of His Excellency the President, where the Jaya Sri Maha Bodhi also was offered with water purified by all the 500 RO plants.

Restoration of Kadawala wewa

Restoration of the Polonnaruwa, Thamankaduwa, Kadawara Wewa, in order to facilitate irrigation purposes of villagers, was held on 19/08/2018 with the assistance of GSMB technical Services, Sri Lanka Navy, GSMB and the Sand Mining Community at Thamankaduwa.

INCOME & EXPENDITURE STATEMENT

	2017 January - December Rs .	2018 January – December Rs .
LICENSE FEES	275,649,686.79	182,010,668.01
INSPECTION FEES	260,394,886.53	243,540,031.79
ROYALTY	4,626,027,568.08	4,336,254,835.78
MINING INCOME	5,162,072,141.40	4,761,805,535.58
LAB	2,566,300.00	4,106,800.00
PROJECT	23,897,133.76	46,863,846.00
GEOLOGY INCOME	26,463,433.76	50,970,646.00
OTHER	100,148,439.17	105,835,411.02
INTEREST INCOME	281,010,362.65	323,407,258.13
OTHER INCOME TOTAL	381,158,801.82	429,242,669.15
INCOME TOTAL	**5,569,694,376.98**	**5,242,018,850.73**
GEOLOGY	49,629,316.81	77,790,198.13
MAPPING	15,856,719.49	15,534,556.93
PROJECT	13,202,794.86	22,144,716.99
REGIONAL	209,433,945.19	304,643,830.10
MINING	37,658,014.16	3,780,211,518.53
ADMINISTRATION	415,920,677.96	470,050,746.43
INCOME TAX	75,714,400.00	180,623,742.00
EXPENSES TOTAL	**817,415,868.47**	**4,850,999,309.11**
INCOME OVER EXP.	**4,752,278,508.51**	**391,019,541.62**

Central Engineering Consultancy Bureau

A. Number of New Projects undertaken by the Bureau from 2018.01.01 to 2018.12.31

1. Consultancy Projects:

- Number of Projects: 69
- Total value of Consultancy Services: LKR Billion 2.6

2. Construction Projects:

- Number of Projects: 42
- Total value of Projects: LKR Billion 12.5

B. **Achievements up to the end of December 2018 –Status of the new major projects undertaken**.

Consultancy Projects

NO	NAME OF THE PROJECT	TOTAL COST OF THE PROJECT LKR MILLION	PROGRESS OF SERVICES AS AT 31.12.2018 %
01	Matara – Katharagama Railway Extension Project	40,000	92
02	Construction of National Stroke Centre at Base Hospital, Mulleriyawa	1, 220	65
03	Kaluganga Head Works Development Project	14,250	70
04	Broadland Hydropower Project	11,480	59
05	Uma Oya Multipurpose Development Project	71,400	95
06	Manning Market Relocation Project at Peliyagoda	4,000	79
07	Defence Head Quarters Complex Project at Akuregoda	55,000	47
08	District Secretariat Building Complex at Narahenpita	2,515	85
09	Design of Jetty at Naval Dock yard at Trincomalee	3,000	100
10	Extension of Southern Expressway Project-Matara to Beliatta and Mattala to Hambantota	255,000	84.5
11	Central Expressway Project – Meerigama to Kurunegala	137,000	45
12	Metro Colombo Solid Waste Management Project-Aruwakkalu,Puttalam	16 ,000	40
13	Seethawaka Ganga Hydro Power Project- Dehiowita	15 ,000	65
14	Sethsiripaya, Stage 3	10,000	32
15	Proposed National School at Polonnaruwa	513	100

Manning Market Relocation

Central Expressway Project

Uma Oya Multipurpose Development Project

Broadland Hydropower Project

Extension of Southern Expressway Project

Metro Colombo Solid Waste Management Project-Aruwakkalu

Construction Projects

NO	NAME OF THE PROJECT	TOTAL COST OF THE PROJECT LKR MILLION	PROGRESS OF CONSTRUCTION AS AT 310.12.2018 %
01	Construction of Morana Reservoir	1,209	96
02	Construction of Vidyalankara International Buddhist Conference Hall at Vidyalankara Pirivena Kelaniya	685	99.6
03	Provincial Level Sports Complex at Rathnapura	406	83
04	Construction of Proposed Nephrology, Dialysis & Transplant Unit at Teaching Hospital, Karapitiya	790	61
05	Construction of Accident & Emergency Treatment Unit Teaching Hospital in Jaffna	531	100
07	Construction of Maternity Ward Complex - G.H-Kurunegala (Stage -III)	915	90
08	Design & Construction of Head Office Building for Ministry of Health	5,199	26
10	Construction of Specialized Paediatric Ward complex – General Hospital, Ampara	876	17
11	Construction of New Building Complex –Base Hospital, Nintavur	2,887	11
13	Construction of Road Development Project, Anuradhapura	3,724	11
14	Construction of Linear Accelerator Room and Radiotherapy Department- Teaching Hospital, Anuradhapura	320	30
15	Proposed Design and Construction of Proposed Administrative Complex at New Town, Polonnaruwa.	1,303	31
16	Proposed Government Officers' Quarters Complex at New Town Polonnaruwa	1,737	33
17	Construction of Proposed Museum & Resource Centre at Polonnaruwa (Stage 1)	165	100
18	Renovation/ Refurbishment of Staff Quarters of Sri Lankan High Commissioner in London.	86	86

Vidyalankara International Buddhist Conference Hall -Kelaniya

Construction of Proposed Museum & Resource centre at Polonnaruwa

Municipal Council - Polonnaruwa

Design & Construction of Proposed Administrative complex at new town, Polonnaruwa

Design & Construction of Head Office Building for Ministry of Health

C. Activities planned for the year 2019

Details of few major Consultancy and Construction projects undertaken by CECB. These projects will continue during the year 2019 too.

NAME OF THE PROJECT	BRIEF DESCRIPTION	SCOPE	TOTAL COST OF THE PROJECT LKR MILLION
Construction of Court Complex at Ratnapura.	CECB is providing the total consultancy services for the construction of this building	Consultancy	1,800
Urban Regeneration Project- City of Colombo Resident Supervision work ,400 Housing Unit	CECB is providing the total consultancy services for the construction of this building	Consultancy	15,000
Sukithapurawara Township Development Programme- Kandy	CECB is providing the total consultancy services for the construction of this building	Consultancy	1,000
Pre Feasibility and Feasibility Study of the Light Rail Transit (LRT) Project, Colombo	CECB is providing the consultancy services.	Consultancy	300,000
Housing Project at Jayawardana Hospital Road- Thalawathogoda.	CECB is providing design review & supervision.	Consultancy	7,000
Seventeen Storied Building and Four Workshops for Sri Lanka Ports Authority	CECB is providing design review & supervision.	Consultancy	10,739
Construction of Administrative Building – Nursing Training School, Anuradhapura	Design and Build	Construction	790
Construction of Oral Health Unit- Teaching Hospital, Karapitiya	Designand Build	Construction	997
Construction of Pediatric Wards Complex- Teaching Hospital, Ampara	Design and Build	Construction	1,427
Proposed Academic and Administration Building of Nursing School- Galle	Design and Build	Construction	513
Construction of a Pediatric Wards Complex –Teaching Hospital, Karapitiya	Design and Build	Construction	1,359

Mahaweli Consultancy Bureau

Engineering Division

Major Activities Performed During the Period 2018.01.01 -2018.12.31

No	Project	Original Contract Value (Rs.)	Total work done	Total Expenditure including overheads (Million)	Payment received from the client (Million)	Remarks
01	Proposed Circuit Bungalow at Moragahakanda – Moragahakanda Kaluganga Development Project	82,935,966.63	40%	56 M	34.5 M	This Project has terminated on 27th June 2018 by Sinohydro
02	Proposed Visitors Information Center at Moragahakanda	137,053,875.00	10%	26.6 M	23.1 M	This Project has terminated on 27th June 2018 by Sinohydro
03	Construction of Proposed Community Based Bank Building - Hingurakgoda	10,812,971.47	90%	6.8 M	7.0 M	Ongoing
04	Reconstruction of Kanewela Anicut - Horana	34,601,101.72	20%	4.9 M	10.3 M	Ongoing

Project Management / Consultancy Division

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	90%	
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	20%	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	95%	

No	Project Name	Project Value (Rs.)	Completed / Ongoing	Progress (%)	Remarks
07	Consultancy Services for the Feasibility Study for Yatimahana Reservoir in Mahaoya basin	31,627,000.00	Ongoing	30%	Client – NWS&DB
08	Social Impact Assessment and Resettlement Action Plan for Mundeni River Basin Development Project	4,540,000.00	Ongoing	80%	Client – MIWR &DM
09	Supplementary Environmental Impact Assessment (SEIA) for Proposed Yan Oya Reservoir Project	4,773,000.00	Ongoing	70%	Client – MIWR &DM
10	Consultancy Services for Socio Economical Survey and Resettlement Action Plan for Thalpitigala Reservoir Project in Badulla District	2,990,250.00	Ongoing	20%	Client – MIWR &DM

NWS –National Water Supply

MIWR –Ministry of Irrigation & Water Resources

Consultancy Recruitments during 2018

1) Provision of services for Moragahakanda Reservoir headworks project between Sinohydro Corporation Limited China and Mahaweli Consultancy Bureau (Pvt) Limited.

   Contract value – RS. 670M

   Claimed value – RS. 211.2M (Excluding NBT and VAT)

   Total received after deducting Mobilization Advance – RS. 210.7M (Excluding NBT and VAT)

2) Consultancy Services for design review and construction supervision of construction of Headworks of Moragahakanda ..

   Contract value – RS. 167.1M (Excluding NBT and VAT)

   Claimed value – RS. 166.7M (Excluding NBT and VAT)

   Total received – RS. 165.3 M (Excluding NBT and VAT)

Part IV

Progress of Programmes Implemented by the Divisions of the Ministry of Mahaweli Development and Environment

1. Air resources Management and National Ozone Unit
2. Biodiversity Division
3. Climate Change Division
4. Land resources Division
5. Environment Pollution Control and Chemical Management Division
6. Forest Resources Divivsion
7. Environment Planning and Economic Division
8. Education, Research and Training Division
9. Policy Plannib\ng and Monitoring Division
10. International relation Division
11. Legal Division
12. Establishment Division
13. Investigation Division
14. Human Resources Development Division
15. Internal Audit Division
16. Land Division.
17. Engineering, Technical and Procument Division
18. Water Resources Management Division

Air resources Management and National Ozone Unit

Air Resource Management Division is the coordination body of the implementation of national air quality management policies and regulations in partnership with all stakeholders related to air quality management.

Air pollution is one of the serious environmental 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. Furthermore, other regional cities are increasingly threatened by air pollution. 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.

Institutional framework for strategic management and coordination of AQM.

- **Stakeholder coordination for Air Resource Management.**

Air Resource Management Division organized Air Resources Management stakeholder meeting on April 19, 2018 to discuss ongoing programmes regarding the air quality management. In this meeting relevant stakeholders were recognized to implement "Clean Air 2025 Action Plan" and necessary steps have been taken to include activities of "Clean Air 2025 Action Plan" into their annual action plan.
In order to strengthen this stakeholder coordination process for air resource management a cabinet approval has been taken on July 11, 2018 to establish a steering/regulatory committee to implement the "Clean Air 2025 Action Plan" through the related responsible institutions and to supervise performance of the plan technical committee consisting of responsible stakeholders and experts in the sector of air quality management was also established to provide technical assistance to the steering/regulatory committee. Joint meeting of steering/regulatory committee and technical committee was conducted on 30th November 2018. Matters regarding air resources management were discussed and many decisions were taken at the meeting.

- **Conduct National Symposium on Air Quality management.**

National Symposium on Air Quality Management in Sri Lanka was organized by the Ministry with the objective of providing a forum to present and discuss the most recent technologies, scientific and policy development associated with air pollution and management of air resources. The National symposium was held on 16 and 17 August 2018 at the Ministry under the patronage/chairmanship of Secretary to the Ministry of Mahaweli Development.

Effective Management of Air Emissions from Motor Vehicles

- **Improvement of vehicle importation standards**

The implementation of EURO 4 or equivalent standards for the importation of motor vehicles is one of the policies included in the 2018 budget proposals for environmental preservation. The Ministry conducted a meeting on 2018/06/21 with the participation of all stakeholders from government agencies and vehicle importers associations to get their views to develop vehicle importation standards equivalent to EURO IV. Finally Vehicular Exhaust Emission Standards for Importation, Manufacturing or Assembling of Vehicles were published by the gazette notification No:2079/42

on Thursday July 12, 2018 and again the standards were amended by the gazette notification No:2083/3 on Monday, August 06,2018

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

The ARM Division of the Ministry conducted four vehicle emission testing centers inspection programs covering Ratnapura, Kegalle, Kandy, Kaluthara and Kurunegala Districts. Necessary steps were taken to solve the problems identified at the VET centres.

Cleaner Technologies, Fuel and Processes

- **Pilot project on eco-drive promotion in Sri Lanka.**

Eco- driving offers numerous environmental benefits including fuel efficiency, improved air quality, improved road safety and reduced cost of maintenance. Eco-driving involves simple modifications of driving style to reduce fuel consumption and minimize the emission of gases. Therefore 04 meetings were organized to discuss on the implementing arrangements of the Japan Cooperation pilot project on Eco Driving Promotion with relevant stakeholders such as Ministry of Transport, National Transport Commission, Sri Lanka Transport Board, Department of Motor Traffic, University of Moratuwa etc. Travel survey of driving pattern was done with selected routs and emission was tested. Eight tanning programmes were conducted for examiners of Department of Motor Vehicles, instructors of driving schools and CTB instructors for eco driving practices

- **Finalization of Fuel Quality Roadmap**

In consideration of the adverse effects of fossil fuel usage on air quality, particularly in the transport sector, the Ministry initiated the development of an action plan to improve fuel quality in Sri Lanka. The action plan titled 'A Roadmap for Cleaner Fuels and Vehicles in Sri Lanka' gives a set of activities to improve fuel quality with time-bound targets giving due consideration for regional and international trends in the subject, while addressing the local fossil concerns. Implementation of this road map would help in controlling air pollution from the combustion of fossil fuel for transport, industry and power generation as well as minimize indoor air pollution from biomass burning in cookstoves. In this regard Air Resource Management Division of this Ministry conducted an Officials' Committee Meeting on January 23, 2018 to update and the finalize the Road Map.

Air Quality Monitoring - Study on ambient air quality using passive sampling test.

The Memorandum of Understanding (MOU) was signed to obtain data on air quality monitoring activities which was conducted by National Building Research Organization (NBRO) 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 second and third instalments were made to the NBRO for this activity. The data obtained from NBRO will be utilize future plans of Air Quality Improvement of the country

Indoor Air Quality Management.

Preparation of Indoor Air Quality Guidelines for SL

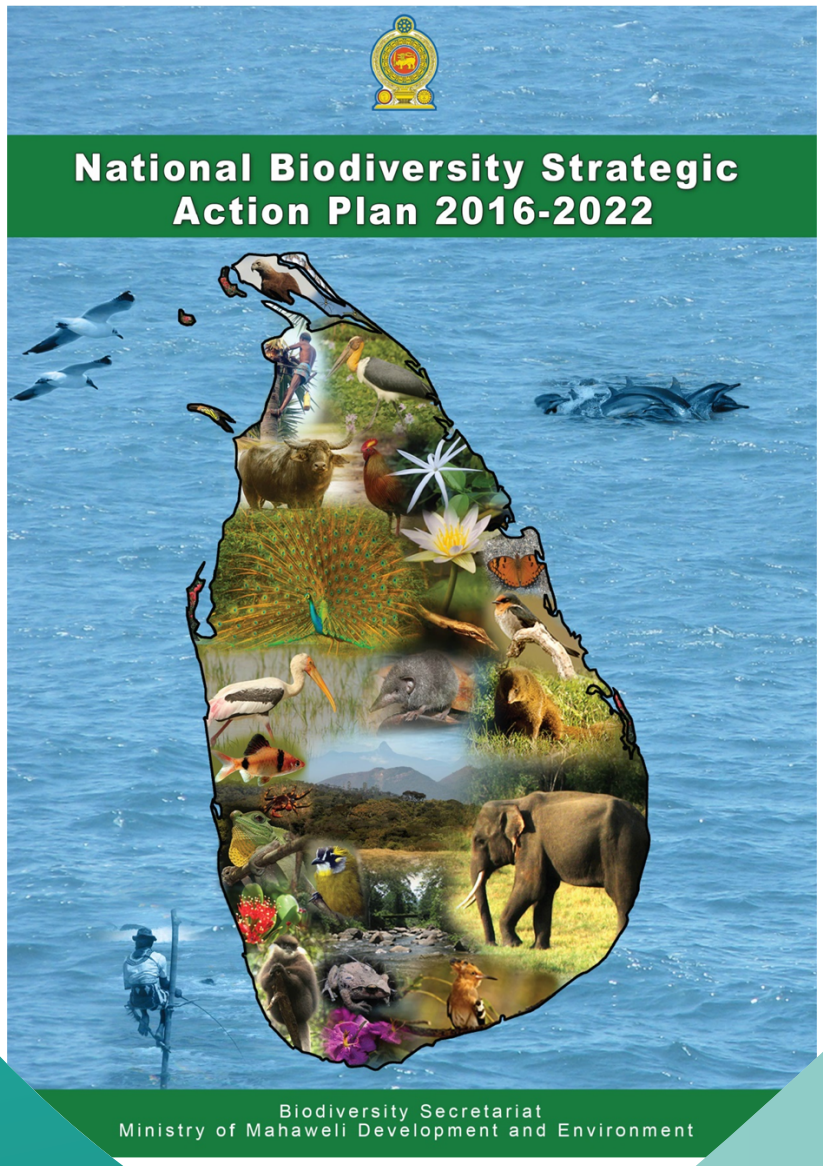
People use indoor environments such as houses, offices, factories, class rooms, vehicles for their day today activities. Accumulation and concentration of polluted / harmful gases in these indoor environments are cause adverse effect for human health. Therefore preparation of indoor air quality guideline is identified as main strategy in Clean Air 2025 action plan. In 2018 technical committee was appointed for initiate the task and the first discussion were held on 27th December 2018.

Awareness, Education Information & Knowledge Management for Air Quality

Reduce and controll the Air Pollution can be done through the proper awareness programs. Therefore, the ARM division of the Ministry organized and successfully conducted awareness workshops/programmes for police officers, media personal and school children. .

ARM Division of the Ministry of Environment organized and successfully conducted series of awareness workshops on Air pollution and Air Quality Management, vehicle emission testing programme and health effects on air pollution for Environment and Traffic police officers at Kurunegala, Polonnaruwa, Galle and Kegalle Districts.

Air Resource Management Division organized an awareness program for media personals on air quality issues, effects and its management needs for Sri Lanka on 27/12/2018 at the Ministry of Mahawali Development and Environment. The workshop was conducted with actively participation of 36 no of media personals from electronic and printed media. 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.

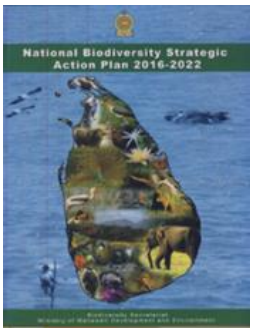


Biodiversity Division

Biodiversity Conservation in Sri Lanka

Sri Lanka has signed the Convention on Biological Diversity (CBD) in June 1992 and ratified it in 1994. All parties agreed to prepare National Biodiversity Strategic Action Plan in COP 10. Accordingly, the Biodiversity Division of this Ministry has been prepared the National Biodiversity Strategic Action Plan in 2016 for the period of 2016-2022 (NBSAP).

The activities in NBSAP are implementing by the Biodiversity Secretariat and the responsible agencies identified in the NBSAP. Also Biodiversity Division act as a coordination body, monitoring and evaluation of the progress of implementation of the National Biodiversity Strategic Action Plan (NBSAP). In 2018, Biodiversity Division, Ministry of Mahaweli Development and Environment conducted three regional level awareness workshop to aware regional level Government, Non- Government and Private Sector officers on implementation of NBSAP.



Biodiversity Related Expert Committees

National Biodiversity Expert Committee has been established under the Biodiversity Division to support to the Ministry of Environment to get decisions regarding the conservation and sustainable utilization of biodiversity.
Committee on Species Conservation, Committee on Invasive Alien Species, Coordinating Committee on Biosafety, Advisory Committee on Pollinator Conservation, Expert Committee on Traditional Knowledge, Advisory Committee on Palaeobiodiversity and Expert Committee for Mangrove Conservation were established under the National Expert Committee on Biodiversity. These Committees were supported to get technical recommendation for taking decisions and preparing plans at the different conservation processes.
The following important points were discussed at the meeting of the National Expert Committee on Biodiversity held on 11 May 2018.

- Biodiversity course to be offered through Distance and continuing Education Unit, University of Ruhuna.
- The requirement of a National Policy on Access to Biological Resources and Benefit Sharing.

At the National Biodiversity Expert Committee Meeting

International Biodiversity Day

As the National Focal Point to the Convention on Biological Diversity, Biodiversity Secretariat of the Ministry of Mahaweli Development and Environment conducted a conference for celebration of the 25th International Biodiversity day on 22.05.2018 at the Auditorium, Ministry of Mahaweli Development and Environment.
The Theme of this year celebration is; "Safeguarding Life on Earth, Let's share our 25 years' of experience

25th Anniversary Programme of Biodiversity Day

Updating the National Red List

Sri Lanka is considered as a biodiversity hot spot due to its richness in flora and fauna and threats to their survival. Having recognized the importance of biodiversity conservation and in line with the international convention of Conservation of Biological Diversity, Bio diversity Secretariat of the Ministry of Mahaweli Development and Environment is in the process of updating National Red List of Sri Lanka-Conservation status of Fauna and Flora.
The National Red List contains total number of 3492 floral species including gymnosperms and pteridophytes (including 943 endemics), within year 2018, it was successfully evaluated 1600 species in higher plants, by conducting 10 evaluation meetings .The updating process is continuing.
Conservation Status of faunal Red List updating group, Land Snails and Marine Mammals expert group meetings were held in year 2018

Workshop on Biodiversity and Ecosystem Services Valuation

An Awareness Workshop on Biodiversity and Ecosystem Services Valuation for University Students was conducted on 18.12.2018 at Rajarata University of Sri Lanka to aware the university students on biodiversity and ecosystem services and how it use in sustainable way for biodiversity conservation.

Action Plan for Conservation and Sustainable Use of Palaeobiodiversity in Sri Lanka

English medium Action Plan of the Palaeobiodiversity was translated in to Sinhala language for facilitating the awareness programmes as well as University students and other users.

Translated Action Plan of Palaeobiodiversity

Preparation of Soil Biodiversity Profile and Conservation Action Plan

Conservation of Soil biodiversity has been identified for sustainable agricultural production through establishment and promotion of sustainable agricultural practices in order to conserve Agro-biodiversity in Sri Lanka.In this context, Biodiversity Division has prepared Soil Biodiversity Profile and Conservation Action Plan by getting relevant experts ideas and suggestions.

Programme on "Atavisi Bodhi"

Under this program, more than 50 Atavisi Bodhi trees kits in 2018 have been given to temples, state institutions and charities in various parts of the country. This programme has been introduced to promote and increase the rare and religious valuable plants in the country.

Asia Regional Workshop on Traditional Knowledge

This workshop was held from 27 to 31 July 2018 in Kandy. About 20 foreign delegates from India, Bhutan, Nepal, Pakistan, Malaysia, Philippines, Vietnam, Tajikistan and Laos participated in this event. Some officers were participated representing relevant key stakeholder institutions from Sri Lanka also.

At this regional workshop, discussed on conservation of traditional knowledge and how to use it sustainable and how to share its benefits. Practical awareness on traditional medicine in Sri Lanka was carried out.

Finding for the Biodiversity researches under the Small Grant Research programme with the expectation of gathering data on fauna & flora species

Biodiversity division is implementing an activity to provide funds for the researchers those who engaged in researches on data deficient fauna & flora species to get their contribution in the Red Listing process. Under this activity funds have provided to the following 3 researches.

1. **Distribution, Ecology and Phenology of Impatiens repens Moon (Balsaminaceae): a rediscovered Endemic Plant Species of Sri Lanka**

2. **Diversity, Systematics and Conservation of the Skink fauna (Scincidae) of Sri Lanka**
3. **Floristic Diversity of Ambokka Mountain Range.**

Mangrove Conservation & Sustainable Utilization

- National Policy on Conservation and Sustainable Utilization of Mangrove Ecosystems in Sri Lanka has been compiled and translated into Tamil and English.
- Ampara Sasthraweli (Mangrove Forest) was declared as a Reserved Forest from 05th June, 2018.
- A Task Force is being set up representing major stakeholder agencies to prepare guidelines for re-planting and rehabilitation.
- Preparation of guidelines for Mangrove Restoration and Replantation has been initiated through sub Committee under National Expert Committee on Mangrove Conservation and Sustainable Use and preparation is in progress.
- Identified 10 hectares of degraded Mangrove areas in Puttlam district restored in collaboration with Forest Department.
- A regional awareness programs on conservation and sustainable use of mangroves were held in Mannar and Puttlam District for government officials, tri forces, police officers attached to the environment and university students and a successful mangrove replanting program held and 26th July 2018 respectively.

Planting mangroves in the field

School Awareness Program at the BMICH Premises

Climate Change Division

The main objectives of the Climate Change Secretariat are, provide a rational platform to address climate change issues at the national level to incorporate them into the development process, Function as the form of dedicated institutional mechanism to undertake climate change responses including development of relevant policies and programs, Liaise with line agencies at national and sub-national levels for identifying priorities and developing mechanisms to implement national policies on climate change, Facilitate climate change related research and distribution of research outcomes to trigger policy reforms and actions, Liaise with the Secretariat to the UNFCCC, and be responsible for preparing documentation in connection with Sri Lanka's participation at COP meetings and other climate change related forums, Provide a one-stop facility to disseminate information relating to the implementation of the decisions taken at UNFCCC-COP meetings & Kyoto Protocol and Serve as Designated Authority for different climate change related bodies. In achieving these objectives the Climate Change Secretariat has conducted following activities.

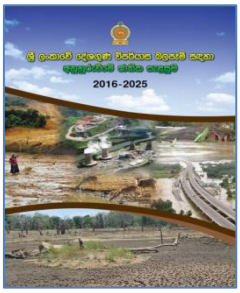
National Policy on Climate Change

The National Policy on Climate Change provides the necessary roadmap for Climate Change adaptation and minimization of emissions of greenhouse gases. It is implemented the national policy on Climate Change and monitored the main thrust areas and the affected areas of climatic change due to progress reporting period. In addition to that, it was prepared the greenhouse gas inventory for the third national communication the due period.

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. The objective of preparing NAPs is to reduce vulnerability to the impacts of Climate Change by building adaptive capacity and resilience.

The key vulnerable sectors identified 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. The NAP document published in Climate Change Secretariat web site (www.climatechange.lk).



During the progress reporting period;

- Coordinated the workshops for relevant government officers for the preparation of Provincial Climate Change Adaptation Plans.
- Sinhala and Tamil translations of National Adaptation Plan were made and 1000 copies of the Sinhala translation were printed.

Technology Needs Assessment on Climate Change

Technology Needs Assessment Report has been prepared to meet climate change challenges. Technology Needs Assessment Report has been used for preparation of Climate change related projects and the third national communication report.

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

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. 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. 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.

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, conducted the training programme on NDCs and greenhouse gas inventory for transport sector and prepared the Sinhala and Tamil translations of the Nationally Determined Contributions.

"Sri Lanka NEXT-A Blue Green Era" Programme and Exhibition 2018

Sri Lanka is vulnerable to adverse effects of Climate Change. As a party to United Nations Framework Convention on Climate Change (UNFCCC), Sri Lanka has recognized its global role in facing and combating the climate change challenges and ratified the Paris Agreement, the global deal agreed during the 21st Conference of Parties (COP21) of UNFCCC. The country has submitted its Nationally Determined Contributions (NDCs) along with its readiness plan to implement the Paris Agreement from 2020. The Sri Lanka NEXT programme has been launched to demonstrate the commitment of Sri Lanka to the Paris Agreement while recognizing achieving the sustainable development goals. Accordingly, the third *"Sri Lanka NEXT-A Blue Green Era"* environmental conference & exhibition was held on 19-20 October, 2018. Climate Change Secretariat has coordinated this event.

- Climate Change Research Forum

Along with Sri Lanka NEXT 2018 programme, Climate Change Research Forum is organized to get the active engagement of stakeholders for the process of developing the Climate Change Research Strategy.

Main objectives of this forum are;

- To obtain inputs to the draft Climate Change Research Strategy for Sri Lanka
- To understand the existing gaps in Climate Change related researches in Sri Lanka
- To launch the Climate Change Digital Research Repository of the Climate Change Secretariat
- To elevate the awareness on Climate Change and its related issues among the Sri Lankan researchers

The forum will be represented by all the sectors of government, academia, private sector and civil society and organized by Climate Change Secretariat of Ministry of Mahaweli Development and Environment along with the Sri Lanka Press Institute, Janathakshan (GTE), Sri Lanka Youth Climate Action Network (SLYCAN Trust) and Integrated Development Association (IDEA).

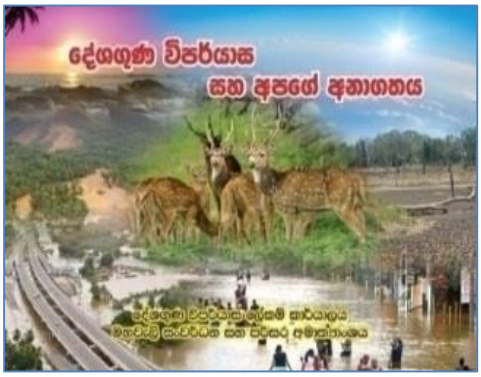
Awareness and Capacity Building on Climate Change

- **Awareness programme for School Teachers**

An awareness workshop was conducted at the Kegalle District Secretariat for World Environment Day 2018.

- **Reprinting of Awareness Materials**

Awareness materials namely Booklet on "දේශගුණ විපර්යාස සහ අපගේ අනාගතය" and Leaflet on "දේශගුණ විපර්යාස හඳුනා ගනිමු" were reprinted



- **Awareness Programme on the submission of proposals to the Green Climate Fund (GCF)**

The awareness workshop on Private Sector Facility of Green Climate Fund (GCF) was conducted on 15th March 2018..

- **Preparation of guidelines for Climate Resilient Human Settlements**

Two workshops were conducted to Preparation of guidelines for climate resilient human settlements. During the progress reporting period, draft guideline and concept paper for climate resilient human settlement was prepared.

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 the two expert committees on National Expert Committee on Climate Change Adaptation and National Expert Committee on Climate Change Mitigation. Two committee meetings were held during the reporting period.

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

National Expert Committee on Climate Change Adaptation was established in September 2012, in order to advice the Ministry on activities related to climate change adaptation in Sri Lanka. During the reporting period, 11thand 12thmeetings were held on 10th August 2018and 9th November 2018 respectively and discussed the following areas.

Provide guidance for;

a. Implementation of Technical Assistant project on Updating Climate Change Vulnerability Assessment and Piloting Mainstreaming Climate Change Adaptation into National Development Activities.

b. Preparation of Vulnerability and Adaptation Measures for the Third National Communication Report to be submitted to UNFCCC.

c. Provide inputs on country position of the Paris Agreement Work Programme for the 24th Conference of parties meeting of the United Nations Framework Convention on Climate Change (UNFCCC)

- **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. Two committee meetings were held during the reporting period.

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, Conducted two workshops to government and private sectors to develop project concepts for plantation sector. Agarapathana and Kotagala Plantations Limited and Elpitiya Plantation Company have submitted their project proposals to Climate Change Secretariat.

Preparation of National Low Carbon Development Strategy (LCDS)

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). 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,

- Conducted sectoral meetings for Energy, Transport, Industry and Waste sector to obtain expert inputs for further enrich of drafted strategy.
- Improved the draft strategy technically and presented to the Expert Committee on Climate Change Mitigation for their comments.
- Revised the strategy according to the comments of Expert Committee.

Establishment of Climate Smart Cities for the city of Kurunegala

Climate Smart City project proposal, Submitted to the Climate Technology Center and Network (CTCN) and obtained the approval from Climate Technology Center and Network (CTCN). Climate Technology Center and Network (CTCN) technical assistance has been given to set up Climate Smart Cities for the city of Kurunegala.

Land Resource Division

Considering facts and trends of land degradation, Sri Lanka has become a party to the United Nations Convention to Combat Desertification (UNCCD) in 1995, after signed and ratified this Convention.

A national implementation program has been planned to be implemented with the intention of halting land degradation of the island for the period from 2015 to 2024. The supervision, monitoring and evaluation of long and short term events and activities of this program is being done by a national monitoring and coordinating committees which coordinated by the Land Resource Division. All the activities which conducted by the Land Resource Division are coming under the National Action program. Following are the main activities were implemented in 2018 accordingly;

Construction of Soil Conservation Models for the Prevention of Land Degradation sites

- **Mahara Prison Premises**

A soil conservation activity in the demonstration site established at Mahara Prison Premises, Gampaha Divisional Secretariat Division was complete with the participation of the prisoners.

- **Sri Lanka Air Force Camp Premises - Meerigama**

Ministry of Mahaweli Development and Environment in collaboration with District Secretariat (Gampaha) and Land Use Policy Planning Department initiated a soil conservation demonstration site at the Meerigama Air Force Base. This site will be constructed according to the terraced fruit orchard concept while adhering to the soil conservation methods.

- **Construction of Soil Conservation Models for the Prevention of Land Degradation sites of schools**

Two model sites were established in Malagala Central and Gajanagma Central, Mahawa with the intention of minimizing land degradation. Enhancing the memorizing power and refreshing the student's mind which got tired due to class room routine were the additional advantages yield from the activity.

Mineral Symposium 2018

International Mineral Symposium was conducted on 20th October 2018 at Bandaranayake Memorial International Conference Hall, under the themes of: Earth Resources, Economic

Benefits and Environmental Impacts. The event was conducted parallel to "Sri Lanka Next 2018 - The Blue Green Era". This was jointly organized by the Land Resource Division and Geological Survey and Mines Bureau. The officers from GSMB, NGJA & GJRTI and other government agencies, local and foreign mineral industrialists and university students were participated at the event.

Preparation of Study Report on Conservation Status of Moragahakanda Kaluganga Watershed Area

Land Resources Division assisted the ICRAF specialist team to develop a comprehensive investment programme to conserve the main watershed areas of the Moragahakanda and Kaluganga reservoirs and to address the land degradation neutrality targets. The ICRAF team conducted a fact finding and ground surveys from 11.03.2018 to 14.03.2018

Printing of Awareness Materials

Since the Sri Lanka's mineral resources and its importance of them are mentioned in an understandable language, the book "Sri Lanka's Mineral Resources and enrich country's coffer" was printed in both languages. Necessary actions were taken to distribute the book among the interested parties of mineral sector, school teachers and students in order to enhance their mineral related knowledge.

In addition to that, a handbill was printed on environment sector master plan and environment pollution caused by micro-plastic.

Conducting Awareness Programs

Awareness programs on sustainable land management, for students and teachers were conducted in Pinnawala Central, Anula Vidyalaya, Nugegoda, Thurston College, Colombo and Yodhakandiya Maha Vidyalaya, Hambantota. In addition to that a program on sustainable land management for the officers of Divisional Secretariat (Dankotuwa) & Local Government (Dankotuwa) and a program on coast conservation and coastal resource management for the officers of the Department of Coast Conservation and Coastal Resource Management.

Conducting Training Programs

Four residential training programs were jointly organized with LUPPD with the intention of safeguarding land resource by minimizing land degradation, public awareness on practical knowledge of soil conservation and ensure smooth flow of the knowledge to general public. 200 Land Use Planning Officers were trained.

Commemoration of the World days related the Environment

- **Commemoration of the World Day to Combat Desertification on 17th June 2018**

After the completion of the soil conservation model site at the Mahara Prison, it was officially handed over to the Mahara Prison on 18th June 2018. The event was held in conjunction with the World Day to Combat Desertification. Awareness Programme on soil conservation with the practical session was conducted at the above premises with the participation of 150 selected farmers of the Gampaha District. At the occasion, valuable fruit plants were distributed among farmers on well.

- **Commemoration of the World Water Day on 22nd March 2018**

Commemoration of World Water Day program 2018 was held at the Pinnawala Central College-Rambukkana-Kegalle. During this program a water tank having a capacity of ten thousand liters was donated to this school.

- **Commemoration of the world Soil day**

Research study was conducted on special distribution of micro elements in two major land uses (tea & vegetable cultivation) in Nuwara Eliya and Seetha Eliya with the collaboration of Faculty of Agriculture, University of Peradeniya.

- **Commemoration of the World Ocean Day on 8th June 2018**

Awareness programme for Media Officers was conducted at the Pigeon Island- Trincomalee for the commemoration of world Ocean Day. This programme was organized by the Marine Environment Protection Authority under the financial support of the Land Resources Division of the Ministry of Mahaweli Development and Environment. Coral cleaning and the snorkelling sessions were also conducted for media officers at this event.

- **Commemoration of the World Environment Day**

Awareness programme to commemorate the World Environment Day, an Awareness Programme and Beach Cleaning Programme was conducted at Negombo Beach and Gampaha with collaborate of Marine Environment Protection Authority and Coast Conservation and Coastal Resources Management Department. The event was financial supported by Ministry of Mahaweli Development and Environment.

Small Grant Research Program on Sustainable Land Management and Land Degradation Prevention -2018

Small granting program was conducted with the intention of receiving research proposals from the universities & other agencies under sustainable land management & preventing land degradation in the thematic areas of soil, water, coast and marine. Eligible proposals were selected through a

technical evaluation committee. Small grants were offered for five selected researches and they were successfully completed at the end of the year.

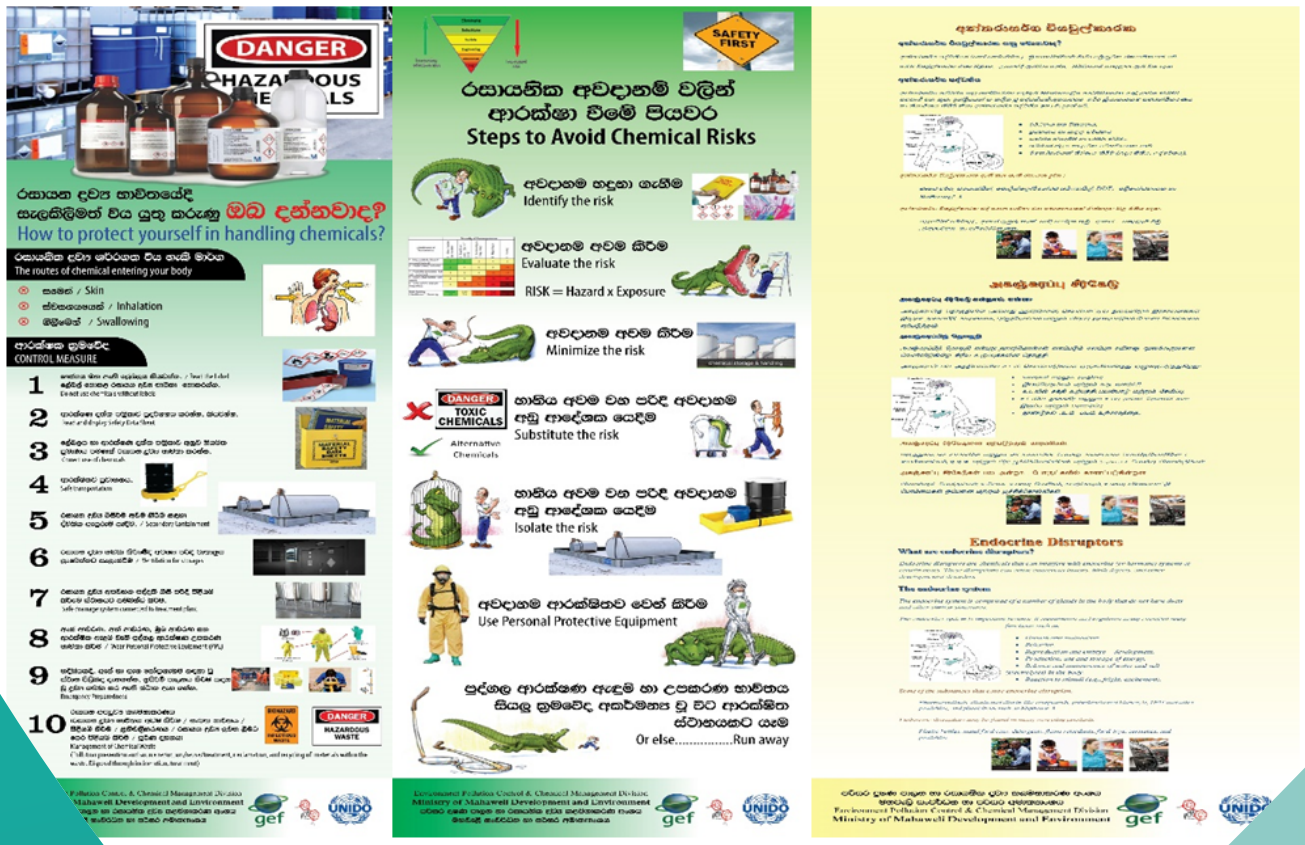
Preparation of Guidelines on Import of Sand and Rock.

The attention has been given to import sand and rocks from the countries having reputation to fulfil the large-scale sand and rock requirement of the mega scale development projects and programs in Sri Lanka. In order assure the quality & standards of the imported sand and rocks and to prevent environmental damage of Sri Lanka, the guideline is being prepared.

Preparation of the National Mineral Policy

According to cabinet decision, Ministry of Mahaweli Development and Environment and the Geological Survey and Mines Bureau are in the process of revising the Mineral Policy drafted by the Ministry of Science and Technology. This revision has done after having several consultation meetings with the relevant agencies. It has been forwarded to the Geological Survey and Mines Bureau to get suggestions from mineral sector.

After getting the public comments for the revised policy, it will be submitted to the cabinet.



Environment Pollution Control and Chemicals Management Division

Environmental Pollution Control & Chemical Management division deals with formulation of national policies, strategies, action plans and guidelines on pollution control and chemical management. Air, water and soil pollution are the major areas of concerns under environment pollution control at present.

The activities of this division aims to achieve 12.4 of Sustainable Development Goal 12, ”Sustainable Consumption and Production” which is to achieve environmentally sound management of chemicals and all wastes throughout their life cycle.

This division works in collaboration with other government and non-government stakeholders in implementing activities related to chemical management and pollution control activities.

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.

This unit represents the Ministry of Mahaweli Development & Environment at national and international forums and committees on pollution control and chemical management .

As the National focal point for International Conventions on Basel, Stockholm and Minamata conventions, the National Steering Committees are conducted in order to take collective decisions on trans-boundary movement of hazardous waste under the Basel Convention, Persistent Organic Pollutants (POPs) under the Stockholm Convention, Mercury management under the Minamata Convention and the industrial chemicals addressed under Rotterdam Convention.

Basel Convention: This is a comprehensive international environmental agreement which deals with Control of Transboundary Movements of Hazardous Waste and their Disposal with 186 Parties(counties). In relation to the convention, Sri Lanka is implementing regulations on hazardous waste management and monitoring transboundary movement of hazardous waste.

Minamata Convention on Mercury: This is a global treaty to protect human health and the environment from the adverse effects of mercury. Sri Lanka signed the convention in 2014 and ratified the convention in 2017. Actions are being taken to manage and phase out mercury where alternatives are available, in the country in relevant sectors mainly in health, education and industry sectors.

Stockholm Convention on Persistent Organic Pollutants (POPs): This is a global treaty to protect human health and the environment from chemicals, that remain intact in the environment for long periods, which accumulates in the fatty tissues of humans and wildlife, and have harmful impacts on human health and on the environment. Exposure to POPs can lead to serious health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damages to the central and peripheral nervous systems.

Rotterdam Convention; This is a Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and a multilateral treaty to promote shared responsibilities in relation to importation of hazardous chemicals. Central Environmental Authority under the Ministry of MMD&E is regulating the industrial chemicals under this convention, while the pesticides covered under this convention is addressed by the Registrar of Pesticides (ROP).

The major activities performed under the Environmental Pollution Control & Chemical Management Division (01.01.2018 - 31.12.2018)

The following reports were developed under the International Stockholm Convention and was distributed among the relevant stake holders for implementation of the relevant activities under them.

These reports are on Persistent Organic Pollutants (POP)s, in use, or the un-intentionally produced POPs. The reports guide the relevant stakeholders to minimize use of Persistent Organic Pollutant Chemicals, use alternatives or if alternatives are not available to manage them in an environmentally sound manner.

(a) Updated National Implementation Plan (NIP) for the Stockholm Convention on Persistent Organic Pollutants (POPs) in Sri Lanka Inventories on Persistent Organic Pollutant pesticides
(b) Revised Inventory of Poly chlorinated biphenyls(PCBs) - 2015
(c) The Assessment of PFOS (Perfluoroctane Sulfonic Acid) and its Salts (PFOS), PFOS presence and uses as well as development of action plans for sound management of PFOS
(d) Unintentionally produced POPs (uPOPs), (Dioxins & Furans Inventory and recommendations for Emission Reductions).
(e) Preliminary Inventory and Action Plan for the sound Management of Polybrominated Diphenyle Ethers (POPs-PBDEs) and Hexabromo biphenyle (HBB) in Sri Lanka

They were printed and disseminated to the relevant stakeholders in order to implement the activities under their purview

The following activities were carried out to commemorate World Environment Day

Waste bin sets were distributed to 23 institutions, including government institutions, schools, religious places in Kegalle district sponsored by Reckitt and Benckiser (Lanka) Ltd,.along with an awareness creation workshop on Minimizing plastic Pollution to coincide with ‘ World Environment Day”held in Kegalle.

1. Awareness porgrammes were conducted on “Beat Plastic Pollution” for schools and government institutions namely hospitals, police, courts, religious places, municipal council etc.

2. Clean up campaign was co-ordinated at Warakapola City with the assistance of Reckitt and Benkiser Pvt Lanka Ltd.

3. Awareness material in all three language were distributed to schools, universities, exhibitions and government institutions on “Micro Plastics and alternatives for plastics.

4. Hazardous and Solid waste management training Programmes were conducted for Castle Street Hospital.

5. "Dhara TV" documentary was produced on Persistent Organic Pollutants.

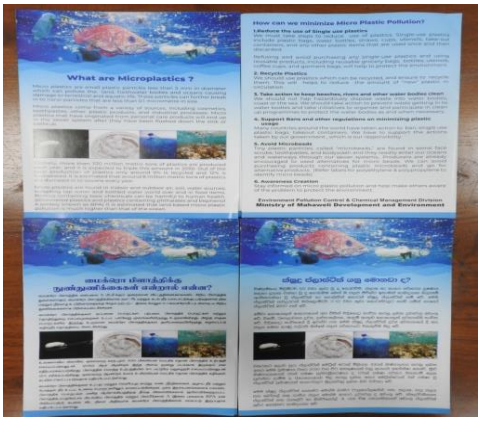
6. Arrangements are already in place to join with Asia Pacific Mercury Monitoring Network (APMMN), while using the rain water mercury monitoring equipment received from Thaiwan which will be established at University of Peradeniya.

7. Training programmes were conducted in all provinces for 500 health laboratory staff on " Chemicals and Waste Management"

8. A training programme was conducted for the staff members of the "Open University of Sri Lanka" on waste management and plastic pollution.

9. "**National Chemical Management Policy**" was formulated through a series of workshops, meetings and consultations to fulfill an outstanding requirement of developing a holistic policy to streamline life cycle management of chemicals used in different sectors.

10. **National Policy on Waste Management** was developed by updating "National Solid Waste Management Policy" developed in 2007 ,including liquid and gaseous waste and there by formulating an overarching policy. Updated draft policy addresses all types of waste irrespective of their physical a nature including the emerging challenges of micro plastics, construction and demolition waste, electronic waste and packaging waste and other categories of hazardous waste with clear identification of stakeholder responsibilities. This policy is formulated and will be submitted for the approval of the Cabinet of Ministers.



11. Reviewed implementation of polythene regulations to improve the effectiveness of implementation of the regulations. The HS codes (Harmonized Systems) of different types of polythene were considered in implementation of the regulations.

Forest Resources Division

"Wana Ropa" National Tree Planting Program

"Wana Ropa" National Tree Planting program has been introduced as an annual program conducted with active contribution of Governmental, Non-Governmental and private sector stakeholders to achieve the target of increasing the total forest cover of Sri Lanka upto 32% out of the total extent of land of the country. The month of October every year has been named as the National Tree Planting Month in order to enhance the attention of tree planting among the public under this program. As such, the "Wana Ropa" National Tree Planting Program for year 2018 was conducted on 05th October 2018 at Thampanekulam in Mannar district, presided over by H.E. the President. 2000 plants have been planted in extent of 02 hectares at this event by the Forest Department to commemorate the national tree planting ceremony. In addition, 269,085 plants were planted parallelly outside forest reserves islandwide active contribution of Governmental, Non-Governmental as well as private sector stakeholders.

"Wana Ropa" National Program of Tree Planting - 2018 - Mannar district- Thampanekulam.

Distribution of fruit plants required for Tree Planting Programs conducted in islandwide

Rs. 4 million were granted under 'Punarudaya' Environment Protection Program of the Presidential Secretariat on request of this Ministry to provide fruit plants for tree planting programs conducted in islandwide during year 2018. Under this program 28,993 fruit plants have been issued by the Department of Agriculture for tree planting programs organized by District Secretariats, Divisional Secretariats, Three Forces, schools and other public institutions and those activities were coordinated by this Division.

Urban Green Canopy Development Program

With the objective of conserving and enhancing the urban green canopies programs of urban greening has been completed in Negombo township and surroundings areas in Gampaha Urban council, SL Institute of Nano Technology Homagama, University of Kelaniya, Medical Faculty of Ragama and extended technical support to greening of Welikanda, Hakmana Pradeshiya Saba area and to Tech city area of Homagama.

Sri Lanka Next National Programme

With Participation of a veteran musician, a musical programme "rhythm of earth" had been conducted for 400 school children jointly with Air Resource Division under “Sri Lanka Next” Environmental Programme

Conducting a tree planting program in collaboration with other public institutions

An internal circular has been issued by the the division of Agriculture and Environmental Education of the Ministry of Education in order to select the schools for the development of gardens of rare fruits. Accordingly, fruit plants were distributed among 152 selected schools to establish fruit gardens. Funds were released to the Department of Agriculture under the Renaissance Program. This program has been selected to be implemented jointly with the sustainable school programme of Presidential Secretariat.

With the National Housing Development Authority, in a new housing scheme, Forest Plants and fruit plants have been planted and so far it has been contributed to have such tree planting programmes in 12 housing schemes.

Plantation activities were carried out with facilitation of the Forest Resource Division and in coordination with Department of Agriculture and the Forest Department according to the request made by other institution.

At the District Environmental Conference and the celebration of the World Environment Day of 2018 at Kegalle on 04.05.2010 presided over by His Excellency the President, arrangement were made to distribute 4000 plants among school children and general public.

Around 3000 fruits plants were distributed as 1000 Mango plants, 1,000 pomegranate seedlings, 500 lime seedlings and 500 Guava seedlings among the school children and the General public under the "Wana Ropa" National Tree Planting Program implemented under the patronage of His Excellency the President in Mannar.

School awareness program

In a context where the forest cover enhancement program is in operation in a multi-disciplinary approach in this country, the objectives of this program were to direct school communities towards tree planting programs and to provide new knowledge on forest conservation, tree planting, bio-diversity conservation through practical activities and to develop attitudes for a systematic waste management in the school and at home.

I. Dhammadinna Maha Vidyalaya, Anuradhapura District on 02nd April 2018 - 160 students and teachers of that school participated in this event. 200 plants of large guava have been issued for school pupils to plant under provisions of the Forest Resources Division of this Ministry.
II. Kiuldeniya Mahanaga Maha Vidyalaya, Kegalla on 26th September 2018 – 300 students in the grade 6-13 and teachers of that school participate in this event. 30 fruit plants have been issued for school pupils to plant under provisions of the Forest Resources Division of this Ministry. In addition to that set of waste separation bins and set of composting bins were distributed to the school and two environmental awareness name boards in the school.

Acquisition of lands for Forest Conservation

Acquisition of lands for forest conservation is conducted under 03 zones.

I. Acquisition of lands for conservation of Knuckles mountain range
II. Acquisition of lands to protect Sinharaja Forest
III. Other - acquisition of lands for forest cultivations

Land acquisition to Forest Department for the above purposes was slow due to various reasons and therefore, arrangements were made to discuss issues in an assembly of relevant Divisional Secretaries, Officers of the Forest Department, Officers of the Ministry of Lands, Surveyors, Valuers, Officers of the Land Reform Commission and all relevant stakeholders.

The matter of settlement of issues was made convenient in 124 land files in Ududumbara Divisional Secretariat by the workshop conducted in April 2018 and in 75 land files in Medadumbara Divisional Secretariat by the workshop conducted in June 2018. Laggala Pallegama 46 land files, in addition to that Nuwaraeliya district 43 other forest land cases were discussed. As a result, work in some 75% such files have advanced from the stage so far existed to the next stage. Further to that two objection inquiries were handled relevant to land acquisition of Ududumbara and Kotapola divisional secretariats. 20 land pilot were acquired in to the Forest department and acquisition of 21 land plots were able to update until to the final stage.

Public Complaint Coordination

Field Investigations were conducted in the Districts of Kalutara, Mullaitivu and Ratnapura and relevant observations issued pertaining to public complaints on forest lands and small power plants and this Division also functioned as a member of Environmental Evaluation Committees of Central Environmental Authority and Forest Department. Some 70 public complaints have been coordinated (e.g. - Lolugaswewa land issue, Amawil Hermitage land issue, Wattamadu land issue etc.). Additionally, this Division also functioned as a moderator to settle institutional issues pertaining to small hydro power plants.

Intervention for court orders, court actions and complicated environmentally sensitive issues

Environment Planning and Economic Division

08 main programmes and 02 main projects were functioned during the year 2018 under this division.

01. Green Village
02. Green Accounting
03. Cleaner Production
04. Green Reporting
05. Green Procurement
06. Medicinal Garden
07. Post Graduate Diploma /MSc. Degree programme on Environment planning
08. National Human Rights Action Plan(NHRAP) 2017-2021

Implementation of the programme to develop Blue Green Beautiful Lanka Villages

The strategy is to prepare participatory village development plans of which resilience-improving actions are in-built. Pooling of resources to achieve synergistic positive outcomes by different state, private, cooperative and non-governmental partners were identified as the strategy. This Ministry provides technical guidance and implementation support. All the stakeholders implementing village development programme for various mandates were identified and networked together.

As a means of providing an effective technical guidance to establish Blue Green villages, preparation of "a compendium of Blue green Village Guidelines" was started, and a draft was prepared.

Following activities were done during year 2018 under the Blue Green Beautiful Lanka Villages programme.

- Inter-agency coordination for Blue green village programe
  A discussion was held at the Samurdhi office at Attanagalla for the BGBLV program to obtain the support of the Samurdhi officers.
  It was discussed the implementation of proposed joint venture approach to the livelihood development programs, as the land use planning policy department has been already formulated the village development plans for the Attanagalla, Bopagama, Kandalanda Neela-haritha village.
- Providing resources for environmental related national programs.
  For the 25th anniversary of the United Nations Biotechnology Convention a Food Mandala consisting of under-utilized fruits was presented. The food Mandala was formulated as a community participatory tool to share the timely distribution of vegetables and fruits in Neela-haritha villages.
- Workshops were conducted by the Kundasale Integrated Development Society in Kandy, Neela-haritha village program, conducted a program to prepare the Neela-haritha village strategic plan for mainstreaming and up-scaling for the national economy.
- On the instructions of His Excellency the President Maithripala Sirisena, as Minister of Ministry of Mahaweli Development and Environment, Sustainable development plan for the Delft Island in the Northern Province has formulated by the Forest division. Conducting field studies to implementing Neela-haritha village program and to publishing as Neela-haritha zone covering the entire Delft Island.

Conducting field studies at Delft Island

- A workshop was conducted at the Welikanda Unit Management Auditorium for the purpose of training unit managers and divisional managers to establish Green Schools and Green Farm Organizations at Welikadha, Mahaweli 'C' Zone. Officers were trained at there to implement environmental projects in Mahaweli areas.
- Contributing to the establishment of the Sports and Environmental Force of the Mahaweli 'C' Zone, Mahaweli Center of Sri Lanka Mahaweli Center. Around 150 school children participated at the event. Distribution of mango, pot and jack was distributed among them.

Distribution of mango, pot and jack among school children

- A program titled "Neelahitha Village Talkatory" was presented at the National Exhibition and discourse to Sri Lanka Neela-haritha Era.
- Institutional Coordination meeting and Blue Green Village Guidelines development meetings conducted and the drafts have been completed. (Battaramulla / Kundasale)

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 Environmental Economic Accounting. (UN-SEEA)

Following initial activities were done during 2018 under the Green Accounting Mechanism

- Conducting a discussion presided over by the secretary on the current situation and action taken with stakeholders on green accounting.
- Conducting a workshop for Ministry officials on Green Accountancy
- The basic discussion on the calculation of Green Accounts of the Energy Sector was conducted

Discussion on the calculation of Green Accounts of the Energy Sector

- Awareness creation of stakeholders in the water sector of the International Organization for International Cooperation (ISIC) on a national scale and the key attribute

Awareness creation of stakeholders in the water sector Energy

- Conducted the second workshop in the water section on green accounting. (Discussion of water sector table with organizations, identification of central focal points for several institutions). Tabling tables prepared to obtain separate data for each institution

Second workshop in the water section on green accounting

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.

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 during 2018 under the Cleaner Production Concept

I. An awareness programme for industrialists was conducted.(carried out by the Switch-Asia project)

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 130 manufacturing and services sector organizations have been associated with the reporting system and green reports have been submitted annually.

Following activities were carried out during 2018 under the National Green Reporting System of Sri Lanka.

- During this year more than 30 industrialists registered for green reporting.
- 05 NGRS reports were submitted by the companies. The evaluation committee was established and evaluated the reports. Presidential award was awarded by the Minster of Mahaweli Development and Environment at the Sri Lanka NEXT event.

- Two awareness programs were conducted for the registered industrialists (Second level) during the year 2018.

Formulation of Public Green Procurement Policy and Guidelines

- The National Green Procurement Guidelines were sent to the National Procurement Committee (NICs) for the second draft.
- Five workshops were conducted to educate on the sustainable consumption and production project.

Establishment of Medicinal gardens

The main objectives of this program are,

1. Conservation of rare plants and Sustainable use of rare plant species.
2. Green job creation for Neela- haritha Green Village Programme.
3. Promotion of Green jobs.
4. Conservation of Biodiversity.
5. Establishment of medicinal garden with educational value.

Three herbaceous gardens have been established during the year 2018. Under this program, applicable plants were planted in Welikanda Rural Hospital, Meegoda Ayurveda hospital and Herbal Gardens in Yagirala with consideration of the climate conditions of the respective sites and the supply of herbs that are essential to the treatment.. Welikanda Town is developed under the

Green City Program to develop the existing Herbarium at the Welikanda Rural Hospital premises and the Herbal Garden of Meegoda Ayurveda Hospital will be improved and the Ayurveda Department of the Western Province will provide quality herbal plants for the herbal garden established in Agirala area. attention has been drawn

Tree planting at Welikanda herbal garden

Post Graduate Diploma /MSc. Degree programme on Environment planning

Actions have been taken with the City and Country Planning Division of the University of Moratuwa to promote the postgraduate Diploma Course in Environmental Planning and the M.Sc. Degree Course in Environmental Planning and the approval of the University Grants.

Inauguration of the Post Graduate Diploma /MSc. Degree programme on Environment planning

Commission for this postgraduate course was received in December 2017. After the selection of students and the course was commenced on 2018/04/04.

National Human Rights Action Plan (NHRAP) 2017-2021

National Human Rights Action Plan 2017-2021 was prepared by Government of Sri Lanka with the active participation of the Ministry of Mahaweli Development and Environment and other stakeholders and it was approved by the Cabinet of Ministers in October 2017. The implementation of recommendations/proposals /progress review in the NHRAP have been identified as Short – term as at 30th June 2018, Mid – term as at 31st December 2019 and Long –term as at 31st December 2021 with specific identification of the relevant Ministry/Agency responsible for implementation or coordination of action.

The inter-ministerial committee chaired by the Hon Prime Minister to review progress on the implementation of the Action Plan and an officials' committee. The Sectoral Committee of Environment cluster with the involvement of civil society stakeholders has to report on progress to the officials' committee every month. Ministry of Mahaweli Development and Environment is responsible for participating the other cross cluster meetings of other sectoral committee meetings with relevant information which are based on other themes such as; Economic ,Social and cultural Rights(Ministry of Social Empowerment and Welfare) and Rights of Internally Displaced Persons(Ministry of Prison Reforms ,Rehabilitation, Resettlement and Hindu Religious Affairs)

I. Completion all the short-term activities except one of them as identified environmental rights (Though amend the National Environment Act was identified as a short term activity it has to take several steps for. Therefore could not complete this activity within the time period)

II. Having a Sectoral Committee meeting for the environmental rights ending at the end of each month, review the progress and report to the Secretariat for Coordination Reconciliation Mechanisms.(SCRM)
III. To participate and submit reports to the sectoral committee meetings when the Institutions under the Ministry are involved in the action plans of the other Ministries.

Training workshop organized by the Ministry of Foreign Affairs on Human Rights Reporting

Education, Research and Training Division

Commemoration of World Environment Day – 2018

World Environment Day 2018 and Environment Conservation Summit was held in 04th June 2018 at " Nidahas Mawatha" Kegalle under the patronage of His Excellency the President of Democratic Socialist Republic of Sri Lanka Hon. Maithripala Sirisena and with the participation of Hon. Members of Parliament, government officers, General public and school children.

Welcome of His Excellency the President

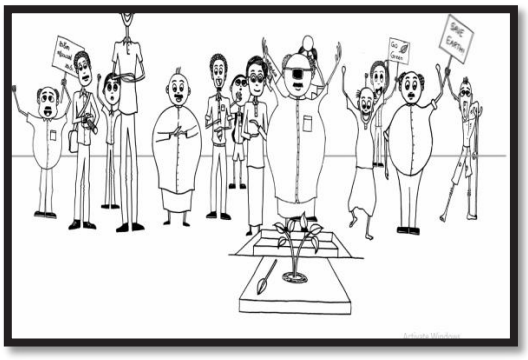
Environmental Pledge

Planting of Belly Tree to mark the World Environment Day 2018

"Soba Chalana Sithuwam " Short Film Competition and Award Ceremony

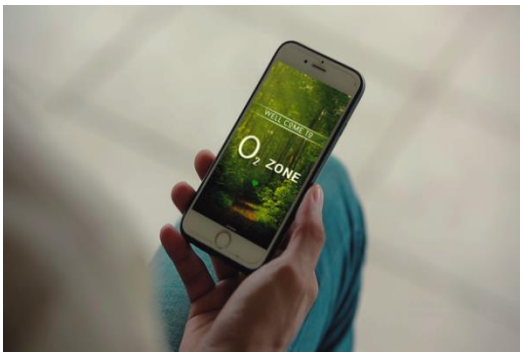
Being object to build up a social dialogue to develop environment conservation through young film producers, "Soba Chalana Sithuwam" short film competition was organized in parallel to the World Environment Day. Creations of the producers were judged and selected by an expert panel. The award ceremony of "Soba Chlana Sithuwam" was held in parallel to "Sri Lanka NEXT - A Blue Green Era" programme with the distinguish participation of the Secretary, Ministry of Mahaweli Development and Environment, of the Expert Panel and the competitors at the BMICH Colombo on 19.10.2019. With the aim to encourage productions a dialogue was made among judge panel and the competitors at the award ceremony.

1st Merit Award – Nalaka Wijeratne



2nd Merit Award – Sudeesha Ratnayake

3rd Merit Award – Manodya Amarajeewa



4th Merit Award – S.Manoj

Supervision and Coordination of Environment issue raised by Media

Coordination activities have been conducted with the environmental related issues telecast on television channels and published in newspapers. Specially, the main objective of this activity is to conserve environment by minimizing the damages occurred due to issues. Actions have been taken to monitor the Environmental issues telecast by television and published by newspapers. These issues are being directed to the respective authorities to take immediate actions.

Conducting Environment Education Programmes

Island wide awareness programmes were conducted to enhance environment knowledge among government officers, school children and General public.Accordingly, 06 programmes were conducted for 2,150 school children and government officers in 2018

Promotion of Green jobs

The main objective of this programme is to drive small and medium entrepreneurs to carry out green jobs. An awareness creation and practical training on green jobs were conducted for interested young generation. Two programmes were conducted and172 entrepreneurs were trained in Padukka and Jaffna in 2018.

Publishing of "Soba" Magazine and "Soba News Letter"

"Soba" magazine is being published in every year with the objective of addressing present Environment issues to build Environment conservation knowledge and environment sensitive community. Accordingly two issues of "Soba" magazine was published in 2018. One issue of "Soba News Letter" was published with the updates of current events organized by the Ministry. These publications were distributed among school children, teachers, Government officers, Libraries and general public etc in island wide.These publications were distributed to Libraries of Universities, Schools, Pradeshiya Sabha etc.

Policy Planning and Monitoring Division

The environmental policy prepared in 2003 was commenced to update from 2017 in accordance with timely requirements. Accordingly, identification of new areas to be encompassed in the environment policy has been updated and the drafts have been updated covering the identified areas of the first policy. This will be followed by the preparation of policy to aware other stakeholder line ministries, government organizations, civil society organizations and the general public.

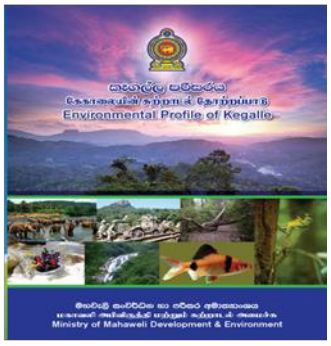
It is in the process of update the National Environment Policy in the country to update the National Environment Action Plan of the country. Accordingly, the workshops have been conducted to address the goals such as: meeting the Challenges to climate change, Saving flora, fauna and eco systems, Wise use of the coastal belt and seas around, Responsible use of land resources and knowledge for right choice.

Approvals were obtained to implement two project proposals forwarded during the progress review period implementing under the consolidated funds.

Cabinet papers were presented for 3 new projects, of which one was approved.

Actions had been taken to prepare Action Plan for the Ministry obtaining provisions under the approved consolidated funds in the National Budget and accordingly, prepared action plans for the projects and programmes. The progress had been called from the projects and programmes implementing under the provisions of the Department of National Budget and reported to the relevant parties. Further the progress of "Punarudaya programme" funded by the President Secretariat had been reviewed by coordinating institutions and divisions which are implementing the programmes.

In collaboration with all the divisions of the ministry, a meeting was held and periodically gathered and identified data requirements of this ministry, in addition to that, data in connection with the Green Accounting and data relevant to the SDG was collected and the register is being preparing by following data. Additionally, base data bases were prepared in relation to the environment sector indicators in SDG coordinated by relevant institutions. Action had been taken to prepare proxy indicators when, data for relevant indicators is not prepare in Sri Lanka. In addition to attending meetings of the sustainable Development Goals, other tasks related to the achievement of the Environmental objectives were also fulfilled.



International Relation Division

14th Governing Council Meeting of the South Asia Cooperative Environment Programme (14- GC-SACEP) 26-28 March 2018 in Colombo

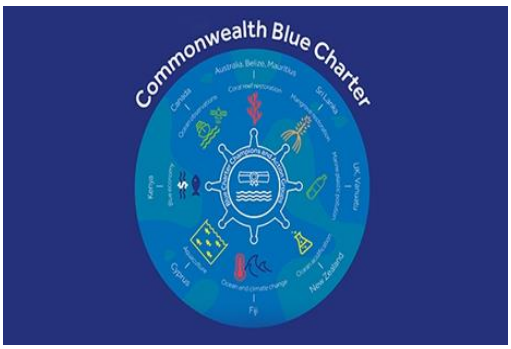
The 14th Governing Council was held on 28 March 2018, Colombo with the highlevel participation of member countries. Further the Preparatory Meeting for the 14th Governing Council held from 26 and 27 March 2018, Colombo with the participation of National Focal Points and senior officials. The Meeting was hosted by the Government of Afghanistan in collaboration with the Ministry of Mahaweli Development and Environment and the SACEP Secretariat. The Government of Sri Lanka, being the host country, has given its consent to provide the land for the permanent building of SACEP Secretariat, and Official Residence for the Director General. Accordingly approval of Cabinet of Ministers was obtained for the budgetary provision for allocation for this land and relevant actions are being taken accordingly.

Visit of the Executive Director of Green Climate Fund

The Green Climate Fund (GCF) is the major international funding institution supporting developing countries on concessionary terms to address their climate change resilient programmes. Therefore, Ministry of Mahaweli Development & Environment is closely working with GCF to access and obtain optimum funding for several projects with the view of strengthening climate resilience in the country.

The Executive Director of GCF, Ambassador Howard Bamsay with a deligation visited Sri Lanka in April, 2018. They had an arial inspection to observe how climate impacts affecting Sri Lanka's catchment watershed areas of the central highlands and the Knuckles Mountains along with experts from World Agroforestry Centre (ICRAF). Executive Director and his team had a bilateral meeting with His Excellency the President Maithripala Sirisena and discussed the potential opportunities for building resilience among the most vulnerable communities, areas and sectors to face climate change challenges and pledged its fullest support to Sri Lanka.

Sri Lanka pledge to become the Champion in Mangrove Restoration in the Commonwealth Blue Charter



The leaders of Commonwealth adopted the Commonwealth Blue Charter, agreeing on a bold and coordinated push to protect the ocean. In this context Sri Lanka announced to be the champion on mangrove restoration while several other countries, Cyprus, Kenya, Australia, Belize, Mauritius, United Kingdom, Vanuatu, New Zealand, Fiji and Canada, similarly pledge the spearhead other areas relevant to sustainable ocean development and conservation.

Sri Lanka joined Commonwealth Clean Oceans Alliance to end plastic pollution

Countries from across the Commonwealth had pledged to eliminate avoidable single use plastics in an ambitious bid to clean up the world's oceans. Together with New Zealand and Ghana, Sri Lanka joined the UK and Vanuatu led Commonwealth Clean Oceans Alliance. This is an agreement between member states to join forces in the fight against plastic pollution.

Joining International Coral Reef Initiative (ICRI)

Sri Lanka is a unique place among the countries which have tropical coral reefs. The International Coral Reef Initiative (ICRI) is an informal partnership establishment with a view of protecting the resource of corals all over the world. Sri Lanka has recently decided to join the International Coral Reef Initiatives (ICRI) to empower its capacity by sharing best practices in conservation of coral reefs. Accordingly approval of Cabinet of Ministers was obtained for joining ICRI and relevant actions are being taken accordingly.

Bilateral and Multilateral Environment Agreements

The Cabinet memorandums have been drafted for the following agreements:

- Agreement Conversion of the Pine Plantations in Sri Lanka into indigenous species (Enrichment of Pine Plantation of Sri Lanka with native species) between Asia-Pacific Network for Sustainable Forest Management and Rehabilitation and Ministry of Mahaweli Development and Forest Department.
- 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 following Agreements have sent to the relevant countries through the diplomatic channel to get their concurrence.

- Agreement for Cooperation on climate change between the Government of the Republic of Korea and Government of Sri Lanka,
- Memorandum of Understand between the Geological Survey and Mines Bureau and the British Geological Survey
- Memorandum of Understand on Scientific and Technical Cooperation between Geological Survey and Mines Bureau of Government of Sri Lanka and GFZ German Research Centre for Geosciences, Potsdam,
- Agreement between Gem & Jewellery Institute (GoSL) and the Gem & Jewellery Institute, Thailand,
- Memorandum of Understand between the State Oceanic Administration (SOA) of the People's Republic of China & Ministry of Mahaweli Development and Environment the Democratic Socialist of Sri Lanka on Coastal and Marine Cooperation,
- Memorandum of Understand for Cooperation in the Gem & Jewellery Sector between Sri Lanka & Viet Nam.

Projects under Global Environment Facility (GEF)

The approval has been granted for the GEF projects under cycle 06 named "Managing together: Integrating community-centered, ecosystem-based approaches into forestry, agriculture and tourism sector". The Technical Committee Meetigs, Inception and validation workshops have been conducted to develop the full project document.Further, approval has been granted to the GEF project on "Healthy Landscapes: Managing agricultural landscapes in socio-ecologically sensitive areas to promote food security, wellbeing and ecosystem health." and the initial work to develop the full project document is in progress.

Annual Country Contribution and Host facility payments for International Environment Conventions, Protocol, Cooperative programmes and International Agencies.

Settled the Annual country contributions and host facility to the following International Environment Conventions, Protocols, Cooperative programmes and International Agencies for the year 2018.

- United Nation Environment Programme (UNEP)
- United Nations Convention to Combat Desertification (UNCCD)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
- Stockholm Convention on Persistence Organic Pollutant
- International Union for Conservation of Nature (IUCN)
- Convention on Biological Diversity (CBD)
- South Asian Co-Operative Environment Programme – Country Contribution
- South Asian Co-Operative Environment Programme – Host Facility
- South Asian Seas Programme under South Asian Co-Operative Environment Programme

Legal Division

"To review and develop legal provision to achieve sustainable development through Environmental Management"

Activities Conducted by legal division

- Hearing of Statutory appeals under the National Environment Act, Mines and Mineral Act and national Gem and Jewellery Authority Act and coast Conservation Act.
- Assist the Attorney - General's Department for the Court cases related to the Ministry and its Line Agencies.
- Preparing of Legal Documents (Notary and Non Notary) related to the ministry.
- Provide Assistance and Coordination to prepare Acts and Regulations to Implement or enforce the Environmental Laws.
- Provide Legal Assistance to the Ministry related Legal issues.

Legal Division				
Major Achievements - 01/01/2018 - 31/12/2018				
No	Main Activity	Sub activity	Physical Progress	Financial (Rs.Millon)
1	Awareness Creation Programs on Environment related laws for Police Officers - Matara & Anuradhapura District		2	0.2433
2	Hearing of Statutory Appeals under Mines and Mineral Act, National Gem and Jewellery Authority Act, Coast Conservation and Coastal Resource Management Act & National Environmental Act	1.1.Hearing of Statutory Appeals under National Environmental Act	116	-
		1.2. Hearing of Statutory Appeals under Mines and Mineral Act	52	-
		1.3.Hearing of Statutory Appeals under National Gem and Jewellery Authority Act	28	-
		1.4.Hearing of Statutory Appeals under Coast Conservation and Coastal Resource Management Act	145	-
3	Provide assistance for Ministry related Court Cases, Human Right Cases and Ombudsman Cases		27	-
4	Provide assistance in preparing legal documents specially in obtaining concurrence and approval from Legal Draftsman and Attorney General		17	-
5	Preparing Agreement and Mo Us / Drafting Cabinet Papers related to the Ministry and Line Agencies		59	-
6	Attending Public Complaints		99	-

Awareness creation programme for Police Officers

Administration Division

The administrative division of Mahaweli Development and Environment is mainly supervising internal administration and establishment matters. Accordingly functions of the administrative division as follows:

- Updating personal files of the employees of the ministry and staff of deputy minister
- Activities related to leave, train warrants, concessionary season tickets.
- Activities related to overtime payments, holiday payments and combined allowances.
- Maintain and update cadre details and getting approval for new posts under the provisions of F-R 71.
- Filling up vacancies recruitment, appointments, promotions, transfers, retirements of staff
- Activities related to granting distress loan and property loans
- Activities related to giving privileges of Agrahara insurance
- Matters related to transport subject
- Activities related to submitting answers to Parliament questions, Adjournment motions, Standing orders
- Getting Parliament entrance passes and sending names of officials of the ministry who participate for meetings/Committees of the Parliament
- Submitting Rules, Regulations, Gazettes, Annual Reports, Progress reports/ Action plan to the Parliament of the ministry and institutions, department under this ministry
- Issue concessionary vehicle importation permits to the eligible officials of ministry and department, institutions under the ministry
- Activities related to issue Identity cards for employees of the ministry
- Activities related to postal vote and election duties
- Providing information which is requested under Right to Information Act
- Review and direct requests in order to getting approval from the treasury for purchasing motor vehicles for ministry and institutions under the ministry
- Getting approval for cadre, SOR, filling up vacancies and allowances for institutions and department under the purview of ministry
- Approve foreign leave, excess fuel for employees of department and institutions
- Activities related to appointing chairman and board of directors for institutions under the purview of ministry
- Appointing ministry representative for interview boards of Department and institutions under the ministry
- Submitting reports for the Public petition committee related to ministry and department, institutions under the ministry

Confirmation of service	**2018**
Departmental Executives	18
Development officer's service	04
Public management assistant's service	01
Combined driver's service	04

Promotions	**2018**
Development Executives	-
Public management assistant's service	02
Combined driver's service	04
Office Employment service	-

Retirements	**2018**
Public management assistant 's service	02
Combined driver's service	01
Office Employment service	01

Loans 2017/ 2018

Distress loan 122
Property loans 04

Foreign Leave	**-**	192
Provide relevant information for postal votes	-	185
Preparation of staff identity cards	-	211
Submitting answers for Parliament questions	-	32
Submitting Acts and other relevant rules & regulations to the Parliament	-	07
Submitting Annual Reports and Performance Reports to the parliament	-	04
Issuing concessionary vehicle Permits	-	86
Cabinet Papers	-	53
Submitting answers according to the Act of Right to Information	-	48

For other tasks actions will be taken according to the letters received to the branch, hence it is inappropriate to mention numbers for these tasks.

Details of Vehicles

Number	Type	Status at 2018.12.31
1.	Cab	27
2.	Motor cars	28
3.	van	03
4.	Jeep	14
5.	Motor bicycle	01
		73

Number of repairs and services of vehicles in 2018 - 282

Investigation Division

The main role of the investigation division is conducting investigations related to all the divisions of the ministry and all the institutions under the ministry and monitoring and coordinating complaints handling in order to minimize the discrepancies and to maintain proper order of the functions carried out by the ministry and institutions under the ministry.

Conducting investigations regarding the complaints related to the ministry and institutions under the ministry, Identifying the drawbacks related to the issue, giving recommendations to prevent the repeating of discrepancies, giving recommendations to take disciplinary actions according to the findings of the, investigations monitoring the complaints handling by the institutions under the ministry, and coordination of institutions under the ministry to settle public complaints as necessary. are the main responsibilities of the investigation division.

Number of Complaints Received and Action taken for the progress reporting period - 2018

Investigations center	N0. of complain received	No.of report called	Nu.of answer receive	No.of investigations conducted
Department of Forest Conservation.	74	67	38	07
Coast Conservation and Costal Resource Management Department	08	08	03	-
Sri Lanka Mahaweli Authority.	37	31	-	06
Central Environmental Authority.	96	91	55	05
National Gem And Jewellery Authority.	23	20	09	03
Marine Environment Protection Authority	03	-	-	03
Geological Survey & Mines Bureau	106	93	42	13
State Timber Corporation	11	07	04	04
Gem and Jewellery Research and Training Institute	01	-	-	01
Ministry of Mahawali Development and Environment	01	-	-	01
Moragahakanda & kalugaga Rever Project	41	39	20	02
TOTAL	**401**	**356**	**171**	**45**

Human Resource Division

Progress of the Human Resource Division from 01/07/2017 to 31/06/2018

Human Resource Division serves opportunities of Local and Foreign Training for officers of all spheres in the Ministry while 537 officers participated in Local Training Programmes within the given period.

	Details of Training Programmes	No. of Officers participated in programmes
01	Out Bound Training (Drivers/Office Assistant/ Management Assistant/Development Officers, Research Assistant, Programme Assistant)	107
02	Induction Training (Drivers/Office Assistant/ Management Assistant/Development Officers, Research Assistant, Programme Assistant/ Assistant Directors)	38
03	Subject Related Training	361
04	Tamil language Training	31
Total		**537**

Accordingly, the HRD Division gas spent Rs. 1,073,678.35 for Local Training opportunities during the period under consideration.

Internal Audit Division

Issued audit queries according to the audit plan in 2018 are as follows.

Date	Audit Query
2018.02.27	Dam safety and water resources planning project
2018.03.02	Voucher audit – mahaweli sector (June to December 2017)
2018.03.02	Voucher audit – environment sector (August to December 2017)
2018.04.10	Project for the Adaptation to the Adverse Effects of Climate Change in the Mahaweli River Basin
2018.05.04	Transport division audit (environment section)
2018.05.17	Biodiversity division
2018.05.22	Inventory system audit (environment section)
2018.06.11	Pilisaru project – management audit
2018.06.19	Pilisaru project – performance audit (fund released local authorities for soiled waste management)
2018.07.13	Uma oya project office audit
2018.07.31	Voucher audit – environment sector (April to June 2018)
2018.09.12	Advance "B" account audit
2018.09.27	Environmental Pollution Control and Chemical Management Division
2018.09.27	Administration division audit (personal files & leave)
2018.11.16	Climate change division
2018.11.16	land resources division and forest resources division
2018.12.31	Environment planning and economic division - ESA project
2018.12.31	Air resources management division and national ozone unit

In addition to the internal audit plan – 2018

Date	Audit Query
2018.07.05	Solid Waste Disposal Project - CSDF
2018.09.03	Examine the vouchers for projects carried out by the Department of Agriculture through the Biodiversity Division
2018.10.11	Investigated the Climate resilient integrated water management project (wew gam pubuduwa)

- **Special investigation (petition) In 2018**
  - misconduct of public funds and property (Mahaweli Sports competition)
  - Investigation into the non-recruitment of the account officer (mahaweli authority)
  - Examine the Corruption of irrigation work in Mahaweli H zone at Thalawa

- **Conducting 08 meetings of Audit Management Committees for the Mahaweli Sector and Environment sector in 2018**

Land Division

- Land acquisition activities and paying compensation for land owners for Moragahakanda Kaluganga Development project, Uma Oya multipurpose Development Project and Upper Elahera project under Mahaweli Water Security Investment Programme,
- Awarding grants under the State Lands Ordinance to the Mahaweli colonists in B,C,D,H,Victoria, Hurulu wewa, Morgahakanda, Walawa, Rambakenoya,
- Release lands for small andmega investment projects in Mahaweli zones
- Awarding of grants under the Land Development Ordinance to the farmers in the jurisdiction of Sri Lanka Mahaweli Authority
- Awarding free grants for Buddhist Temples and other places of religious under jurisdiction of Sri Lanka Mahaweli Authority

Zone	**Target (2018)**	**Progress (2018.12.31**
B	9,174	8, 250
C	8,440	8,450
D	1,998	1990
H	5,230	4,240
Victoria	920	255
Huruluwewa zone	1,302	1,300
Moragahakanda zone	1,857	1,857
Walawa zone	8,570	8,580
Rambaken Oya zone	1,500	1,500
Total	**41,741**	**39,172**

Engineering, Technical and Procument Division

- 29 Cabinet Appointed Standard Procurement Committee Meetings were held and taken decisions.
- 9 Ministry Procurement Committee Meetings were held and taken decisions.
- 55 TEC Meetings of the projects which are under the Ministry were attended and taken decisions.
- 8 Cabinet Papers of the Projects which are under the Ministry and relevant to the Technical mater were prepared and forward to approval.
- 480 decisions of Procurement Committee of Department, Government Institution and Projects under the Ministry were taken as Procurement Committee Member.
- 130 recommendations to issue Visa for Foreign Employers who are working under the MKDP, UOMDP, MWSIP and 210 recommendations to Import and Export Licenses of these projects were given.
- 25 Interview Panels for recruiting new Employee of Government Institute and Project which are under the Ministry were attended.
- Assistance was given to solve the technical matter with the Treasury & other government institutes as an agent of the Ministry in 12 times.
- The duties pertain to the Contract Management under Projects which are handled by the Ministry or Institution under the Ministry were handled and completed successfully.

Water Resources Management Division

Uma Oya Multipurpose Development Project.
Attended special progress review meetings. (Attended of about 20 meetings held at CECB)

Participated for discussions in development projects on water resources sector conducted at Irrigation Department, Mahaweli Authority and National Water Supply and Drainage Board. Moreover, attended the Technical Evaluation committee meetings.

Studied the proposed cascade system development Project under the proposed North Central Provincial Canal and finalized the feasibility study with JICA.

- Discussed on the project proposals with lined agencies & institutions.
- Submitted the Feasibility Study report to all lined agencies & institutions

"A river for Jaffna" project proposal

- Discussed with Dutch experts and carried out project feasibility studies.
- Conducting discussions with lined agencies & institutions
- Conducted a separate feasibility study with MCB for the same concept but different approach.

Mahaweli Water Security Investment Program

- Studied the additional water request proposals as desk studies.
- Forwarding these requests to PMDSC consultants to study the possibility of diverting additional water requirements.
- Conducting a water balance study on the Mahaweli River Basin with PMDSC consultants

Field visits were made on water resources planning and development and conducted relevant discussions for improvements.

Participated for the meetings on formulation of the National Environmental Policy and prepared a list of water policy concepts for the environmental policy and submitted it to environmental policy proponents.

Part V

“Punurudaya” National Environment Conservation Program

The Ministry of Mahaweli Development and Environment was provided Rs. 108,789,219 to "Punurudaya" National Environment Conservation Program - 2018 guided by the Presidential Secretariat. The following institutions and divisions of the Ministry of Mahaweli Development and Environment implemented various programs.

Implement Institution/ Division	Allocation
Education, Training and Research Division	15,250,000
Central Environmental Authority	88,463,993
Department of Forest Conservation	3,065,226
Biodiversity Division	2,010,000
Total	108,789,219

Education, Training and Research Division

Project for Create Awareness for Government Teachers on Environment Education Introduced under the New Syllabus (2017-2021)

The above project has been implemented under the direct supervision and financial support of the Presidential Secretariat under the "Punarudaya" National Environment Conservation Programme with the aim of an attitudinal change of school children by educating teachers on theoretical and practical aspects of environment issues targeting the Government Teachers who teach the science subject from grade 6-11. About 1,752 teachers were trained through 15 workshops held island wide in 2018. The second edition of Teachers' guide book is also published in 2018.

Central Environmental Authority

"Punurudaya" National Environment Conservation Program has been launched with main objective of environmental conservation while ensuring the environmental sustainability during the period of 2016-2018 in Sri Lanka.

Following seven projects were successfully completed in the year 2018 under the "Punarudaya" programme.

Strengthening National Environmental Pioneers Programs (EPP) in school network

This program was conducted covering all island school networks with the objective of enhancement of environmentally friendly future generation. In order to achieve the objective, 76200 pioneer caps, 37000 Note books, 1000 pioneer flag, 2000 Eco Club Guide books, 161000 certificates and 81650 awards were produced within this year.

Environmental Pioneer National Camp

Environmental Pioneer National Camp was held from 22nd to 19th September 2018 in "Sagarika" Navy Camp in

Trincomalee with participations from 57 schools. With total participation of 606,340 Environmental Pioneers and 70 Teachers who are handling Environmental Pioneer program in schools were participated to four days national camp.

Preparation of guide Book for teachers & Presidential medal holders

This guide book was printed in Sinhala medium (400 copies) and Tamil medium (200 copies).

Environmental Education & awareness program for Presidential medal holders

This program was conducted for Students who are awarded Swarna medal to enhance their theoretical and practical knowledge to achieve task of Presidential Environmental Award. This program was successfully conducted in Uva Province, Sabaragamuwa Province, North Western Province, Colombo district and Puttalam district with participation of 650 Swarna medal holders and 100 Divisional Environmental Officers and Teachers.

Production of Exhibits for environmental awareness

To enhance knowledge of environmental sensitiveness and environmental conservation, following exhibits were produced and distributed through Central, Sabaragamuwa, Northern and southern provincial offices

- 4 Flex Backdrop
- 4 CEA Name board
- 4 Eco board Tree Structures
- 27 Pull up stand flex banners
- 4 Television (Size 43")

Dissemination the environment knowledge through the public libraries

This programme was held on 26th of November 2018 in CEA head office. Representing all districts in western province in Kalutara, Colombo and Gampha 190 librarians were participated and distributed environmental information posters prepared by three languages.

Gampaha district integrated solid waste management project - Construction of Compost yard (15 MT per day capacity)

Construction of compost yard with the capacity of 15MT per day was completed and operations will be started on 05.02.2019.

Department of Forest Conservation

The Department of Forest Conservation was successfully completed following projects in the year 2018 under the "Punarudaya" National Environment Conservation Program.

1 Hectare of tree planting program was established in Kandhetenna forest reserve and further maintained forest which was established in 2017. In addition to that tree planting program was implemented in madupara reserve, thambapani areas in Mannar district.

Biodiversity Division

Established five butterfly gardens in Kegalle Educational Zone under the "Punurudaya" National Environmental Conservation programme.

- Kg./Kegalu Balika Vidyalaya
- Dudley Senanayake Central College, Tholangamuwa
- Kg//Dedigama Parakumba Maha Vidyalaya
- Kg./Bossella Maha Vidyalaya
- Kg./Dedigama/Kahabiliyawala Maha Vidyalaya,

Community Base Awareness Creation Programme on Pollinator Conservation

The Biodiversity Division of the Ministry of Mahaweli Development & Environment collaborated with Coconut Cultivation Board to conduct community base awareness programs on endemic bees' conservation and increasing coconut harvesting.

Awareness programmes were conducted with filed practical demonstrations in selected areas in Yakwila & Welpalla coconut development areas in Kurunagala district and Nittambuwa and Malwathuhiripitiya coconut development areas on 7 December 2018 in Gampha district.

During the awareness programs Importance of pollinator conservation and field studies were conducted, and distributed bee boxes to the selected coconut cultivators to upscale their livelihood through beekeeping. Monitoring will be done in due course.

Pollinator conservation awareness programme with practical demonstration was conducted for government officers on 14 December 2018 at the Ministry of Mahaweli Development & Environment.

The residential workshop was held from 1-2 November 2018 at the Haldummulla Medicinal Park for officers of the Forest Department, Department of Wildlife Conservation, Central Environment Authority and Provincial Environment Officers in the Uva Province to aware classification and identification of Intermediate Zone Butterfly species in Sri Lanka.

PART VI

Financial Analysis and Summary of Accounts

Ministry of Mahaweli Development and Environment – 160

Programme and Project	Recurrent Expenditure			Capital Expenditure		
	Revised Provision (Rs.)	Expenditure (Rs.)	%	Revised Provision (Rs.)	Expenditure (Rs.)	%
Programme 01						
Operational Activities						
Project 01						
Minister's Office	40,550,000.00	33,625,841.58	82.9	3,585,000.00	2,698,288.70	75.3
Project 11						
State Minister's Office	21,179,000.00	14,705,679.02	69.4	3,671,000.00	3,394,885.17	92.5
Project 02						
Ministry Administration	310,350,000.00	291,443,419.35	93.9	18,715,000.00	17,065,259.52	91.2
Programme 02						
Programme 03				1,708,937,250.00	1,491,343,430.13	87.3
Environment Protection				1,708,937,250.00	1,491,343,430.13	87.3
Project 04						
Public Institution	3,523,000,000.00	3,489,050,840.00	99.0	1,782,500,000.00	1,293,933,537.00	72.6
Project 05						
Mahaweli Development				36,157,476,750.00	31,308,806,030.56	86.6
Sub Total						
Department of Forest Conservation - 283	1,400,554,000.00	1,323,970,895.92	94.5	913,600,000.00	911,947,526.02	99.8
Department of coast conservation and coastal resource management - 291	127,350,000.00	124,903,101.89	98.1	1,367,620,000.00	448,835,549.46	32.8
Total	5,422,983,000.00	5,277,699,777.76	97.3	41,956,105,000.00	35,478,024,506.56	84.6

Recurrent Expenditure - 2018
Expenditure Head - 160 - Ministry of Mahaweli Development and Environment
Programme No: 1 - Operational Activities
Project 01- Minister's Office

Object Code	Finance Code	Category/Object/Item/Description	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Recurrent Expenditure	**40,550,000.00**	**33,625,841.58**	82.9
		Personal Emoluments	207,000,000.00	18,017,170.75	8.7
1001	11	Salaries and Wages	12,750,000.00	10,810,305.57	84.8
1002	11	Overtime and Holiday Payments	1,700,000.00	1,567,824.23	92.2
1003	11	Other Allowances	6,250,000.00	5,639,040.95	90.2
		Travelling Expenses	2,750,000.00	728,735.75	26.5
1101	11	Domestic	750,000.00	606,856.75	80.9
1102	11	Foreign	2,000,000.00	121,879.00	6.1
		Supplies	6,500,000.00	5,784,525.17	89.0
1201	11	Stationery and Office Requisites	1,500,000.00	1,439,566.75	96.0
1202	11	Fuel	5,000,000.00	4,344,956.42	86.9
1203	11	Diets and Uniforms			
		Maintenance Expenditure	6,100,000.00	5,999,299.21	98.3
1301	11	Vehicles	6,000,000.00	5,908,771.21	98.5
1302	11	Plant and Machinery	100,000.00	90,528.00	90.5
1303	11	Buildings and Structures			
		Service	4,500,000.00	3,096,110.70	68.8
		Transport	900,000.00	718,387.10	79.8
1402	11	Postal and Communication	1,000,000.00	611,460.81	61.1
1403	11	Electricity and Water	1,400,000.00	776,599.53	55.5
1404	11	Rent and Local Taxes	200,000.00	-	0.0
1409	11	Other	1,000,000.00	989,663.26	99.0

Capital Expenditure - 2018

Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 1 – Operational Activities
Project 01- Minister's Office

Object Code	Finance Code	Category/Object/Item/Description	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Capital Expenditure	**3,585,000.00**	**2,698,286.70**	75.3
		Rehabilitation and Improvement of Capital Assets	2,900,000.00	2,050,726.70	70.7
2001	11	Buildings and Structures	250,000.00		0.0
2002	11	Plant,Machinery and Equipment	300,000.00	-	0.0
2003	11	Vehicles	2,350,000.00	2,050,726.70	87.3
		Acquisition of Capital Assets	685,000.00	647,560.00	94.5
2101	11	Vehicles		-	
2102	11	Furniture and Office Equipment	25,000.00	14,800.00	59.2
2103	11	Plant,Machinery and Equipment	660,000.00	632,760.00	95.9

Recurrent Expenditure - 2018
Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 1 – Operational Activities
Project 01- State Minister's Office

Object Code	Finance Code	Category/Object/Item/Description	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Recurrent Expenditure	**21,179,000.00**	**14,705,679.02**	69.4
		Personal Emoluments	10,250,000.00	7,190,063.37	70.1
1001	11	Salaries and Wages	6,450,000.00	4,697,030.73	72.8
1002	11	Overtime and Holiday Payments	1,200,000.00	834,165.00	69.5
1003	11	Other Allowances	2,600,000.00	1,658,867.64	63.8
		Travelling Expenses	1,660,000.00	618,634.50	37.3
1101	11	Domestic	660,000.00	618,634.50	93.7
1102	11	Foreign	1,000,000.00	-	0.0
		Supplies	3,990,000.00	2,845,997.23	71.3
1201	11	Stationery and Office Requisites	1,350,000.00	785,671.05	58.2
1202	11	Fuel	2,590,000.00	2,060,326.18	79.5
1203	11	Diets and Uniforms	50,000.00		0.0
		Maintenance Expenditure	2,370,000.00	1,804,400.91	76.1
1301	11	Vehicles	2,000,000.00	1,684,225.91	84.2
1302	11	Plant and Machinery	270,000.00	89,850.00	33.3
1303	11	Buildings and Structures	100,000.00	30,325.00	30.3
		Service	2,909,000.00	2,246,583.01	77.2
		Transport	200,000.00	-	0.0
1402	11	Postal and Communication	879,000.00	416,583.01	47.4
1403	11	Electricity and Water	1,080,000.00	1,080,000.00	100.0
1409	11	Other	750,000.00	750,000.00	100.0

Capital Expenditure - 2018
Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 1 – Operational Activities
Project 01- State Minister's Office

Object Code	Finance Code	Category/Object/Item/Description	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Capital Expenditure	**3,671,000.00**	**2,698,286.70**	73.5
		Rehabilitation and Improvement of Capital Assets	2,671,000.00	2,050,726.70	76.8
2001	11	Buildings and Structures	1,071,000.00		0.0
2002	11	Plant,Machinery and Equipment	100,000.00	-	0.0
2003	11	Vehicles	1,500,000.00	2,050,726.70	136.7
		Acquisition of Capital Assets	1,000,000.00	647,560.00	64.8

Object Code	Finance Code	Category/Object/Item/Description	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
2101	11	Vehicles		-	
2102	11	Furniture and Office Equipment	325,000.00	14,800.00	4.6
2103	11	Plant,Machinery and Equipment	675,000.00	632,760.00	93.7

Recurrent Expenditure - 2018
Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 1 – Operational Activities
Project 02 – Administration and Establishment Service

Object Code	Finance Code	Category/Object/Item/Description	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Recurrent Expenditure	**310,350,000.00**	**291,443,419.35**	93.9
		Personal Emoluments	188,320,000.00	171,675,632.64	91.2
1001	11	Salaries and Wages	118,600,000.00	116,286,916.24	98.0
1002	11	Overtime and Holiday Payments	7,700,000.00	7,264,684.03	94.3
1003	11	Other Allowances	62,020,000.00	48,124,032.37	77.6
		Travelling Expenses	3,600,000.00	3,400,566.53	94.5
1101	11	Domestic	1,600,000.00	1,450,458.75	90.7
1102	11	Foreign	2,000,000.00	1,950,107.78	97.5
		Supplies	18,850,000.00	18,578,638.63	98.6
1201	11	Stationery and Office Requisites	6,400,000.00	6,274,735.41	98.0
1202	11	Fuel	12,200,000.00	12,065,173.32	98.9
1203	11	Diets and Uniforms	250,000.00	236,729.90	94.7
		Maintenance Expenditure	14,800,000.00	14,427,830.33	97.5
1301	11	Vehicles	12,300,000.00	12,245,347.20	99.6
1302	11	Plant and Machinery	2,200,000.00	2,106,981.13	95.8
1303	11	Buildings and Structures	300,000.00	75,502.00	25.2
		Service	48,100,000.00	47,728,134.21	99.2
1401	11	Transport	5,100,000.00	4,689,134.73	91.9
1402	11	Postal and Communication	11,500,000.00	10,932,838.80	95.1
1403	11	Electricity and Water	16,000,000.00	15,819,106.96	98.9
1404	11	Rent and Local Taxes			
1405	11	Other	16,500,000.00	16,287,053.72	98.7
		Transfers	35,580,000.00	35,534,199.01	99.9
1505	11	Subscriptions and Contributions Fee	32,680,000.00	32,673,956.83	100.0
1506	11	Property Loan Interest to Public Servants	2,900,000.00	2,860,242.18	98.6
		Other Recurrent Expenditure	100,000.00	98,418.00	98.4
1701	11				
1703	11	Implementation of the Official Languages Policy	100,000.00	98,418.00	98.4

Capital Expenditure - 2018
Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 1 – Operational Activities
Project 02- Administration and Establishment Service

Object Code	Finance Code	Project	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Capital Expenditure	**18,715,000.00**	**17,065,259.52**	91.2
		Rehabilitation and Improvement of Capital Assets	10,050,000.00	8,633,926.53	85.9
2001	11	Buildings and Structures	1,550,000.00	1,545,730.40	99.7
2002	11	Plant,Machinery and Equipment	500,000.00	390822.64	78.2
2003	11	Vehicles	8,000,000.00	6,697,373.49	83.7
		Acquisition of Capital Assets	2,665,000.00	2,621,715.00	98.4
2101	11	Vehicles		-	
2102	11	Furniture and Office Equipment	30,000.00	20,800.00	69.3
2103	11	Plant,Machinery and Equipment	2,635,000.00	2,600,915.00	98.7

Capital Expenditure - 2018
Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 2
Project 03- Environment Protection

Object Code	Finance Code	Project	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		1Formulation, Review and Gap Analysis of Environmental Policies			
2507	11	Investments	500,000.00	448,552.75	89.7
		2. Adaptation and Mitigation of Climate Change Impacts			
2507	11	Investments	1,500,000.00	1,467,103.29	97.8
		3. Commemoration of Major Environment Events			
2509	11	Investments	5,000,000.00	3,308,608.71	66.2
		4. Education and Awareness Creation on Environment			
2509	11	Investments	1,570,000.00	1,558,250.50	99.3
		5.Environmental Protection and Conservation			
2507	11	Investments	9,100,000.00	8,547,644.05	93.9
		6 .School Environmental Pioneer Programme – Harith Niyamu			
2509	11	Investments	19,000,000.00	18,491,916.85	97.3
		7. Implementation of the Montreal Protocol			
2509	13	Investments	29,670,000.00	29,470,266.58	99.3
2509	17	Investments	490,000.00	489,421.00	99.9

Object Code	Finance Code	Project	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		13. National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants			
2202	13	Investments	4,029,650.00	4,029,618.00	100.0
		18. Pilisaru Programme			
2506	11	Investments	215,000,000.00	165,000,000.00	76.7
		58. Mainstreaming Agrobiodiversity Conservation and Use in Sri Lankan Agro-Eco System for Livelihoods and Adaptation to Climate Change (GEF)			
2509	13	Investments	16,473,500.00	8,789,450.45	53.4
2509	13	Investments	13,840,000.00	12,744,518.61	92.1
		69. Construction of Solid Waste Disposal Facilities – Anuradhapura, Hikkaduwa, Udunuwara and Panadura(GOSL/Korea)			
2506	12	Investments			
2506	17	Investments	39,000,000.00	36,950,000.00	94.7
		74. Mechanism for Reducing Emissions from Deforestation and Degradation (GOSL/UNDP)			
2202	13	Investments			
		97. Addressing Climate Change Impacts on Marginalized Agricultural Communities at Mahaweli River Basin (GOSL/WFP)			
2202	13	Investments	250,000,000.00	127,896,987.70	51.2
		101.Monitoring Water Quality of Major Water Bodies (GOSL/JaPan)			
2507	13	Investments			
2507	17	Investments	1,000,000.00	1,000,000.00	100.0
		104. Sustainable Management of Bio Diversity and Natural Resources			
2507	11	Investments	9,200,000.00	9,200,000.00	100.0
		105 popularization of Environment Lanes/Parisara Mawatha			
2202	11	Investments	911,100.00	911,065.05	100.0
		106 Enhancing Biodiversity and Sustennance of Ecosystem Service in Environmentally Sensitive Areas (GEF)			
2509	13	Investments	61,000,000.00	45,435,688.72	74.5
		108 Environmentally Sound Management and Disposal of Polychlorinated Biphenyls Wates and Contaminated Equipment (GEF/UNIDO)			
2509	13	Investments	27,340,000.00	17,803,176.88	65.1
		109 Minamata conservation Initial Assessment in Sri Lanka UNIDO)			
2507	13	Investments	5,000,000.00	4,071,010.59	81.4
		110 Education, Awarenesss and Green Award Implemented by			

Object Code	Finance Code	Project	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Central Environmental Authority			
2507	11	Investments	17,000,000.00	16,756,572.08	98.6
		112 Eco Systems Conservation and Management Project (GOSL/WB)			
2506	12	Investments	940,000,000.00	939,850,714.81	100.0
2506	17	Investments	10,000,000.00	8,989,792.40	89.9
		114 Preparation of Sri Lanka's Third National Communication Report on Climate Change (UNDP)			
2507	13	Investments	20,520,000.00	20,113,774.11	98.0
		115 Improving Industrial Waste and Water Management in order to Prevent Ground Water Polution in Gampaha District			
2507	13	Investments	6,300,000.00	6,300,000.00	100.0
		116 Rehabilitation of Degraded Agricultural Lands in Kandy, badulla and Nuwara Eliya Districts in the Central Highlands			
2505	13	Investments	1,200,000.00	1,139,259.00	100.0
		117 Prtoject on Air Quality Assessment for Health and Environment Policies			
2507	13	Investments	4,293,000.00	580,038.00	13.5
		Total	1,708,937,250.00	1,491,343,430.13	87.3

Capital Expenditure - 2018

Expenditure Head -160 - Minister of Mahaweli Development and Environment
Programme No: 2
Project 05 - Mahaweli Development

Object Code	Finance Code	Project	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		1. Moragahakanda Kaluganga Development Project (GOSL/China,Kuwait& Saudi)	**18,877,700,000.00**	**16,030,630,927.56**	84.9
2506	11	Investments	9,320,700,000.00	9,220,204,000.00	98.9
	12	Investments	4,500,000,000.00	3,039,334,380.80	67.5
	14	Investments	3,457,000,000.00	2,779,898,153.32	80.4
	17	Investments	1,600,000,000.00	991,194,393.44	61.9
		3. Mahaweli Consolidation Project (System B Rehabilitation)			
2506	11	Building and Structures	290,000,000.00	290,000,000.00	100.0
		4.Uma Oya Multipurpose Development Project (GOSL-Iran)			
2506	11	Land and Land Improvemets	7,510,000,000.00	6,523,304,111.27	86.9
		5.Rehabilitation of Major and Medium Irrigation Schemes			

Object Code	Finance Code	Project	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
2506	11	Land and Land Improvemets	150,000,000.00	137,000,000.00	91.3
		6. Redeemaliyadda Integrated Development Projec			
2506	11	Land and Land Improvemets	76,000,000.00	64,000,000.00	84.2
		7.Welioya Integrated Developmnt Project			
2506	11	Land and Land Improvemets	260,000,000.00	260,000,000.00	100.0
		8.Maduru Oya Right Bank Development (System B)			
2506	11	Land and Land Improvemets	60,000,000.00	60,000,000.00	100.0
		9.Feasibility Studies			
2505	11	Investments	28,028,900.00	21,540,144.91	76.8
		11.Mahaweli Water Security Investment Programme (GOSL/ADB)- North Cen. Province Canal, Moragahakanda Kalugaga Transfer canel, Minipe ancicut raising& LB Rehabilitation, North Wes. Province Canal	5,199,000,000.00	5,108,393,259.91	98.3
2506	12	Investments	3,440,000,000.00	3,400,186,914.48	98.8
2506	14	Investments	609,000,000.00	600,716,772.82	98.6
2506	17	Investments	1,150,000,000.00	1,107,489,572.61	96.3
		13.Dam Safety and Water Resources Planning (GOSL/W.B)	2,540,000,000.00	2,283,050,648.04	89.9
2506	12	Investments	2,500,000,000.00	2,243,050,648.04	89.7
2506	17	Investments	40,000,000.00	40,000,000.00	100.0
		14.Rambakan Oya Intergrated Development Project			
2506	11	Investments	108,000,000.00	94,000,000.00	87.0
		16. Agriculture and Livestock Programme Implemented by Mahaweli Authority of Sri Lanka			
2506	11	Investments	214,000,000.00	175,000,000.00	81.8
		17. Maduru Oya Right Bank Development Project	5,145,000.00	143,735.63	2.8
2506	12		5,000,000.00		0.0
2506	17		145,000.00	143,735.63	99.1
		18. Strengthening the Resilience of Smallholder Farmers in the Dry Zone to Climate Variability and Extreme Events through an Integrated Approch to Water Management (GCF/UNDP)	839,602,850.00	261,743,203.24	31.2
2202	13	Investments	784,647,850.00	206,788,203.24	26.4
2202	17	Investments	54,955,000.00	54,955,000.00	100.0
එකතුව			36,157,476,750.00	31,308,806,030.56	86.6

Capital Expenditure - 2018
Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 2 Development Activities
Project 04 - Public Institutions

Object Code	Finance Code	Institution	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Central Environmental Authoerity			
2201	11	Public Institutions	57,000,000	57,000,000	100
		Marine Environment Protection Authority			
2201	11	Public Institutions	90,000,000	77,253,537	85.8
		Gem & Jewellery Research & Training Institute			
2201	11	Public Institutions	60,000,000	51,680,000	86.1
		Mahaweli Authority of Sri Lanka			
2201	11	Public Institutions	1,575,500,000	1,108,000,000	70.3
		Total	1,782,500,000.00	1,293,933,537.00	72.6

Recurrent Expenditure - 2018
Expenditure Head -160 - Ministry of Mahaweli Development and Environment
Programme No: 2 – Development Activities
Project 04 - Public Institutions

Object Code	Finance Code	Institution	Revised Provision (Rs.)	Net Expenditure (Rs.)	%
		Central Environmental Authoerity			
1503	11	Public Institutions	615,000,000	615,000,000	100.0
		Marine Environment Protection Authority			
1503	11	Public Institutions	128,000,000	127,986,840	100.0
		Gem & Jewellery Research & Training Institute			
1503	11	Public Institutions	80,000,000	51,680,000	64.6
		Mahaweli Authority of Sri Lanka			
1503	11	Public Institutions	2,700,000,000	2,694,384,000	99.8
		Total	3,523,000,000	3,489,050,840	99.0

Part VII

Cabinet Memoranda

Cabinet Memoranda of Ministry of Mahaweli Development and Environment

#	Cabinet Paper Number	Title of The Cabinet Paper
1	18/0091/704/001	To impose a temporary Prohibitory Order to stop reclamation of Wetlands in Colombo Metropolitan Region and declaration Wetlands as Protected Areas and development of Wetlands
2	18/0194/704/003	Effective Management of Water Resources for Meeting the Challenges of Climate Change
3	18/0193/704/002	Special Disaster Management Plan associated with the areas affected by Uma Oya Multibpurpose Development Project
4	18/0251/704/004	Cabinet Memorandum to implement Colombo South Sand Nourishment Project Sand Engine Methodology
5	18/0373/704/005/TBR	Awarding the contract of Construction of Kaluganga – Moragahakanda Transfer Canal (KMTC) [from 0KM + 000m to 08Km + 830m] – two tunnels of length 8 Km with open canal Aqueducts and associated structures under Upper Elahera Cana under Mahaweli Water Security Investment Program
6	18/0374/704/006/TBR	To obtain approval for the revised cost estimate of the Moragahakanda and Kaluganga Development Project.
7	18/0382/704/007/ TBR	Payments for the variations occurred owing to the identified geological differences taken place in mining foundations for saddle dam No. 01 of Moragahakanda Reservoir
8	18/0478/704/008/ TBR	Awading the contract of Construction of Main Canal from Nebadagahawatta to Mahakithula Reservoir Inlet Tunnel [5Km +250m to 22Km+300m] of North – Western Province Canal Project under Mahaweli Water Security Investment Program.
9	18/0589/704/009	Budgetary Provision for allocation of a Land for Construction of the Secretariat and Residence of the Director General of the South Asia Co –operative Environment Programme (SACEP)
10	18/0588/704/001-I	To impose a temporary prohibitory Order to stop reclamation of Wetlands in Colombo Metropolitan Region and declaration Wetlands as Protected Areas and development of Wetlands.
11	18/0684/704/011	Appointment of a Procurement Specialist for the Programme Management Unit of the Mahaweli Water Security Investment Program (MWSIP)
12	18/0673/704/010	Obtain approval for “Sri Lanka Coastal Zone & Coastal Resource Management Plan 2018” prepared according to the Coast Conservation & Coastal Resource Management Act No.57 of 1981.
13	18/0851/704/012	To appoint a Consultant to the Ministry of Mahaweli Development and Environment.
14	18/0901/803/002	Extention of the period of time of the MOU between Ministry of Mahaweli Development and Environment, Mahaweli Consultancy Bureau and Sinohydro Corporation Ltd for the provision of Consultancy Services for reviewing of design and construction supervision pertaining to headworks of Moragahakanda Reservoir.
15	18/0900/803/001	The Theme on Environment in the Open Government Partnership National Action Plan.(Commitment 1:- Transparent Environmental Decision Making Right of the Public to comment on Initial Environmental Examination (IEE) and Government Accountability on Public Comments)
16	18/0942/803/003	Mining of Quartz Deposits in Kotikambokka Forests of the Department of Forest Conservation and sale for Exports after

#	Cabinet Paper Number	Title of The Cabinet Paper
		Value Addition.
17	18/0949/803/005	Construction of Pulathisi Market Complex & Agro – Economic Center at Kaduruwela, Polonnaruwa.
18	18/0964/803/006	Controlling the Imports and use of non – ecofriendly Asbestos in Sri Lanka.
19	18/0988/803/007	Membership of the International Coral Reef Initiative by Sri Lanka.
20	18/1013/803/008	Establishment of Southern Provincial Office and Galle District Office of the Marine Environment Protection Authority with a Laboratory.
21	18/1014/803/009	Special additional allowances and facilies provided for the displaced persons in the implementation of Mahaweli Water Security Investment Programme.
22	18/1109/803/010	To grant approval for the Government Institutions which expect to purchase furniture from the State Timber Corporation considering the quality and durability.
23	18/1154/803/011	Amendments for the National Environment Act
24	18/1172/803/012	Cabinet Memorandum to implement Southern Colombo Sand Catchment Project using Sand Engine Mechanism and to restore destructed natural dune of Kalu Ganga outfall.
25	18/1216/803/013	Extention of the Service of Dr.P.B.Terny Pradeep Kumara, General Manager of the Marine Environmet Protection Authority (MEPA)
26	18/1240/803/014	Emergency of the period of service of the contract awarded to the CECB to obtain consultancy service to assist the employer's representative of Uma Oya Multipurpose Development Project
27	18/1272/803/015	To appoint a Project Director for Moragahakanda – Kaluganga Development Project
28	18/1334/803/017	To Develop Gem Street Demuwawatha, Ratnapura as an international Gem Street and Construction of Gem Tower.
29	18/1321/803/016	Implementation of the Follow –up project to check the quality of internal water sources of the country.
30	18/1350/803/019	To establish Regulatory/Steering Committee to implement "Clean Air 2025 Action Plan" with a view to achieve better air conditions in the year 2025
31	18/1349/803/018/TBR	To extent the period of agreement signed between the Ministry of Mahaweli Development and Environment and FARAB Company for the implement of Uma Oya Multipurpose Development Project
32	18/1401/803/020	Issuing of Letter of Internt & signing of Power Purchase Agreement by Ceylon Electricity Board to purchase power generated by 'Waste to Energy' Bio Gas project under construction at Kotawila,Matara to streamline Waste Management of Matara Muncipal Council and surrounding Local Authorities
33	18/1532/803/009 - I	Special additional allowances and facilities provided to the persons who loses lands and house in the implementation of Mahaweli Water Security Investment Programme
34	18/1514/803/021	People's awareness campaign on the massive investments being made in the field or irrigation Works under the Mahaweli water Security Investment Programme
35	18/1679/803/023	Providing Relief under Emergency Disaster Conditions to House holder adversely affected by the water leaks of the Main Tunnels of the Uma Oya Multi Purpose Development Project.
36	18/1672/803/022	Land Acquisition for the proposed Sri Lanka – China Logistics and Industrial Zone or Special Economic Zone (SEZ) Hambantota

#	Cabinet Paper Number	Title of The Cabinet Paper
37	18/1769/803/024	Public – Private Joint Investment Programme on Sectors of Renewable Energy, Export Market – Oriented Environment Friendly Agriculture and Tourism in Mahaweli Special area in Line with Blue –Green Economic Development Approach
38	18/1797/803/027	Climate Change Mitigation Action Support Project
39	18/1795/803/025	Amendment of Forest Conservation Ordinance.
40	18/1796/803/026	Approval to award the Consultancy Contract package to Egis Eau of France (Lead Partner) Egis International of France (Joint Venture Member) and Resources Development Consultants Pvt.Ltd of Sri Lanka. (National Sub – consultant) for Provision of Consultancy Services for Improving System Efficiencies and Water Productivity.
41	18/1817/803/028	To impose temporary prohibitory order to stop reclamation and destruction of wetlands in Colombo Metropolitan Region and declaration wetlands asprotected areas and development of wetlands.
42	18/1917/803/012- I	Colombo South Sand Nourishment Project – Stabilization of Mt.Lavinia to Angulana Coastal Stretch using Sand Engine Methodology and Restoration of Eroded Natural Sand Bar at the Kalu Ganga River Mouth.
43	18/1955/803/029	Mahaweli Authority of Sri Lanka – Annual Report 2015.
44	18/2083/803/031	To associate with the external investor selected by the project Committee formulated to reorganize Mahaweli Livestock and Agro-Enterprises (Pvt) Limited (MLAE) of Mahaweli Authority of Sri Lanka (MASL) as a Public – Private Partnership.
45	18/2171/803/034	Intergreted Watershed and Water Resources Management to Mitigate Global Climate Chang Impacts.
46	18/2162/803/032	Empowering SriLanka to confort Adverse Impacts of Climate Chang through Obtaining International Scientific,Technical and Financial Assistance by Entering into Agreements with Green Climate Fund (GCF) Intrnational Council for Research in Agro Forestry (ICRAF)] and Obtaining Membership of the Global Green Growth Initiative (GGGI).
47	18/2365/803/039	Minimize environmental damage caused due to fragmentation of lands for housing constructions or other purposes.
48	18/2373/803/012 - II	Cabinet memorandum to implement Southern Colombo Sand Catchment Project using Sand Engine Methodology and to restore destructed natural dune of Kalu Ganga outfall.
49	18/2605/803/020-I	Issuing of Letter of Internet & signing of Power Purchase Agreement by Ceylon Electricity Board to purchase power generated by " Waste to Enery" Bio Gas Project constructed at Kotawila,Matara to streamline Waste Management of Matara Muncipal Counil and surrounding Local Authorities.
50	18/2659/803/027- I	Climate Change Mitigation Action Support Project.

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மகாவலி அபிவிருத்தி மற்றாடல் அமைசக

Ministry of Mahaweli Development and Environment