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தேசிய நீர் வழங்கல் மற்றும் வடிகாலமைப்புச் சபை
National Water Supply & Drainage Board

2018
Annual Report



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நகரத் திட்டமிடல், நீர் வழங்கல் மற்றும் உயர் கல்வி அமைச்சு
Ministry of City Planning, Water Supply and Higher Education

Vision

To be the most prestigious utility organization in Sri Lanka through technological and service excellence

Mission

Serve the nation by providing sustainable water & sanitation solutions ensuring total user satisfaction

Goals

- Increase the water supply and sanitation coverage
- Improve business efficiency
- Ensure greater accountability and transparency
- Facilitate safe drinking water supply and sanitation to rural and underserved communities

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His Excellency Maithripala Sirisena
The President of Democratic Socialist Republic of Sri Lanka



His Excellency Ranil Wickramasinghe
The Prime Minister of Democratic Socialist Republic of Sri Lanka



Rauff Hakeem
**Hon. Minister of City Planning, Water Supply
& Higher Education**



Lucky Jayawardena
**Hon. State Minister of City Planning, Water Supply
& Higher Education**

► **Message from the Secretary, Ministry of City Planning, Water Supply & Higher Education**



The Ministry of City Planning, Water Supply and Higher Education (MCPWS&HE) worked throughout the year 2018 with the National Water Supply and Drainage Board (NWSDB) to serve the nation in providing piped drinking water and piped sewerage disposal facilities. As a result of all the endeavors taken in 2018 and in the past years, it has been able to provide more than half of the country's population with pipe borne water supply facilities by the end of 2018. The pipe-borne water supply coverage of the country as at end 2018 was 50.5% out of which 40.01% has been provided by NWSDB itself.

The MCPWS&HE supported and provided direction to NWSDB in implementing 22 foreign funded water supply projects, 15 local bank funded water supply projects, 02 Small and Medium Water Supply projects and 07 foreign funded sewerage projects during the year. Further, the Ministry worked hand in hand with NWSDB during the year investing Rs. 756.06 million under the budget head -Water Sector Community Facilitation of which special attention was given to provide safe drinking water for the areas affected with Chronic Kidney Disease of Unknown Etiology (CKDu) and to marginalized communities throughout the country. The Ministry will continue working together with NWSDB in the coming years to achieve the targets already set for making 55% of the population available with pipe borne water and 2.25% of the population available with piped sewerage by 2020.

The Ministry is grateful to our many funding partners who supported us in 2018, the principal ones being the Government of Sri Lanka, ADB, JICA, World Bank, Austria, Belgium, China, France, Hungary, India, the Netherlands, Korea, Spain and United States of America.

I would take this opportunity to thank Hon. Rauff Hakeem, Minister of City Planning, Water supply and Higher Education for his leadership and guidance and Hon. Lucky Jayawardena, State Minister of City Planning, Water supply and Higher Education for the co-operation extended to all of us to implement government policy with regard to City Planning and Water Supply.

I wish all success to the endeavors of the NWSDB to provide the public with high quality water supply and sewerage services and to implement the several development programmes that have been lined up for 2019 and beyond for achieving their water supply and sanitation targets.

M.M.P.K.Mayadunne

Secretary

Ministry of City Planning, Water supply and Higher Education



National Water Supply & Drainage Board

The supply of potable water was originally the responsibility of the Public Works Department (PWD) which was subsequently transformed to the Department of Water Supply in 1965. Thereafter, the National Water Supply & Drainage Board was formed by Act of Parliament in 1975.

The National Water Supply & Drainage Board currently functions under the Ministry of City Planning, Water Supply and Higher Education.

Around 90.6 % of the population have access to the safe drinking water of which 50.5% is through piped water supply systems throughout the country.

Notice of the Report

Hon. Minister of City Planning, Water Supply & Higher Education,
Ministry of City Planning, Water Supply & Higher Education,
Lakdiya Medura,
No. 35, Sunil Mawatha,
Pelawatta,
Battaramulla.

Dear Sir,

Annual Report and Financial Statements - 2018
National Water Supply & Drainage Board

In terms of Section 14 (2) of the Finance Act No. 38 of 1971, the members of the Board have the honour to forward herewith the Annual Report and the Financial Statements of the National Water Supply & Drainage Board for the year ending 31st December 2018.

Yours faithfully,

Eng. K. A. Ansar
Chairman
National Water Supply & Drainage Board

Chairman's Statement



“ 707 million cum of drinking water was produced in 2018 which was provided to the consumers through 2,328,654 service connections”



The year 2018 is the 3rd year of implementing the Corporate Plan 2016-2020 of National Water Supply and Drainage Board (NWSDB). Throughout the year 2018, NWSDB continued working towards achievement of the goals and objectives set out by this Corporate Plan and serve the nation by providing safe drinking water and sewerage facilities to the public. The NWSDB provided 109,482 new water supply connections during the year and it enabled to bring the population having piped drinking water supply provided by the NWSDB to 40.1% while contributing to bring the total pipe borne water supply coverage of the country to 50.5%. NWSDB was able to exceed 700 million cum of annual drinking water production for the first time in its history in 2018. 707 million cum of drinking water was produced in 2018 which was provided to the consumers through 2,328,654 service connections. This amounts to a 3.06% increase of total drinking water production compared to the year 2017.

In the way forward of achieving the service connection coverage targets on piped water supply and sewerage, the NWSDB continued its development programmes successfully during the year. Different financing strategies adopted in compliance to the Government's project financing policies enabled the NWSDB to carry out Rs.66.54 billion worth of investments during the year on development activities in water supply and sewerage sector. Further to the direct allocations by the GOSL, these financing strategies includes Rs. 16.16 billion invested on water supply projects through the finances obtained from the loans borrowed from foreign/ local banks directly by the NWSDB with the Guarantee of GOSL and Rs. 4,820 million borrowed from local banks to continue the 15 ongoing Local Bank Funded (LBF) water supply projects.

During the year, NWSDB was able to complete five Large Scale Foreign Funded projects(under Capital Budget): two Water Supply, two Sewerage and one having both water supply and sewerage components; moving towards its goals on piped water supply coverage and piped sewerage coverage of the country. Further, 22 foreign funded water supply projects, 15 local bank funded water supply projects, 02 Small and Medium Water Supply projects and 04 sewerage projects were continuing as at end of the year to increase the pipe borne water supply coverage or piped sewerage coverage of the country. In carrying out its development projects, NWSDB has given a special attention on providing safe drinking water for people living in the areas affected with Chronic Kidney Disease of unknown etiology (CKDu) and many CKDu relief activities were implemented during the year spending Rs. 302.18 million from capital budget allocated from the Ministry for the same.

As part of improving the business efficiency, NWSDB continued its endeavor on reducing Non-Revenue Water (NRW) by carrying out many short-term and long-term measures in RSC level as well as by implementing large scale Foreign Funded projects in 2018. Accordingly, the island wide NRW value was brought down to 24.93 % as at end

2018 from 25.98 % at end 2017. NWSDB also continued its focus on Information Technology development and Energy Management programs throughout 2018.

Assuring the quality of water provided to the customers was a priority. Operational monitoring and verification monitoring were done by the Central Laboratory with the cooperation of the Regional laboratories in the NWS&DB to assure the water safety. According to the analytical data in year 2018, 99.4% of microbiological testing and 87.4% of physical and chemical testing were satisfactory. With the intention to ensure water safety and security, implementation of Water Safety Plan (WSP) was also continued in 2018 under the advocacy and implementation support from the WHO. As at end 2018 there were 194 urban Water Safety Plans being implemented in various stages Island wide.

We are thankful for all the support given by the Hon. Minister of City Planning, Water Supply and Higher Education for the accomplishments of the functions of NWSDB during the year. His directions, guidance and support as the Minister in charge of Water and Sewerage facilities were invaluable for us. Our sincere thanks also is extended to the Hon. State Minister of CPWS&HE for the guidance and support tendered us throughout the year. We also take this opportunity to extend our thanks to the Secretary to the Ministry of CPWS&HE and all the staff at the ministry for direction, coordination, support and assistance given whenever necessary. We also take this opportunity to thank the Secretary to the Ministry of Finance and the Heads of Departments in the Treasury for the continuous support by them to achieve progress in all our activities. We are grateful to multinational donors, bilateral financiers and local banks for giving us a hand for the developments we have brought up throughout the country in water supply and sanitation sector. We thank them for their interest to having participated with NWSDB on development work in the sector.

All the progress we have made through the year is a result of the dedications and efforts by the Members of the Board of Directors, management and the staff of the NWSDB. Without their dedications, hard work and sacrifices, our achievements would be impossible. We expect their endeavor through the years to come will

upgrade the health, social and living standard of the people from all parts of the country by improving the service in water supply and sanitation facilities meeting the consumer satisfaction. Meanwhile, if there are any lapses on the part of the NWSDB, we request our customers to bear with us and inform us for further improvement.



Eng. K. A. Ansar

Chairman

National Water Supply & Drainage Board





“We forget that the water cycle and the life cycle are one.”

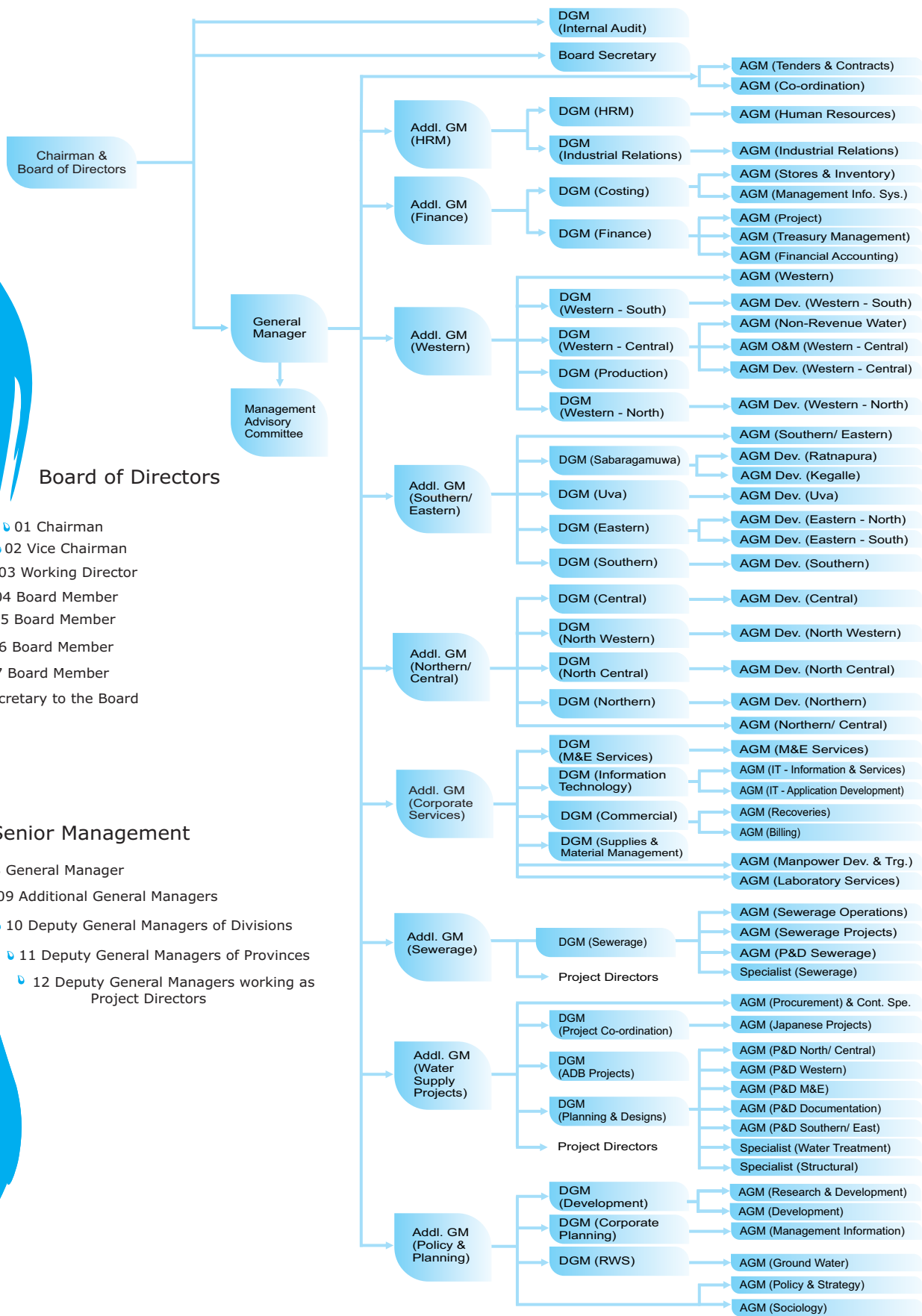
Jacques Cousteau



Corporate Governance and Statistical Review ▼

Kalatuwawa Water Treatment Plant

Organizational Structure



Board of Directors

- 01 Chairman
- 02 Vice Chairman
- 03 Working Director
- 04 Board Member
- 05 Board Member
- 06 Board Member
- 07 Board Member
- Secretary to the Board

Senior Management

- 08 General Manager
- 09 Additional General Managers
- 10 Deputy General Managers of Divisions
- 11 Deputy General Managers of Provinces
- 12 Deputy General Managers working as Project Directors

Board of Directors

01 Eng. K. A. Ansar

Chartered Civil Engineer/ Lead Auditor (QMS)
M.Sc. (Delft), B.Sc. Eng. (Hons),
Dip. H.E. (Delft), C.Eng., MIE (SL)
Chairman, NWSDB (Since 05.02.2015)

02 Mr. M. Shafeek Rajabdeen

Vice Chairman, NWSDB (Since 10.03.2015 - 24.01.2018)

Mr. M. H. M. Salman

Attorney at Law
Vice Chairman, NWSDB (Since 24.01.2018)

03 Mr. P. I. T. Mahilal Silva

BA, MA, M.S.Sc
Working Director, NWSDB (Since 05.02.2015)

04 Dr. T. B. Ananda Jayalal

MBBS, MSc, MD, PG Cert.in Paed. Nutrition
Acting Deputy Director General Environmental Health,
Occupational health and Food Safety
Director, Youth Elderly and Disabled Persons
Ministry of Health Nutrition & Indigenous Medicine
Board Member, NWSDB (Since 20.01.2017)

05 Mr. J. M. U. P. Jayamaha

DPFM, PGD(A&F), Fellow Member of APFASL
Additional Director General
Department of Public Enterprises
Board Member, NWSDB (Since 02.04.2015)

06 Mr. Shantha Rathnayake

Board Member, NWSDB (Since 12.02.2015)

07 Mrs. K. A. Subadra Walpola

MA
Senior Assistant Secretary
Ministry of Local Government & Provincial Councils
Board Member, NWSDB (Since 13.02.2015)

Secretary to the Board

Mrs. W. P. Sandamali De Silva

B.Sc. Special (Hons)
Master of Public Management, IMSL (Member)

11 Nos. of Board Meeting held during year 2018

Senior Management

08 General Manager

Eng. D. U. Sumanasekara

B. Sc. Eng. (Hons), M. Sc. (Netherlands), C. Eng. FIE (SL)

09 Additional General Managers (Addl. GM) (as at 31st December 2018)

Eng. J. R. B. Nedurana (Sewerage)

B.Sc. Eng (Hons), P.G. Dip. in Environmental
Science & Technology (Delft)
C.Eng. FIE(SL),

Eng. R. H. Ruvinis (Water Supply Projects)

B.Sc. Eng. (Hons) P.G.Dip. (App Hy)
MBA, C. Eng. FIE (SL), MIE (Aus). CP Eng.

Eng. S. G. J. Rajkumar (North Central)

C. Eng., FIE(SL), M.Sc. in Sanitary Engineering,
M.Sc. in Environmental Engineering and Management

Eng. B. S. Wijemanna (Western)

B.Sc.Eng., M.Eng. Hydrology and Water Resource, IHE (Delft)
Dip. In Construction Management
C. Eng. FIE (SL)

Eng. N. H. R. Kulanatha (Southern Eastern)

B.Sc. Eng., C. Eng. FIE (SL)

Eng. T. S. Wijethunga (Policy & Planning)

B.Sc. Eng., C. Eng., FIE(SL), MBA, M.Sc. (Planning)
MA. (Financial Economics), MIM (SL), PG. Dip. (Finance) -
ICA(SL), Dip (Mgt.)-DK

Mr. D. Thotawatte (Finance)

B.Com (Sp.), ACA, MA (Fin. Econ)

Mr. G. K. Iddamalgoda

(Human Resource Management)

B.Sc. (B. Admin), Dip. in Per. Mgt.,
MA (Mgt. & Admin) London

Eng. K. J. V. A. Perera

(Corporate Services)

P. G. Dip. in Environmental Engineering and Management,
B.Sc. Eng., FIE (SL), M.Eng. (Sanitary) IHE (Delft)

10. Deputy General Managers (DGM) of Divisions (as at 31st December 2018)

Mr. R. M. A. S. Weerasena (Internal Audit)

B.Com (Sp.), PGDBM (Col.), ACA

Mr. A. G. S. Kumara (Costing)

B. Com. (Sp.), M.Sc. (Management), FCA

Mrs. N. Y. S. Abeygunawardena

(Industrial Relations)

BA, P.G. Dip. in Management (PIM), Member (IMSL)

Mr. W. A. S. Sumanasooriya

(Human Resources)

BB.Mgt. – HR (Special), MBS, PgdLS NDIPM MIPM, MIMSL

Mr. R. M. A. Bandara

(Supplies & Material Management)

B.Sc., (Business Administration - Spl.)
Dip. in Purchasing and Materials Mgt.

Mrs. M. M. S. Peiris (Finance)

B.Sc. (Accountancy & Finance Mgt.), ACA (SL)

Eng. S. G. G. Rajkumar (Commercial)

B.Sc. Eng. (Hons), C.Eng., FIE(SL),
M.Sc.(Denmark), MBA (PIM-US), M.Eng (Moratuwa)

Act. Eng. K.P.R.S. Samarasinghe (Production Western)

M.Sc. (Water Supply Eng.) The Netherlands

M.Sc. (Env. Eng.) Moratuwa, MIE (SL), AM(OACETT) Canada

Eng. T. M. W. Sunil Bandara (M&E)

IESL (Mech - Eng), C.Eng. MIE (SL)

P. G. Dip. (B. Admin.), P. G. Dip. (Disaster mgt.)

Eng. U. Ratnapala (Planning & Designs)

B.Sc. Eng., C. Eng. FIE (SL), P.G.Dip. in Hydraulics Eng. (Moratuwa),

P. G. Dip. in Business & Financial Admin (ICA)

Eng. K. D. P. F. Siriwardana (Corporate Planning)

M.Sc. (Env. Eng.) Denmark, PG Dip (Const. Mgt) SL,

C.Eng., MIE (SL)

Eng. Jaliya Lalith Seekkuge (ADB Projects)

B.Sc.Eng.,Hons, C.Eng., MIE(SL), MBA(PIM- SRJ)

PG Diploma (Const. Mgt),

PG Diploma in Drinking Water Mgt.(Germany)

Eng. J.Chandradasa (Information Technology)

B.Sc. Eng., C.Eng. MIE(SL)

Eng. I.V.W. Ediriweera (RWS)

B.Sc. Eng. M.Sc.(Water Resources Management),

M.Sc. (Development Studies), C.Eng., MIE(SL), FIE(SL), MIWA(UK)

Eng. Dhanesh Gunethilake (Sewerage)

B.Sc. Eng.(Hons), PG.Dip. Env. Eng & Mgt (Moratuwa)

M.Sc. Sanitary Eng. (UNESCO-IHE, Delft)

FIE(SL) MCIWEM (UK) C.Eng. Intpe.

Eng. (Mrs.) D.M.L.C. Pitawala (Development)

B.Sc. Eng. Civil (Hons), M.Sc. Env. Eng. (DK), C. Eng., MIE (SL)

Eng. S.S.S. Vipulanandan (Project Coordination)

B.Sc. Eng., Fellow of IESL M.Sc. (Construction Project Management),

M.BA. (University of Colombo), Dip. (Commercial Arbitration), Dlp. (Adjudication)

11. Deputy General Managers of Provinces (as at 31st December 2018)**Eng. C.C.H.S. Fernando (Western South)**

B.Sc. Eng., MPM, PG Dip. (OSLO University)

MIE (SL), C.Eng., MIM (SL), ,

Eng. K.P.R.S. Samarasinghe (Western North)

M.Sc. (Water Supply Eng.) The Netherlands

M.Sc. (Env. Eng.) Moratuwa, MIE (SL), AM(OACETT) Canada

Eng. M.M. Uma Lebbe (North)

IESL, PG. Dip. (Str. Eng. Design)

PG. Dip. (Water & Wastewater Treatment)

Eng.T.W.S. Perera (Western Central)

B.Sc.Eng.,(Spl), C.Eng.Masters in Dev. Science MIE (SL).

Eng. (Mrs.) I.M.W.K. Illangasinghe (North Western)

B.Sc. (Eng.), M. Eng.(Japan) C.Eng. MIE(SL)

Eng. G.V. Wijerathne (North Central)

B.Sc.(Eng), M.Sc(WREM), C.Eng, MIE (SL)

Eng. S. S. Devaraja (Sabaragamuwa)

B. Tech. (Eng.) Open University,

P. G. Dip. in Environmental mgt. (University Kelaniya),

M. Sc. in Environmental Eng. & mgt. (University of Moratuwa)

MDS in Development Studies (University of Colombo)

C.Eng. MIE(SL)

Eng. R.S. Liyanage (Uva)

B.Sc. Eng. C.Eng. FIC(SL), PGD (Management),MIM,

M.Sc. Eng. (Water & Environmental Resources Management), MBA,

M.Sc. (Water Resources Management, Holland)

Eng. J. K. S. Pathirana (Southern)

B.Sc. Eng. (Hons), C.Eng. MIE (SL) M.Sc. (Sanitary) Delft.

Eng. S.A. Rasheed (East)

M.Sc.(Sanitary Engineering), The Netherlands

P.G.Dip.(Structural Engineering Design), Sri Lanka

B.Sc. Eng. Sri Lanka, C.Eng., MIE(SL)

Eng.M.K.D.J.H. Meegoda (Central)

B.Sc. Eng., M.Sc. (Water Management), MIE(SL), C.Eng.

12. Addl.GMS/DGMs working as Project Directors**Eng. N. H. R. Kulanatha (Wastewater disposal for****Rathmalana Moratuwa & Ja-Ela/ Ekala Area)**

B.Sc. Eng., C.Eng. FIE (SL),

Eng. B. S. Wijemanna**(Greater Colombo Rehabilitation Project)**

B.Sc. Eng., M.Eng. Hydrology and Water Resources, IHE (Delft),

Dip. in Construction Management, C.Eng. FIE (SL),

Eng. K. J. V. A. Perera**(Gampaha Attanagalla Water Supply Project)**

P. G. Dip. in Environmental Engineering and Management

B.Sc. Eng., FIE (SL), M.Eng. (Sanitary) IHE (Delft),

Eng. K.P.R.S. Samarasinghe (Labugama Kalatuwawa WSP and Kolonna Balangoda WSP)

M.Sc. (Water Supply Eng.) The Netherlands

M.Sc. (Env. Eng.) Moratuwa, MIE (SL), AM(OACETT) Canada

Eng. S.A. Rasheed (Colombo Water Supply Service Improvement Project)

M.Sc.(Sanitary Engineering), The Netherlands

P.G.Dip.(Structural Engineering Design), Sri Lanka

B.Sc.Eng. Sri Lanka, C.Eng., MIE(SL)

Eng. R.S. Liyanage**(Mahiyanganaya WSP and Badulla Haliela WSP)**

B.Sc. Eng. C.Eng., FIC(SL), P.G.Dip. (Management),MIM,

M.Sc. Eng.(Water & Environmental Resources Management), MBA,

M.Sc. (Water Resources Management, Holland)

Eng. R.A.A. Ranawaka**(SHIFT Project)**

B.Sc.(Eng).Hons, PG Dip. (Env. Eng & Man), C.Eng., FIE (SL)

Eng. I.V.W. Ediriweera**(Ambatale/ Orugodawatta Pipe laying Project)**

B.Sc. Eng. M.Sc.(Water Resources Management),

M.Sc. (Development Studies), C.Eng., MIE(SL), FIE(SL), MIWA(UK)

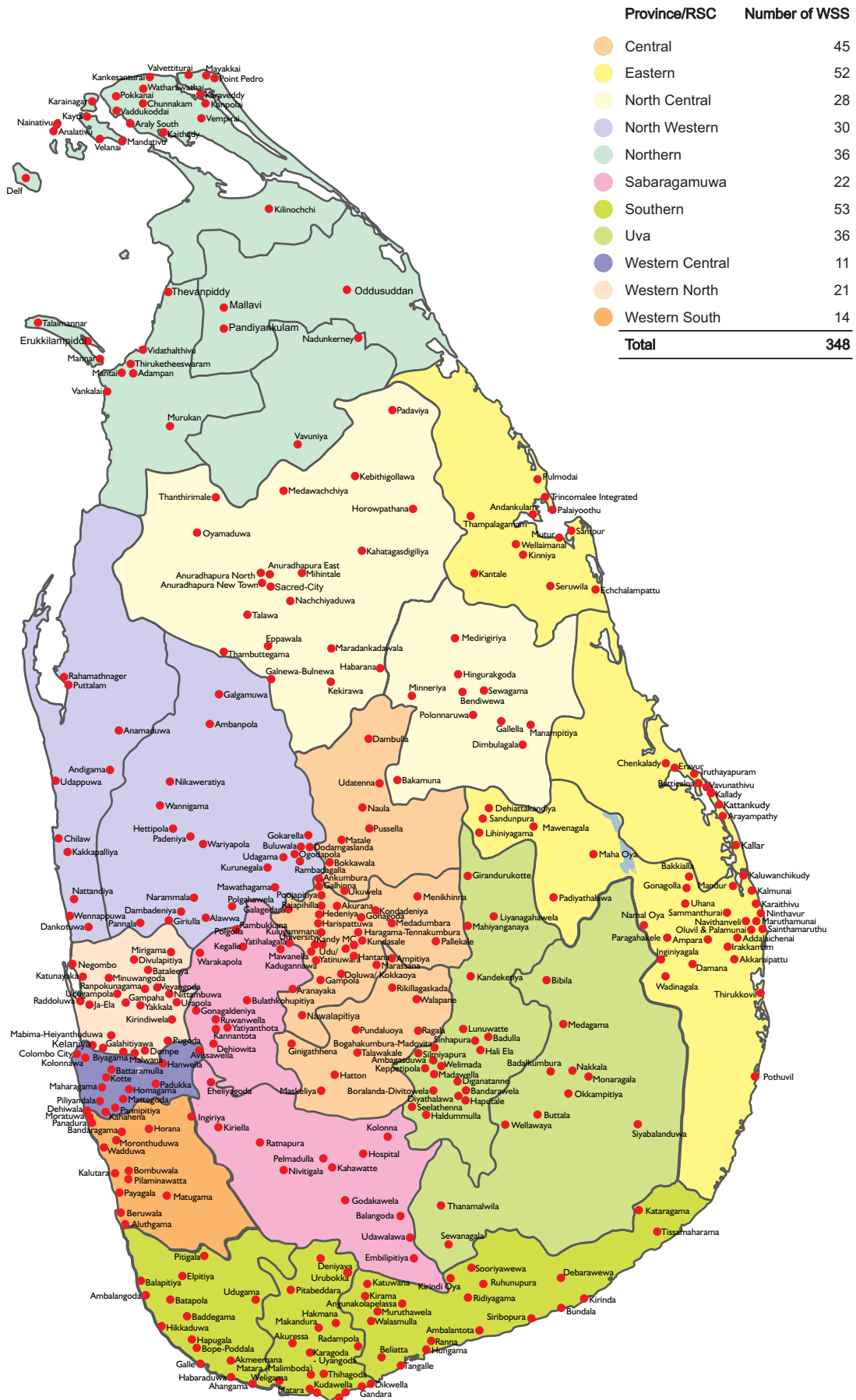
Eng. M.M. Uma Lebbe (Anuradhapura Phase II)

IESL, PG. Dip. (Str. Eng. Design)

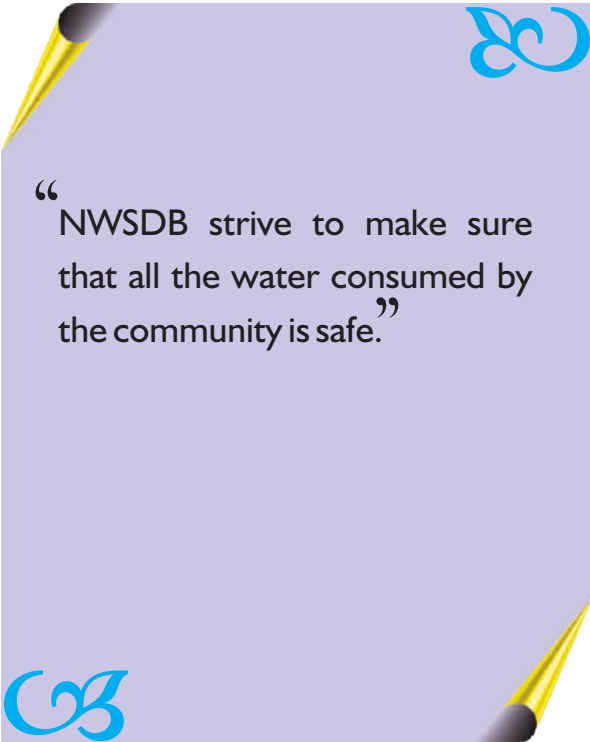
PG. Dip. (Water & Waste Water Treatment)



Existing Water Supply Schemes



Corporate Planning



“ NWSDB strive to make sure that all the water consumed by the community is safe.”

Implementation Status of the Corporate Plan 2016-2020

The year under review was the third year of the Corporate Plan 2016-2020. The NWSDB continued working towards the achievement of the goals and objectives set out by the Corporate Plan during the year.

It was considered important to have timely reviews for the successful achievement of the goals, objectives and the targets set. Accordingly, 4th quarter of 2017, 1st, 2nd and 3rd quarters of 2018 progress reports on the Corporate Action Plans were presented to the Members of the Board at Board meetings held in 2018.

Activities towards the goal on water supply and sanitation coverage were carried out throughout the country by all RSCs. In achieving the goal of improving business efficiency, special efforts taken to reduce NRW and power cost during 2018 are noteworthy while customer service improvement was also given priority. Initiatives on IT improvements, R&D activities, institutional development, and staff training also contributed towards this goal. On achievement of the Goal “Ensure greater accountability and transparency”, both the Internal Audit Division and the Government Audit Branch worked on the accountability and transparency issues. With regards to the goal on social responsibility of improving drinking water and sanitation status of the population other than the NWSDB customers, the CKDu affected areas and the rural community without safe water supply facilities were given priority within the available resources. Technical assistance was provided to CBO managed schemes through the RSCs.

Water Safety Plan (WSP) implementation in Sri Lanka continued in 2018 under the advocacy and implementation support from the WHO. NWSDB strive to make sure that all the water consumed by the community is safe. Under this context Water Safety Plans (WSPs) are being implemented. As at end 2018 there were 194 urban Water Safety Plans implemented in various stages Island - wide by the DGMs of RSCs with assistance of WSP advisory unit established in Kandy.

Further details including targets and achievements of the Goals for the year 2018 are presented in page 11 of this report.

Progress Towards Stated Goals

Goal	Key Objectives	Target end 2018	Achievement end 2018
1. Increase the water supply and sanitation coverage	1.1 Total Pipe-borne water supply coverage	54.9%	50.50%
	1.2 Piped sewerage coverage	2.7%	2.06%
	1.3 Access to safe drinking water supply coverage	89.5%	90.6%
2. Improve business efficiency	2.1 NRW (island-wide)	23.88%	24.93%
	2.2 Total staff for 1,000 connections	4.45%	4.31%
	2.3 Expenditure on power to total recurrent cost	20.26%	15.55%
	2.4 Maintenance expenses to total recurrent cost	6.21%	6.07%
	2.5 Establishment expenses to total recurrent cost	10.41%	10.11%
	2.6 Estimated bills to total number of bills	1.0%	1.33%
	2.7 Collection efficiency	100%	105%
	2.8 Accounts receivable from -		
	(a) domestic and commercial institutions	30 days	27 days
	(b) Government institutions	40 days	7 days
	2.9 Promote Human Resource Development		
	(a) In-house training (nrs. of participants)	6 125	11 259
	(b) In-country external training (nrs. of persons)	180	220
(c) Overseas training (nrs. of persons)	120	215	
2.10 Improve service to customers and promptly attend to public complains Public awareness programs to be carried out all island (school/other)		222 nrs.	237 nrs.
2.11 Annual savings from energy efficient projects.	30.0 million		17.8 million
2.12 Research and Development Division of the NWSDB is continuing systematic, investigative and experimental activities that are performed for the purpose of acquiring new knowledge to efficient business and O&M activities.			
2.13 The NWSDB is ready to capitalize on improving the customer and corporate relationship, which will have a web-portal as a platform for improving its business to implement comprehensive ICT development activities.			
3. Ensure greater accountability and transparency	<p>Initiatives were taken to develop a whole range of management and business tools on human resource development, management information system and business plan.</p> <ul style="list-style-type: none"> • Delegation of financial authority • Training on budgetary control & financial regulations • Audits on commercial operations • Audits on stores and supplies • Audits on cash/ cheque payments • Audits on construction contracts • Valuation of assets • Improved Management Information and Coordination 		
4. Facilitate safe drinking water supply and sanitation to rural and underserved communities	4.1 RWS Schemes maintained by CBOs, LAs and others under the NWSDB backup support.	10.6%	10.5%

Key Performance in Water Supply & Sewerage

“With the new water supply connections provided by NWSDB during the year, altogether 50.5% of total population is served with piped drinking water supply.”

There are 348 major, medium and small water supply schemes in operation under the NWSDB's purview.

By providing 109,482 new service connections during the year, the population that was covered with piped drinking water supply by the NWSDB was brought to 40.1%. With the new water supply connections provided by NWSDB during the year, altogether 50.5% of total population is served with piped drinking water supply.

Four major water supply projects in different parts of the country were completed during the year, enabling to provide new service connections or to improve service level of existing consumers. There were 19 foreign funded water supply projects, 15 local bank funded water supply projects and 02 Small & Medium Water Supply projects implemented during the year to increase the pipe borne water supply coverage of the country. In addition, 07 sewerage projects were also implemented to increase piped sewerage coverage.

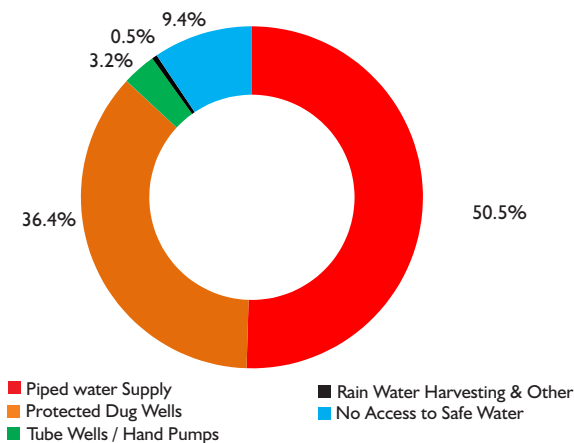
To assure the water safety, operational monitoring and verification monitoring are done by the central laboratory with the cooperation of the regional laboratories in the NWS&DB. Analytical data in year 2018 revealed that the 99.4% is satisfactory in microbiological testing and 87.4% is satisfactory with physical & chemical testing.

Several NRW reduction activities were conducted during the year. Within Colombo city, critical areas were selected and area inflow measurements were taken after establishment of closed boundaries. Night survey, culvert survey and house to house survey were carried out to identify visible leaks. Accordingly, the NRW of Western Province & Island wide were brought down up to 26.16% and 24.93% respectively, by end of the year.

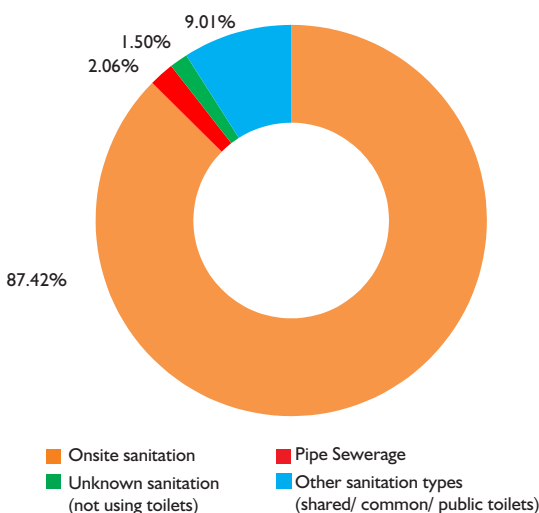
The tariff revision has not been in line with the increase in the operational expenses from the year 2012. Hence the Board has experienced difficulties in managing its cash flow during the recent years. Despite the policy decision taken in the year 2014 by the General Treasury to convert the total outstanding debt into equity to strengthen the Balance Sheet, it had not improved due to the debt commitment of the new loans.

The NWSDB has recorded Rs.2,926,304,392, Rs.1,816,772,395. after tax profit for the last consecutive two years since 2016 and loss of Rs.568,695,429 for the year 2018.

Access to Safe Water Coverage



Sanitation Coverage

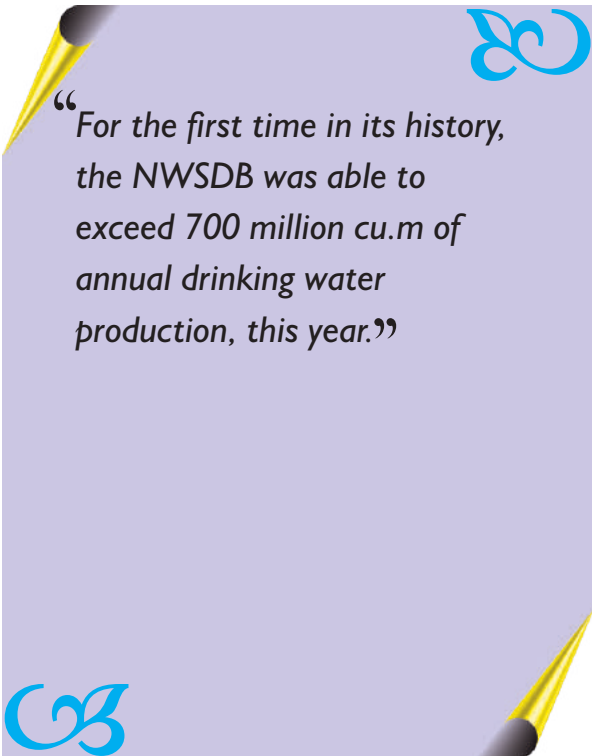


	2017	2018	Variation (%)
KEY STATISTICS: WATER SUPPLY			
No. of Water Supply Systems	343	348	1.46
Piped Water Production (million cu.m.)	686	707	3.06
Piped Water Consumption (million cu.m.)	508	531	4.53
Domestic Connections (Nrs.)			
(a) Western Province	902,050	936,927	3.87
(b) Other Provinces	1,143,859	1,206,349	5.46
Total Domestic Connections	2,045,919	2,143,276	4.76
Public Stand Posts (Nrs.)			
(a) Western Province	489	483	1.24
(b) Other Provinces	1,127	1,057	6.62
Total Public Stand Posts	1,616	1,540	4.94
Non-Domestic Connections (Nrs.)			
(a) Western Province	84,878	89,925	5.95
(b) Other Provinces	88,375	95,453	8.01
Total Non-Domestic Connections	173,253	185,378	7.00
(Including total public stand posts)			
Total No. of Service Connections	2,219,172	2,328,654	4.93
Average Monthly Household Consumption			
(cu.m. per house connection)			
(a) Western Province	17.61	17.62	-
(b) Other Provinces	13.31	13.30	-
Average Recurrent Cost of Water Production (Rs./ cu.m.)	36.35	39.60	-
Average Total Cost/ Unit Sold (Rs./ cu.m.)	49.11	52.75	-
Average Unit Revenue (Billing/ Consumption) (Rs./ cu.m.)	48.95	49.27	0.65
Average Household Bill Value per Month (Rs.)			
(a) Western Province	795.33	804.37	1.14
(b) Other Provinces	464.92	468.38	0.74
Collection Efficiency	1.03	1.05	1.94
Deep Wells (Nrs.)			
(a) Drilled	291	335	15.12
(b) Successful	245	282	15.10
Non-Revenue Water (%)			
(a) Western Province	27.68	26.16	5.81
(b) Other Provinces	23.92	23.50	1.79
(c) Island-wide	25.98	24.93	4.21
KEY STATISTICS: SEWERAGE			
Domestic Connections			
Western Province	15,500	16,531	6.65
Other Provinces	599	660	10.18
Non-Domestic Connections			
Western Province	1,293	1,365	5.57
Other Provinces	187	225	20.32
Housing Scheme Connection(Bulk)			
Western Province	2,666	3,666	-
Other Provinces	-	-	-
Total Sewerage Connections			
All Island	21,245	22,447	5.67
Western Province	20,459	21,562	5.39
Other Provinces	786	885	12.59

Note : “ - “ no meaning for variation (%) calculation.

	2017	2018	Variation (%)
OTHER KEY STATISTICS			
Total Revenue (Rs. million - with VAT)	24,846	26,164	5.30
Total Recurrent Expenditure (Rs. million)	24,924	28,012	(12.39)
O&M Staff/ 1,000 Connections	3.88	3.61	7.48
Total Staff/ 1,000 Connections	4.66	4.31	8.12
Total Development Expenditure (Rs. billion)	68.98	66.54	-

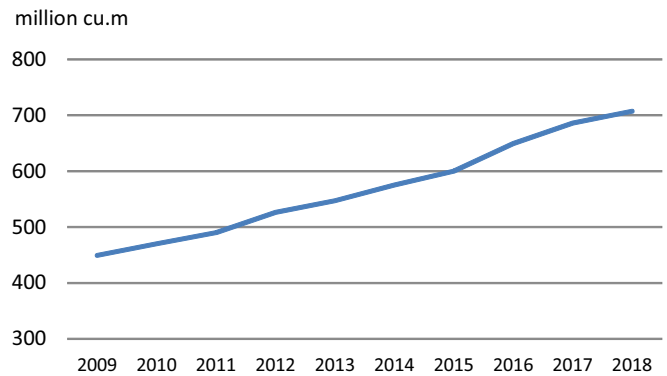
Summary of Operations



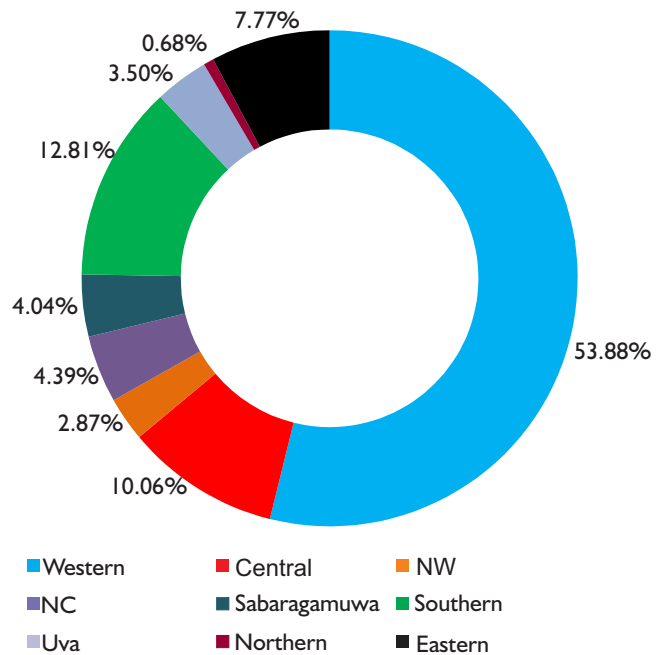
WATER SUPPLY

Drinking Water Production

The total quantity of drinking water produced in 2018 was 707 million cu.m. Accordingly, for the first time in its history, the NWSDB was able to exceed 700 million cu.m of annual drinking water production, this year. The trend in drinking water production during the last 10 years is given in the chart. The Western Province water supply system claims the major share of production mainly through the centers at Ambatale, Labugama, Kalutuwawa, Biyagama, Bambukuliya and Kandana & Kethhena in Kalutara amounting to 53.88% of the total water produced by the NWSDB.

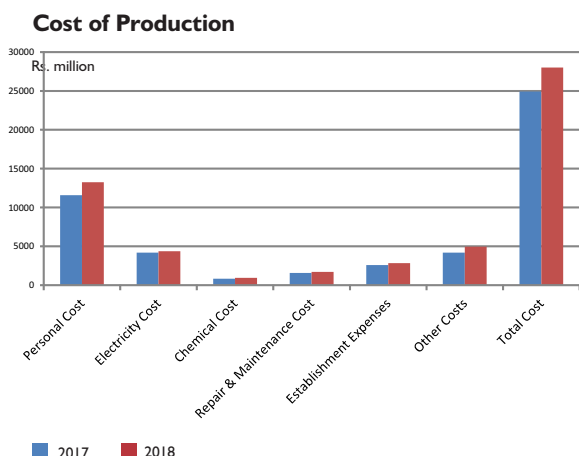


Water Production by Provinces during 2018



Cost of Production

Breakdown of the total production cost (Rs. million) in comparison with 2017 is shown below:



Cost of Production Rs. /cu.m.

2017
49.11

2018
52.75

Cost of Production = Total Cost / Units Sold

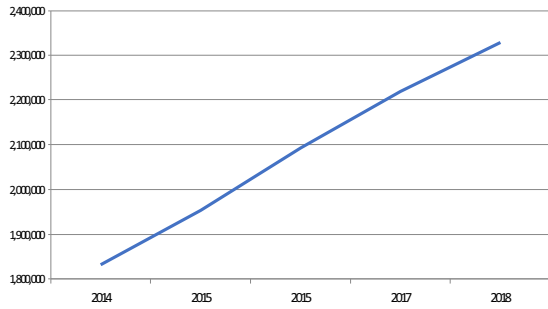
Comparison of Service Connections

Province/ RSC	No. of Connections Province/ RSC-wise			NWSDB Region	No. of Connections NWSDB Region-wise		
	As at end December 2017	As at end December 2018	Change %		As at end December 2017	As at end December 2018	Change %
Western - Central	462,290	478,438	3.49	Priority **	2,007	1,874	(7.48)
				Colombo City	142,883	144,712	1.28
				Kotte	166,770	171,952	3.11
				Maharagama	150,630	159,900	6.15
Western - North	271,735	284,106	4.55	Kelaniya	194,207	203,924	5.00
				Gampaha	77,528	80,182	3.42
Western - South	252,903	264,308	4.51	Dehiwala	107,363	109,321	1.82
				Kalutara	67,570	70,074	3.71
				Panadura	77,970	84,913	8.90
Central	261,356	272,559	4.29	Kandy North	99,303	104,222	4.95
				Kandy South	85,103	88,838	4.39
				Kandy East	76,950	79,499	3.31
North Western	78,036	82,548	5.78	Kurunegala	78,036	82,548	5.78
North Central	114,351	121,541	6.29	Anuradhapuraya	114,351	121,541	6.29
Sabaragamuwa	106,606	112,466	5.50	Ratnapura	51,219	55,264	7.90
				Kegalle	55,387	57,202	3.28
Southern	312,024	320,351	2.67	Hambantota	106,237	109,766	3.32
				Matara	97,267	99,446	2.24
				Galle	108,520	111,139	2.41
Uva	94,794	103,307	8.98	Bandarawela	53,409	59,316	11.06
				Monaragala	41,385	43,991	6.30
Northern	21,653	24,199	11.76	Jaffna			
				Mannar	21,653	24,199	11.76
				Vavunia			
Eastern	243,424	264,831	8.79	Ampara	58,005	62,744	8.17
				Trincomalee	63,866	73,018	14.33
				Akkaipattu	74,605	78,271	4.91
				Batticaloa	46,948	50,798	8.20
Total	2,219,172	2,328,654	4.93	Total	2,219,172	2,328,654	4.93

** In year 2018, Priority connections include only Colombo City area.

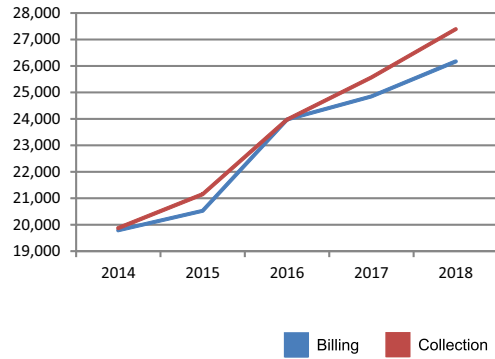
Growth of Connections

No. of connections

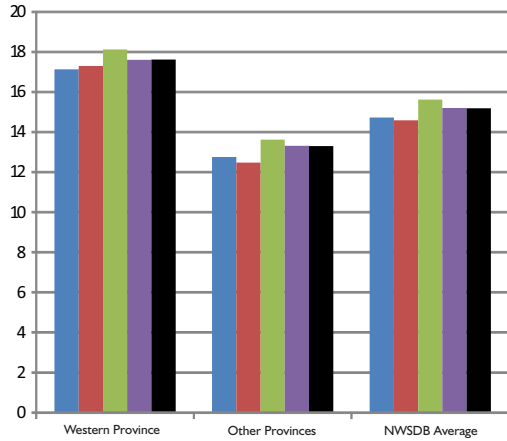


Comparison of Annual Billing and Collection

Rs. million



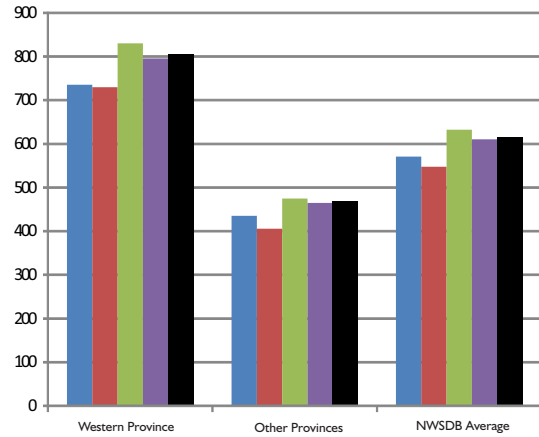
Average Household Monthly Consumption (cu.m per Connection)



2014 2015 2016
2017 2018

Average Household Monthly Bill

Rs.



2014 2015 2016
2017 2018

Billing Statistics

Description	2017 (Rs.million)	2018 (Rs.million)
Billing Target (with VAT)	26,346	26,667
Actual Billing (with VAT)	24,846	26,164
Collection Target (with VAT)	27,913	27,809
Actual Collection (with VAT)	25,567	27,385

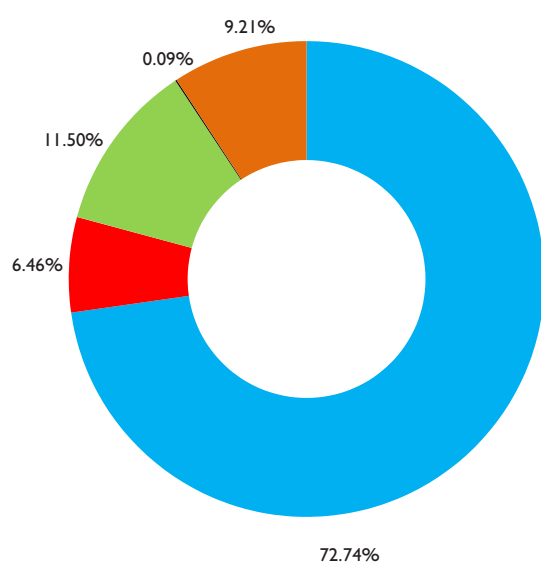
Quantity of Water Sold and Revenue by Consumer Categories (2018)

Consumer Category	Quantity sold		Revenue	
	cu.m '000s	%	Rs. million	%
Direct billing #	388,563	72.74	15,730	60.12
Schools	6,253	1.17	147	0.56
Tenement gardens	2,225	0.42	90	0.35
Public stand-post supply	458	0.09	8	0.03
Government institutions, NWSDB premises	34,530	6.46	2,454	9.38
Commercial and industrial	61,425	11.50	6,138	23.46
Tourist hotels	3,329	0.62	315	1.20
Shipping	135	0.03	75	0.29
Board of Investment	9,893	1.85	706	2.70
Religious premises	6,117	1.14	149	0.57
Subtotal	512,928	96.02	25,813	98.66
Bulk billing	18,154	3.40	343	1.31
Others*	3,108	0.58	9.0	0.03
Grand Total	534,190	100.00	26,164	100.00

Domestic, NWSDB Quarters, Government Quarters, Condominium, Domestic Non-Vat, Domestic Samurdi & Tenement Samurdi

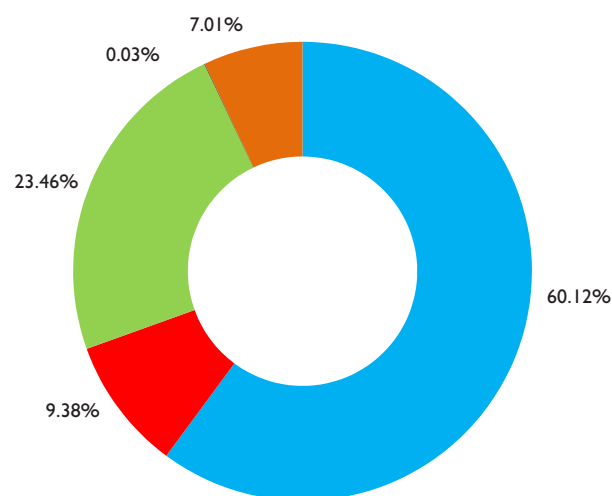
* All other billing categories which are not under "Direct Billing" or not specified as above have been grouped under 'Others'. Setting-off rebates have also been included in this category.

Percentage Quantity of Water Used by Consumer Categories



■ Domestic ■ Government Institution
■ Commercial/ Industrial ■ Stand Post
■ Others

Percentage Revenue by Consumer Categories



■ Domestic ■ Government Institution
■ Commercial/ Industrial ■ Stand Post
■ Others

Summary of Investments

“These financing strategies together enabled the NWSDB to carry out Rs.65.61 billion worth of investments during the year 2018 on development activities in water supply and sewerage sector.”

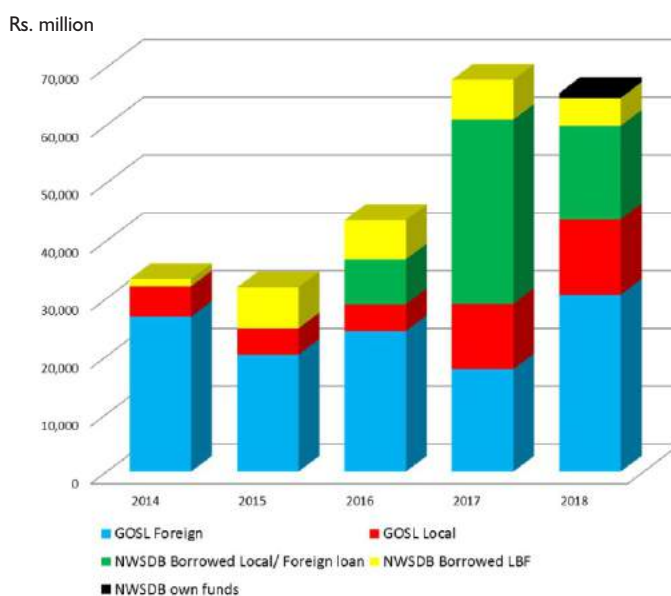
Financial Sources

The NWSDB was allocated with Rs.13.31 billion for the foreign loan disbursements of large scale water supply and sewerage projects for the year 2018. In addition, Rs. 4.1 billion was allocated as a supplementary allocation for covering the additional expenditure under foreign loan disbursement. The local counterpart funds of these projects, was managed with the allocation of Rs. 5,890.29 million local funds provided for the expenditure on VAT and Custom Duties and the balance local component with the Peoples Bank loan (Rs.6.91 billion) serviced by the Treasury and Rs. 863.07 million of NWSDB's own funds. Local consolidated funds of Rs. 269 million was also provided for 2 selected large scale water supply and sewerage projects while Rs. 196.15 million foreign grants or reimbursable foreign grants were also allocated for two selected large scale sewerage projects. For emerging small townships (Small & Medium) water supply & sewerage projects, Rs. 395 million domestic funds was provided for implementing two small and medium scale water supply projects and for the utility shifting work all over the country. Further, Rs. 1,059.56 million of domestic funds was provided for implementing the projects under water sector community facilitation.

Further to the direct allocations by the GOSL, Rs. 16.16 billion was expended on water supply projects through the finances obtained from the loans borrowed from foreign/ local banks directly by the NWSDB with the Guarantee of GOSL. In addition the NWSDB continued the 15 ongoing Local Bank Funded (LBF) water supply projects by borrowing Rs. 4.82 billion from local banks during 2018.

These financing strategies together enabled the NWSDB to carry out Rs.66.54 billion worth of investments during the year 2018 on development activities in water supply and sewerage sector.

Total Investment on Water Supply and Sewerage Sector in 2018

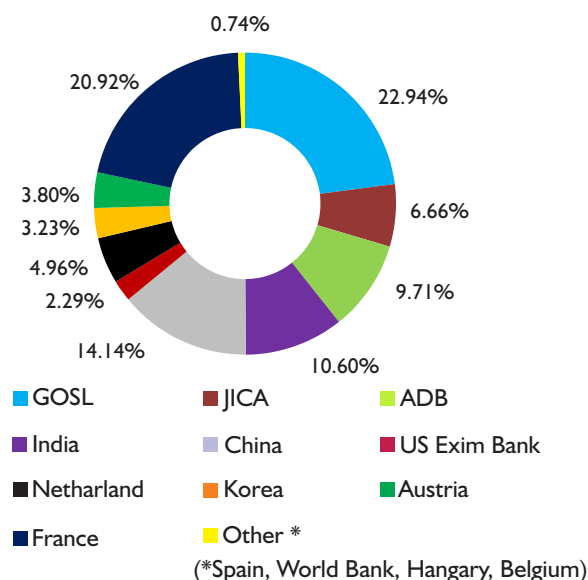


Comparison of Capital Fund Utilization 2017/ 2018

Description	2017		2018	
Foreign Component (Rs. million)	17,794	109%	30,619	128%
Foreign Aid Related Domestic Component (Rs. million)	11,640	98%	13,066	100%
Consolidated Funds for Local Projects (Rs. million)	1,135	48%	1,003	69%
Total	30,177	100%	44,668	116%

In addition to the above development works, during the year NWSDB has invested Rs. 821.39 million for rehabilitation activities, Rs.34.88 million for maintaining sewerage schemes, Rs. 323.58 million for reduction of NRW, Rs. 93.44 million for energy saving activities and Rs. 114.26 million for purchase of capital items from its Revenue Income earned during 2018. Under the Rehabilitation activities, priority was given to the schemes where there was no donor assistance or special funds being allocated for the improvement of schemes.

Foreign Aid Contribution by Donors and Related GOSL Funds



Details of Projects Completed during the year 2018

RSC	Project Name	Agent	TEC Rs. Million	Beneficiaries
Uva	Badulla - Haliela WSP	US Exim Bank	11,880.00	110,000
	Augmentation of Kataragama Scared City Wastewater Disposal Project	Austria	2,040.00	26,000
Western	Greater Colombo Wastewater Management Project	ADB	1,012.00	150,000
Central	Greater Dambulla WSP	India	9,593.00	174,180
North Western	Greater Kurunegala Water Supply & Sewerage Project	Exim Bank China	13,248.00	114,000

Employees

“The ratio of staff per thousand service connections was reduced to 4.31 in the year 2018 from 4.66 in 2017.”

Staff Strength

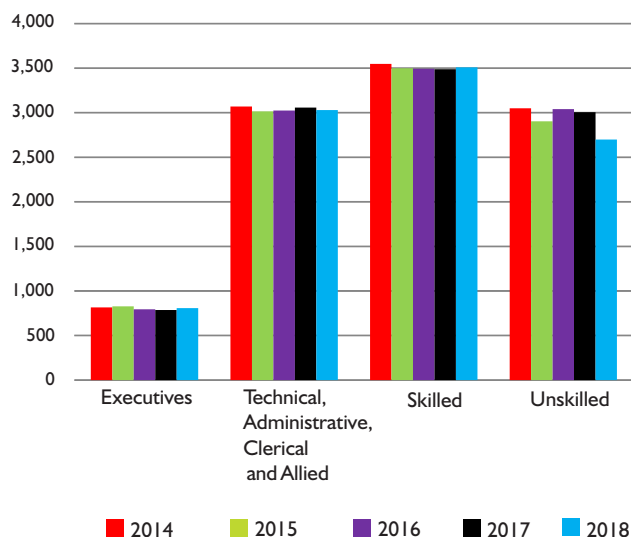
Staff	2017	2018
(a) Permanent	10,082	9,901
(b) Casual	1	0
(c) Contract	229	121
(d) Plant Technician Apprentice & GT	26	24
Total	10,338	10,046

At the end of 2018 there were 9,901 permanent staff, 121 contract and 24 Plant Technician Apprentice & GT. Most of the contract employees were recruited to work for foreign funded projects.

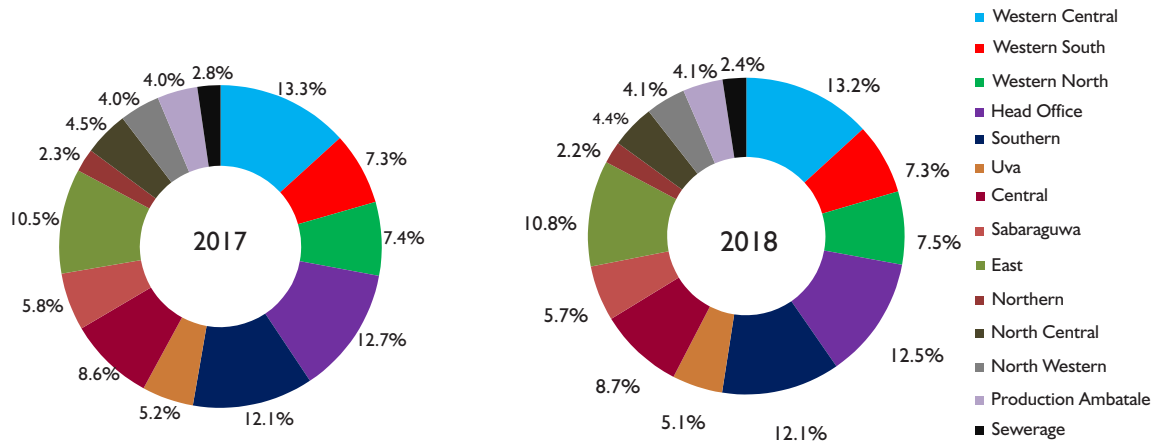
There were 671 permanent, 24 contract and 4 plant operator technician apprentice recruitments of various staff categories during January to December in 2018. In the same period there were 852 permanent, 1 casual, 132 contract and 6 plant operator technician apprentice terminations which includes retirements, resignations, vacated posts and deaths in different categories of staff. This resulted in decrease of total staff by 292 compared to December 2017.

The ratio of staff per thousand service connections was reduced to 4.31 in the year 2018 from 4.66 in 2017.

Distribution by Key Job Function



Staff Distribution by Location



STAFF BENEFITS

- An Annual Bonus of Rs. 40,000.00 including productivity incentive was paid during the year.
- Encashment of unutilized medical leave was continued as in the previous years.
- Employees who had rendered an unblemished service to the NWSDB were felicitated at the World Water Day Ceremony held March, 2018.
- Transport facilities were made available to the staff at a concessionary rate.
- Death donations were granted in respect of the permanent employees who had died whilst in service.
- Local/ foreign training facilities were provided to the employees.
- Rs. 650 / person / month was granted as a tea allowance for the employees.
- Loan facilities were provided via Government Banks (Housing loan and vehicle loan through the Peoples Bank and the Bank of Ceylon respectively).
- A Festival Advance of Rs. 10,000/= per employee was paid to the employees.
- Rs. 53,643,481.00 among 113 employees as 12 month loan and Rs. 1,354,915,879.00 among employees as 10 month loan have been distributed at a concessionary rate during the year 2018.
- Rs. 88 million (approx.) was incurred for the reimbursement of medical expenses of employees (including family members), in addition to medical expenses incurred for critical illnesses.

Comparison of Staff Remuneration in 2017 and 2018

Description	2017 Rs. million	2018 Rs. million
Salaries	10,421	11,976
Contribution to Employees' Provident Fund	911	1014
Contribution to Employees' Trust Fund	228	254
Total	11,560	13,244

STAFF REMUNERATION AND BENEFITS

MANPOWER DEVELOPMENT & TRAINING

Based on the Training Needs Analysis 2018 and special training requirements received from Sectional Heads, MDTD has conducted 255 In House training programmes during the year 2018 for employees of various categories and total employee participation was 11,259 (1,377-Managerial, 3,960-Other Executives, 2,689-Supervisory, 19,01-Clerical & Allied, 1,332-Operational). During this year 43 new training courses were introduced.

MD&T Division also arranged training for 220 employees externally through other training institute covering a total of 2,000 training days .

Overseas Training and Official Visits

Overseas short term training was provided for 55 employees of the Board with the financial assistance of ADB and other bi-lateral short fellowships from JICA, OKP, ITEC, AIT with EBARA etc. In addition MD&T Division facilitated official visits for 155 officers in respect of Pre-shipment Inspections, Factory Contract Negotiations, Twinning Programmes, etc. through various projects implemented in the year 2018.

Long Term Fellowships

During 2018, long term fellowships have been received by the NWSDB Engineers for full-time study abroad on the following programs .

- M.Sc. in Water Management and Governance Sponsored by the Orange Knowledge Programme (OKP)
- M.Sc. in Urban Water and Sanitation with Specialization Water Supply Engineering by the Orange Knowledge Programme (OKP)
- M.Sc. In Sanitary Engineering by the Orange Knowledge Programme (OKP)
- Master Degree Programme in Environment Management / Disaster Management and Climate Change by the Japanese Human Resource Development Scholarship Programme (02 nrs.)

Industrial Training

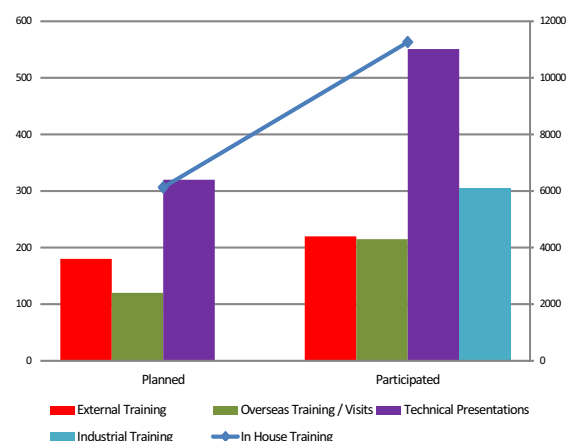
Industrial Training was provided to 305 apprentices of Undergraduates, NDT/HNDE students, Craft Apprentices, Students of Technical Colleges, Institute of Chartered Accountants, AAT, Vocational Training Authority, National Apprentices and Industrial Training Authority (NITA) programs. Ninety five Undergraduates, 191 Technical Trainees, 05 Accounting Trainees and 14 clerical / other trainees covering 43,270

man days, were provided under them.

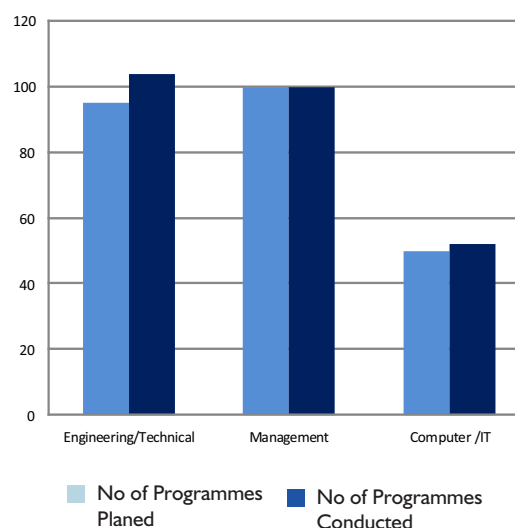
Summary of Training Provided for Internal Staff.

Type of Training	No of Employee Trained		Man Days
	Planned	Trained	
In House Training	6,125	11,259	17,330
In Country External Training	180	220	2,000
Overseas Training	120	215	4,322
Workshops/ Technical Presentations Conducted by External Institutions	320	551	
Total	6,745	12,246	23,652

Progress 2018 : nrs. of participants



Summary of Training Provided Through MD&T Division



Comparison of Training Participation (2017 & 2018)

	2018	2017
In House Training	11259	9228
External Training	220	182
Overseas Training / Visits	215	239
Technical Presentations	551	245
Industrial Training	305	230



“A drop of water is worth more than a sack of gold to a thirsty man.”

- Unknown



Sustainability Report ▼



Information Technology Solutions For Improving Service Excellence and Operational Efficiency

Information Technology – The key to success and future growth

The NWSDB is taking important steps to upgrade the ICT status of the organization to enhance the efficiency, service level and customer satisfaction; and to improve the work process.

Improvements to Commercial Operations Management System

The Commercial Operations Management System which commenced its online operations since January 2016, was improved to include much new functionality covering the important areas such as Complain Management, New Connection Processing, Bowser Supply Billing, NRW activities, Work Order Handling, Pay-In-Voucher Handling, Integration with Collection Agents (online, real-time payment data transfer) etc.

A new mobile app was developed to extend the system to field level officers to communicate with the central system while they are at the field. This app provides various functions that enable the field officers to view the work order and enter the data in the field itself over a mobile connection while locating the customer premises easily due to integration with google map.

The Mobile App for meter readers was implemented islandwide and this app is used by all the meter readers in the regions to collect the meter readings and calculate the bill values while facilitating to capture consumer contact details as well as to process meter reader complaints.

Continuous Improvements to Software Systems

In addition to the Commercial Operation Management System, the IT Division engaged in maintaining the software systems such as HRM/Payroll, Inventory Management System etc. as a priority activity. Steps were taken to strengthen the internal software development team and upgrade their capacity.

Hardware and Infrastructure Maintenance

NWSDB has a latest data center based on virtualization concepts using VMWare with sophisticated hardware. All the internal solutions are hosted at this data center and therefore the IT Division maintains the data center as a high priority task of the Division. Several steps were taken to upgrade the facilities and also to establish the Disaster Recovery Facility at RSC office in Kadawatha, utilizing the funds from GCWWMIIIP Project.

Official Web Site of NWSDB

Information about NWSDB; details about the projects and ongoing activities; notices, details of events,

information important to the customers and general public are maintained in the official web site (www.waterboard.lk). In addition the customers have the facility to make their water bill payments online through the official web site.

Automation and Remote Controlling

As an important step towards improving the service levels of the organization, the NWSDB has taken steps to implement automation and remote controlling solutions to various operational areas. Several initiatives have been taken to utilize NB-IoT technology to implement a pilot project in automating the meter reading process (at procurement stage).

Also, monitoring of the operations of the treatment plants and NRW etc. are under discussion. The procurement process for acquiring a NRW monitoring center is in progress with the funding of GCWWMIIIP project.

Geographic Information Systems (GIS)

NWSDB has taken several important steps to regularize the GIS usage in the organization and also to implement a centralized server based GIS solution to facilitate the users to use the GIS platform effectively. The users at the regions will be able to utilize the maps and information available in the GIS server to carry out their regular activities.

A comprehensive solution consisting of ArcGIS server, ArcGIS desktops, personal computers and high accuracy GPS equipment is now being implemented. A separate contract to upgrade the existing capacities of the data center is also in progress to support the GIS developments.

Call Center Operations

The Call Center which facilitates the customers to lodge their complaints through the hotline 1939 is a major part of the customer care services. At present, the center is located in Maligakanda and operates with 7 agents at a time.

Commercial Activities

The three areas: Issuing water bills every 30 day to all customers, completing all the meter readings within the month, reducing arrears with active involvement of all staff; were identified as the Key Performance Indicators (KPI) for the year.

During the year emphasis was made for achievement of the KPIs; however there were disruption due to trade union actions. Yet, there are many regions that have achieved higher percentages on 29, 30, 31 day meter readings now. Some have achieved 97%. The IT section developed Commercial Operation Management System and the Mobile Application have provided enhanced facility to plan implement and execute meter reading. In the event targets could not be achieved, there is facility to print bill on estimation basis.

Rural Development Bank (RDB) has commenced water bill collection through its ground network. This gave convenience to another segment of customers, where monthly bills are collected while other payments due to the bank are collected at the field. In addition, a facility was introduced to issue Group Bills for the institutions that have offices all over the country whereas the monthly water bill is paid centrally, which leads to improve early settlement of bills. Income increase from 2017 to 2018 is over 1.6 billion representing 6.2% increase while the percentage increase in new connections given during the same period is 4.93%. In 2018 there was an increase in collection arrears.

At the monthly Staff Meeting, expected performance was closely monitored and various methods were

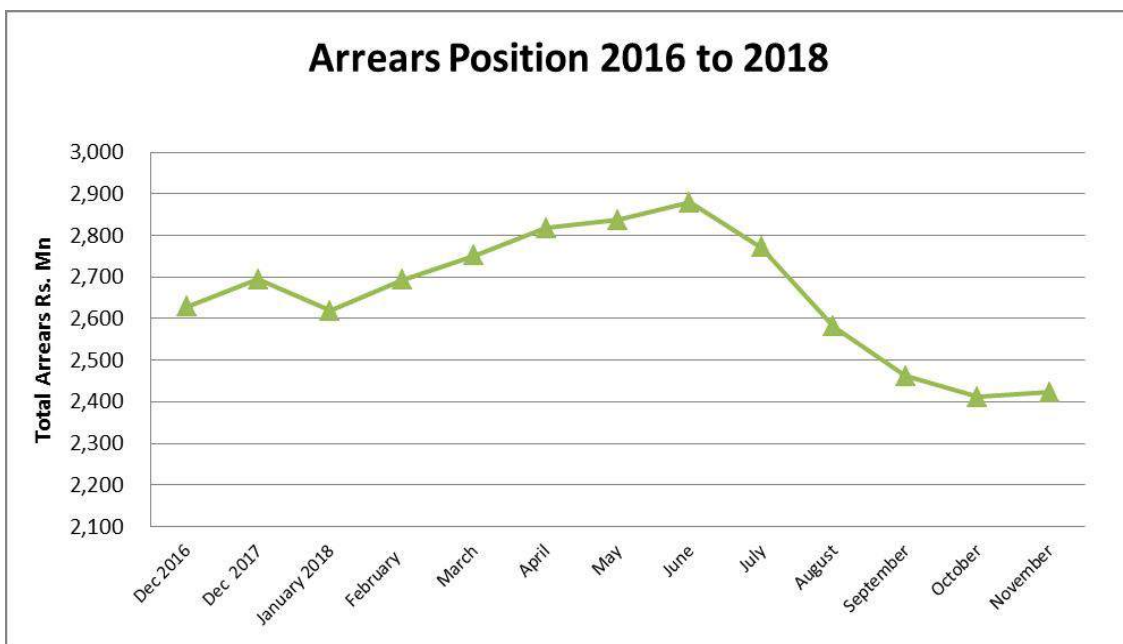
adopted to reduce the work load & improve productivity of the available staff. Consultation with staff of their role was held and their suggestions were entertained for better performance while graduate trainees were also consulted for their views to improve the system.

The traditional approach of Legal Recovery was revisited by visiting some selected customers on a pilot basis to have a clear understanding as to why the customers have difficulties or poor response to the expensive process of NWSDB writing letters to the disconnected customers. In the curriculum of educating people, Legal Recovery was introduced.

By working closely with MD&T Division, training modules have been developed, resource person have been identified and developed to train different segment of staff in commercial activities in the board after identifying the gaps in their performance and also by examining various on the job deliveries of day to day activities. Various initiatives were implemented to improve the skills, attitudes and capabilities of the staff while encouraging creative thinking.

All Commercial officers were given a comprehensive awareness program making them aware of importance on key result areas. Learning from other regions were also shared for better performance and customer satisfaction.

Emphasis was made towards recovering of arrears. Various strategies had been adopted by the RSCs for success. The figure shows the reduction in arrears.



Rural Water and Sanitation

Performance and Major Activities in Rural Water and Sanitation Section

The Rural Water and Sanitation (RWS) Section has played a supportive role in many events apart from major works of the section. Signing of MoU (Memorandum of Understanding) with the Department of National Community Water Supply (DNCWS), involvement in project activities, periodical survey including field visits while conducting awareness programmes and TOT's are some of the major works carried out by the section.

In regard to Water Safety Plan (WSP), support was rendered to stakeholder meetings, discussions, exposure learning, field visit to CBOs (Community Based Organizations), awareness programmes and preparation of final documentation of each scheme under the Water Safety Plan Training of Trainers workshops. The section assisted in monitoring service coverage performance and identification, augmentation & rehabilitation needs in small - scale water supply scheme in Kaluthara & Kegalle districts. TOT workshops were conducted with major focus of awareness creation on rehabilitation and catchment improvement.

In order to intensify coordination and cooperation between MMD&E, CRIWMP, NWSDB and DNCWS, and review the progress of the project by sharing experiences of the stakeholders, two workshops were held under output 2 of CRIWMP. Further, steps were taken to enhance roles and responsibilities of the NWSDB to sustain future rural and small - scale water supply schemes by finalizing RWS guidelines and

activities. Preparation of project documents, study reports and concept papers could be highlighted among other major tasks of the section. In addition, three guidelines were finalized in both Sinhala and Tamil languages.

More Importantly, an MOU was signed between the NWSDB and DNCWS with the assistance of WaSSIP. Accordingly, it was agreed to provide technical support to the DNCWS as requested by community managed water supply schemes on a three phases Goal set : Short term, Medium term & Long term until the CBOs become fully technically competent to handle major technical issues.

Moreover, a conceptual framework has been prepared by RWS section to analyze the areas need to be prioritized to implement small - scale water supply schemes. It has been suggested handling Small Scale Water Supply Schemes from this section to avoid any overlapping of construction & management of water schemes by the DNCWS with the NWSDB.

RWS website feed task was undertaken carefully to bring out a new and desire effect in the web layout. In this regard, key items were added newly to showcase projects & programmes and future plans of the section with info & pictorial description.

Lastly, the overall productivity process was well coordinated, well - committed and cooperated by the staff irrespective of their positions by having group meetings, obtaining everyone's views and engaging in continuous monitoring of cost cutting, energy saving activities and it is continued to be in progress.

Public Awareness Programme

Public Relations Unit conducted various education and awareness programmes targeting customer groups, school children and consumer societies. Major focus was placed on water conservation, environment aspects and protection of water bodies etc. This has been done throughout the country with 45 programmes conducted in schools and 13 programmes in government institutes and private sector.

Various events were held to mark the World Water Day. Drama, art and essay competitions for school children were held. Periodicals to educate the target group on many different aspects related to the water Service were

published. The water magazine (Jalaya) was published for the months March, June and December in 2018.



World Water Day 2018

Groundwater

There are many groundwater related activities carried out by groundwater section. Groundwater development activities of hydrogeological investigations, construction of deep and shallow boreholes and assessment of wells and aquifers for long term groundwater extraction were conducted under NWSDB, state and private sectors and special projects of WASSIP, CRIWMP and the project under the Ministry of Plantation Industries. Further, development and flushing of deep and shallow boreholes, installation of new hand pumps, repair and rehabilitation of public hand pump tube wells were carried out under the funds of Pibidemu Polonnaruwa, NWS&DB drought relief programme and public requests. Implementation of 3Tier system for maintenance of hand pump tube wells under UNICEF funds and groundwater studies, monitoring of groundwater intakes and stream gauging can be considered as other major groundwater activities conducted in 2018.

As a total, 644 hydrogeological investigations, 337 deep and shallow borehole constructions, 185 flushing and well developments, 125 new hand-pump installations, 391 repair & rehabilitations of hand pump tube wells, 108

pumping tests and 6 nrs. and 3Tier training programs under UNICEF funds have been conducted during the year. Under the above activities, source capacity of existing pipe water supply schemes was increased by 6,232 cu.m/day using groundwater in 2018. The project for construction of 80 hand pump tube wells in Nuwara Eliya District was conducted under Ministry of Plantation Industries to implement drinking water supply facilities in the small tea plantation areas. Further, water sources investigation for selected villages in Kurunagala, Puttalam, Anuradhapura and Vavuniya Districts are in progressed under the CRIWMP project. Continuous monitoring of selected groundwater based WSS, preparation of water safety plans and groundwater modeling for Attanagalu oya basin, study of high yielding over flowing wells in Ratnapura District and study of groundwater potential and quality in Mannar District are the new future focuses of the section. Many capacity building programs were also conducted for the staff, during the year.

Energy Management

The annual cost for the electricity consumption in the year 2018 was approximately Rs. 4,362 million and 95.7% of this has been spent for water production and pumping while Rs.54.5 million has been spent for sewerage treatment and pumping. The balance Rs.133 million has been spent for office spaces. NWSDB is the main consumer of the Ceylon Electricity Board. However, the energy saving programme introduced in 2004, together with the tariff category rectifications and M&E improvement works has resulted a high energy and cost savings. During the last 02 years, Energy Management Unit has implemented several solar energy projects, to reduce the energy for office buildings. Meanwhile energy unit in M&E Section checked the possibility to implement wind energy plants by co-ordination with Sri Lanka Sustainable Energy Authority and it was identified Hambantota Ruhunupura and Wayamba Province to implement them.

The M&E Division is fully equipped with energy measuring equipment to carry out all type of energy audits for pumping systems as well as energy management works. During the year, 37 numbers of energy audits and studies were carried out with support of RSC M&E Sections. There are 15 numbers of projects completed in year 2018. The annual cost saving due to these completed projects is Rs.17.8 million. Also it is decided to implement 30 numbers of ongoing and new projects during year 2019 and cost investment for these projects including ongoing projects in the year 2018 is nearly Rs. 353 million. Total expenditure for the year 2018 is Rs. 145 million for these completed and ongoing projects.

Central Laboratory

Operational monitoring and verification monitoring are done by the central laboratory with cooperation of the regional laboratories to assure the water safety. Analytical data in year 2018 revealed that the 99.4% is satisfactory in microbiological testing and 87.4% is satisfactory with physical & chemical testing. River basin management plans were prepared and water quality monitoring was implemented for major river basins to keep the water quality comply with SLS 722.

Laboratory accreditation – ISO 17025:2005 – was awarded to the Central Laboratory & Western Production, Ambatale Laboratory for the chemical testing of aluminum sulphate and hydrated lime. Western South Laboratory, Kadana, Biyagama & Jaffna laboratories are progressing for the accreditation of the

water quality parameters. Two laboratories were established for Western Central region for the verification monitoring of the distributed water.

Analytical scope has been developed for enumeration of algae & algae toxin analysis, biomass quantification, detection of volatile organic compounds and water treatment chemicals - powder activated carbon (PAC) and Polyacrylamides (PAM) analysis.

Heavy Metal testing facilities was established in Bandarawela and Jaffna laboratories & existing testing facilities of heavy metals were upgraded with High end analytical instrument – ICP OES - in the Central laboratory.

Non Revenue Water Reduction

Non-Revenue Water Section acts a big role to save water which doesn't contribute to revenue generation. NRW Section functions mainly in the area of DGM (W-C) focusing to reduce losses occurring from pipe leakages, unbilled authorized consumption and unauthorized consumption of its enforcing area.

The NRW section operates under the AGM (NRW) with Manager (NRW) and CE (IDU). NRW unit and Randiya unit are functioning under Manager (NRW) and Illegal Detection Unit is functioning under CE (IDU).

NRW Reduction Activities

Formation of Societies, Disconnection of common outlets and Provision of individual connections under Randiya programme

There are 1,171 underserved settlements in Colombo City and already 1,791 societies have been formed to cover them and meter the free water outlets. Tables showing the formation of societies and their consumption, provision of connections and disconnection of common outlets and stand post resurvey programme in Colombo city administrated under Randiya Programme, are presented below.

Formation of Consumer Societies

	2013	2014	2015	2016	2017	2018
Societies Billed	1,578	1,735	1,756	1,762	1,778	1,791
Billed Consumption (cu.m/month)	166,103	159,445	147,923	135,282	120,807	108,552
Revenue (Rs./month)	576,609	624,438	584,933	478,796	432,171	389,603

Provision of connections and disconnection of common outlets

Year	2013	2014	2015	2016	2017	2018
Connections provided (No.)	948	528	54	110	131	129
Common outlets disconnected (No.)	110	72	40	31	78	99

Stand post resurvey programme in Colombo City

Societies Visited (No)	Type of Connection				Outlet (No)	Type of Outlet		
	Normal (No)	Disconnected (No)	Illegal (No)	Other (No)		Stand Post (No)	Bath Tap (No)	Toilet Tap (No)
1791	1247	506	13	25	2790	534	942	1314

At the year-end 2018, 99 common outlets have been disconnected by providing 129 individual connections requested by individual applications for an affordable fee in order to improve hygienic condition and improve quality of life of the inhabitants.

Unauthorised consumption detection by IDU Section

Illegal detections in Western Central area are made through regular & random checking of premises, checking of disconnected premises, attending to complaints, checking of high bill arrears, zero bills, low consumption and estimated bills etc.

During this year 1,059 unauthorized connections have been detected and Rs. 48.81 million has been levied. Table below shows the details of unauthorized consumption detection.

Unauthorized Consumption Detection

	2013	2014	2015	2016	2017	2018
Premises checked (No.)	13,343	12,812	12,250	13,417	9,654	10,988
Detections made (No.)	1,661	1,521	1,196	804	1,181	1,059
Amount levied (Rs.m)	69.64	54.77	42.19	33.55	41.62	48.81

Leak Detection inside private premises

	2013	2014	2015	2016	2017	2018
Complaints Attended (No.)	714	589	788	895	853	1001
Leaks Detected (No.)	542	446	755	678	795	966

Leak Detection in distribution system on request

	2013	2014	2015	2016	2017	2018
Leak Detection in Western Central area (No)	50	99	123	206	328	405
Leak Detection in outside areas (No.)	21	24	9	9	16	23

Night Leak Survey and Detection

	2013	2014	2015	2016	2017	2018
Distance Covered (No.)	1326	2191	1941	1692	1651	1928
Underground leaks detected (No.)	412	1380	1045	833	707	832
Underground leaks repaired by NRW (No.)	-	-	-	-	156	191
Culvert leaks detected (No.)	-	68	46	37	13	21
Culvert leaks repaired by NRW (No.)	-	-	-	25	10	11

Flow and Pressure measurement

	2013	2014	2015	2016	2017	2018
Routine Flow measurements(No.)	28	28	36	85	187	192
Flow & Pressure measurements on request (No.)	215	160	56	199	191	85
Total(No.)	243	188	92	284	378	277

Tracing of underground utilities

	2013	2014	2015	2016	2017	2018
Pipe line tracing (m)	1050	3000	9610	26195	5825	22370
Valve tracing (No.)	44	63	129	127	87	115

Expansion of NRW monitoring activities Outside Western Central area.

As a result of expansion of the service in NRW Section during the year 2018, the section initiated preliminary activities such as area isolation, flow meter validation to calculate NRW monthly, in Western South and Western North areas as well for year 2019.

Supplies & Material Management

Supplies and material management are important functions in the overall operation of the NWSDB activities. The required materials for NWSDB's operation needs to be readily available and it should maintain correct purchasing policies and procedures for procurement and storing of the items.

Supplies and Material Management Section had been very successful in supplying necessary chemicals throughout the year 2018 without any interruption. The related staff of supplies and material management helped to provide all the new connections during the year and it maintained a buffer stock too to face any critical situation.

It was maintained high standard of clearing of shipments for more than 600 shipments coordinating with the institutions such as the Ministry of City Planning, Water Supply and Higher Education, the Government Treasury, Sri Lanka Customs, Banks, Sri Lanka Ports Authority, Shipping Lines, Insurance Companies and clearing agent formalities, relevant O&M cargo ensuring efficiency to avoid paying demurrages. In addition 958 Purchase

Orders and 112 Award Letters have been issued during the year for local purchasing with the value of Rs. 275 million. Due to lack of fund allocation for payment of custom duties for project cargo, demurrage charges had to be paid.

During this year, it was able to save more than Rs. 248 million by redistributing excess materials among the RSCs Island wide, without purchasing new materials.

A process is underway to link all the 336 stores throughout the Island by an Inventory Management Software and it is going to be implemented step by step. Plans are underway to supply 143 computers for 143 stores. Until it is fully functioned, a bulk SMS system has been introduced in order to find out excess and nonmoving items to issue for the required RSCs.

It was able to implement a computer software system to claim defective water meters under warranty period in this year, while 670 computers to NWS&DB offices and stores, were provided.

During this year, 19 nrs. of contract documents which are Rs. 862 million worth have been prepared. Arrangements were made to collect redundant and unproductive items from all 336 stores and tendering for sale 102 lots out of 108 lots worth of Rs. 50 million during the year 2018. The section was able to win 3rd place of

annual Productivity Competition organized parallel to the World Water Day 2018. The section has managed to achieve expected objectives within the budget allocations and overall performance of Supplies & Material Management was up to the expectations.

Research and Development

Development Activities

Ground water modeling in Attanagalla Oya river basin

Attanagalla Oya is important to supply of drinking water and for the maintenance of agriculture eco systems. With the increasing water demand and uneven climatic changes, quantity of water in the Attanagalla Oya is insufficient to fulfill required water demand. Aim of this research is to present the ground water status of the Attanagalla Oya basin from preliminary ground water modeling to predict the potential storage of ground water. The total estimated research cost is Rs. 3.96 millions and programmed for a period of 3 years.

Study of existing overflowing and high yielding deep bore wells to use as water sources for development of water Supply Schemes within the Embilipitiya and Kolonna DS areas in Ratnapura District, Sri Lanka

Main purpose of the study is to develop community based rural water supply schemes and maintain existing schemes using sources of overflowing deep borehole wells or new boreholes which will be constructed along identified areas from the study. Measuring of well yield for wet season were completed in 2018. The total estimated research cost is Rs. 6.19 million and programmed for 2 years period.

A study on how to strengthen corporate governance practices and management control systems (CS) for challenges faced by National Water Supply and Drainage Board (NWSDB) -An initial study

This research provides industry wide best practices as well as large public sector organizations best practices which recommended to be applied to NWS&DB to its current corporate governance practices and management control system to address the ongoing issues. This study also provides broader insight of the aspects of the public sector corporate governance and their implication to the performance of the NWS&DB in broader way under Sri Lankan context. The research was

completed in 2018 and final report to be submitted.

Groundwater potential and water quality related issues in Mannar Island for effective water management

Water quality issues in the Mannar island with respect to the seasonal variations and variations with the effect of pumping and identifying high Fe-Mn areas and potential areas of sea water intrusions. Identifying water quality related issues will be major outcome in this research. This information is of paramount importance for better management of the Thottakadu, Thottavel and Thaleimannar well fields as a major intake for supply of drinking water in the Mannar island. The total estimated research cost is Rs. 1.9 million of which Rs. 0.947 million is from NWS&DB.

Special Events

Research and Development study Symposium 2018 of the NWSDB

Fourth Annual Research and Development study Symposium was held on 20th March 2018 at the BMICH Presenting 31 papers, including 02 from International Authors with about 450 participants.

IWA Water and Development Congress & Exhibition (WDCE) 2019

Training programme has been commenced to improve writing and presentation skills of the authors. Workshop has been done with the participation of key personal of the IWA committee.

Institutional Development Activities undertaken by the section

In view of the Institutional Development several studies have been undertaken as listed below.

- Korean collaborative study on membrane filtration for small-scale water purification plants in Sri Lanka.
- Revise the specification of mastic materials used to protect ductile iron flange joints.
- Study and monitoring of RO plants and carrying out measures to improve the system.

- Assistance for implementation of water footprint in Sri Lanka.
- Iron removal using a filter media.
- Establishing mechanism for water allocation.
- Preparation of GIS database on water resources and water supply schemes.
- Research study on water in domestic consumers and its impact to NWSDB consumers and for the whole country.



4th Research and Development Study Symposium 2018

CKDu Programme

Chronic Kidney Disease of unknown etiology (CKDu) has become a major health problem in Sri Lanka. In Early Stages it was confined to North Central and Uva provinces. It is now prevalent in the North western, Northern, Central, Eastern, Sabaragamuwa and Southern provinces.

Accordingly, the NWSDB has developed short term, medium term and long term strategies and work plans to provide safe drinking water to CKDu affected areas as per recommendations by WHO and medical professionals.

In collaboration with the Ministry of City Planning, Water Supply and Higher Education, the NWSDB implemented many CKDu preventive activities investing Rs. 302.18 million during the year 2018. Supply of water through pipe line extension, purchasing and installation of RO plants, installation of small RO plants (for Schools and religious places), rain water harvesting, water supply through bowsers, water quality testing, rural water supply and paying the liabilities of 2017 were mainly covered through this allocation.

Water Safety Plans (WSPs)

The World Health Organization's (WHO) guidelines for drinking water quality recommended Water Safety Plan (WSP) as the most effective means of consistently ensuring the safety of a drinking water supply. Water Safety Plan implementation in Sri Lanka continued from the year 2015 under the advocacy and implementation support from the WHO.

Eleven Urban WSP training programs were conducted for all RSCs under the Manpower Development and Training Section of the NWSDB. With the commitment of NWSDB, WSP could be implemented in 149 urban WSSs which is about 45% of the total water supply schemes maintained by NWSDB which includes all the major urban water supply schemes in the country such as Ambatale, Biyagama, Kandana, Negambo, Greater Kandy, Kandy South, Thuruwila, Gallella, Konduwatawana, Himadurawa, Batticalao, Greater Matara, Greater Galle Water Supply Schemes (WSSs) representing more than 60% of the total beneficiaries of NWSDB.

In addition, a series of international WSP auditing programs under the category of external informal were conducted with the assistance from WHO to evaluate 16

WSSs since year 2016. Further, the internal formal auditing was commenced in the year 2018. Besides, the World Bank Assisted Water Supply and Sanitation Improvement Project (WaSSIP) has joined hands to strengthen the implementation process of WSPs in the seven districts and capacity building of the rural water supply sector of Sri Lanka. Total 194 WSPs were in progress at different stages at end 2018.

Moreover, the NWSDB has discussed with the Institute of Engineers, in Sri Lanka (IESL), Standard Institution of Sri Lanka (SLSI) and WHO country office to establish external formal auditing in the first time in the Southeast and South Asian regions setting an example for the other countries. The WHO regional office in New Delhi has already granted Sri Lankan Rs. 2.8 million to the IESL as the independent hosting agency to lead this endeavor.

Hence, no doubt that the NWSDB is exactly in the tract of meeting the set goals of the WSP Strategic Plan - 2020 by implementing the WSP as a holistic approach to ensure safe access to all citizens of the country as per the vision of WSP Team of the NWSDB, i.e. "Safe Water for a Wealthy Life".



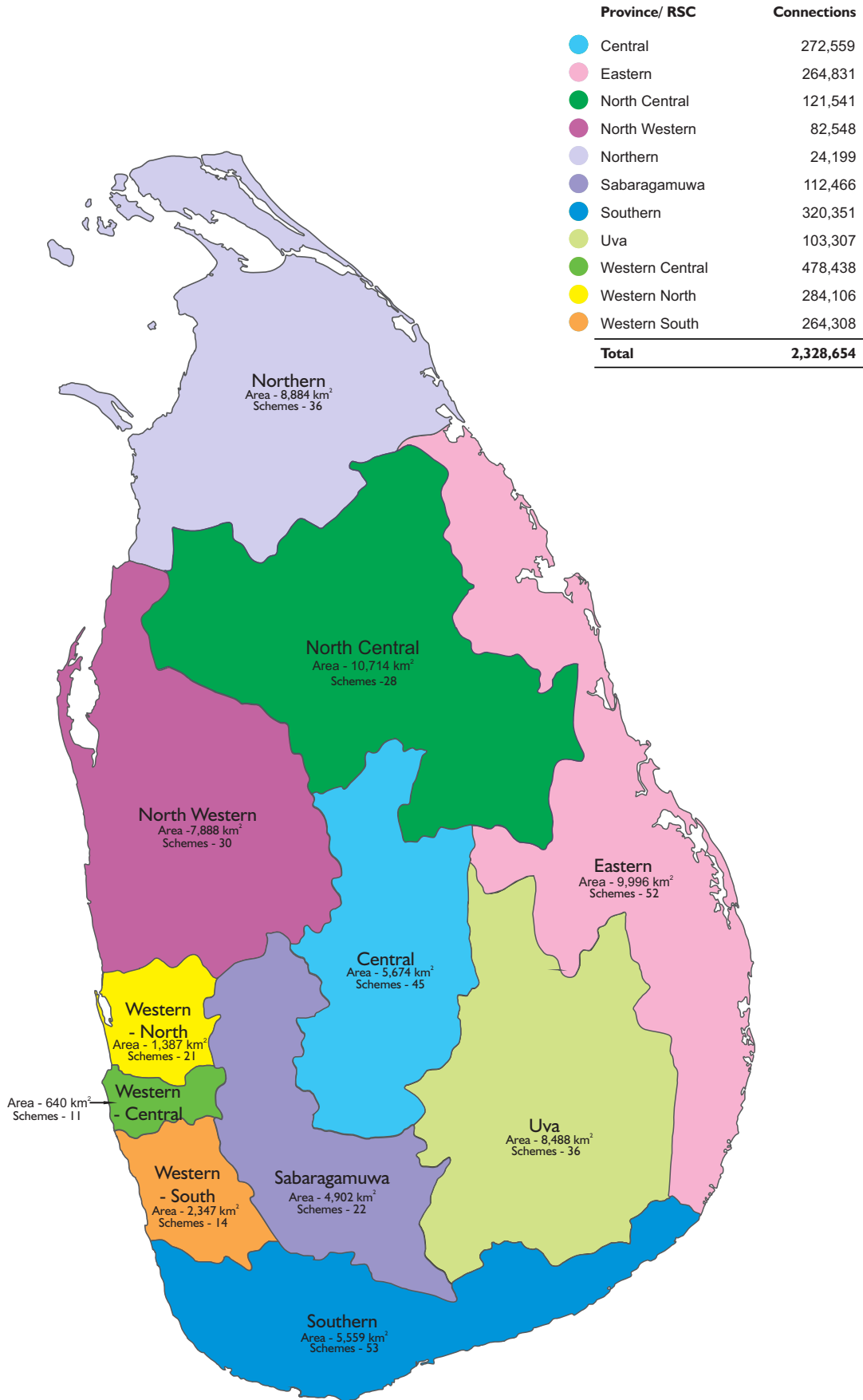
“Water is the driving force of all nature”

– Thomas Fuller





Regional Support Centres



REGIONAL SUPPORT CENTRES

Western - Central

The western Central Regional Support Center (RSC-WC) consists of Colombo City North (CCN), Colombo City South (CCS), Kotte and Maharagama manager regions. New laboratory of RSC (WC), customer care center at Maligakanda, Drive through bill payment center at Maliganaka, Newly Modified Bowser point at Manager Office CC-North were put into operation during the year. Manager (CC-N) office won the First place in world water day competition Year 2018 & Manager Kotte office won the 3rd Place in National Productivity Awards 2018.

The targets of New Connections and Billing & Collection were successfully achieved during the year. A total of 16,587 new connections were given in RSC-WC region during the year. This is a 100% achievement and exceedance of the target as the plan was to give 16,368 connections. The Billing target for the year was Rs.7,761 million and actual billing up to November 2018 is Rs. 8,017 million which is a 103% achievement. For the same period, collection is Rs. 8,208 million which is 100% achievement of the Rs. 8,169 million annual targets. Collection efficiency is 102 & Debt age is 0.4 current month for the total RSC (WC).

Pipe Line Extensions / Infilling Lines were undertaken in the RSC during the year with a total length of about 70km pipe line extensions and common line improvements.

Many NRW reduction activities and Energy Saving Activities were conducted in the RSC during the year. The NRW figure for the RSC (WC) Region is 31.6 % which is 1.3% reduction from the last year. Renovation and laying work of the Colombo City pipe network has been commenced by GCWWMII project to sharply reduce NRW.

O&M sections have taken some steps to save energy in addition to major works. The Stores Modular was fully implemented and preparation of material request was done considering minimum requirements & present stocks (fast moving & slow moving). Excess material was transferred to the other Regions.

Establishment of Laboratory at Manager (CCN) office for testing of water quality. Preventive maintenance programme for Chlorinators were carried out. Water Safety Plans were prepared & implemented in Kotte & Kolonnawa areas, while plans have been prepared for

Battaramulla, Maharagama, Colombo City North and South areas.

As Infrastructure and Institutional Development works in the regions; installation of chlorinators in Halpita, Miriswatta and Jamburaliya pump houses; completion of the construction of new valve house at Maligakanda reservoir; renovation of Homagama, Maharagama, Pannipitiya and Miriswatta water towers; pumps replacement for capacity improvement in pannipitiya & palanwatta were carried out in the manager Maharagama area in 2018.

Installation of CCTV surveillance system for Manager Office(C-N) and construction of drive through system, renovation of cashier point and improvement of bowser filling point at Maligakanda were carried out while providing Credit/ Debit card payment facilities to cashier points at Maligawaththa & Maligakanda.

An emergency response plan was prepared in Kotte-Kolonnawa areas to face disaster situations such as floods.

The development activities were carried out by the development section of RSC (WC) to achieve the long term and short term objective to improve the water supply facilities and to enhance the quality of service. Water supply facilities of Manager Kotte Region were upgraded.

Meter reading through mobile application using smart phones was implemented in Colombo city and part of other areas while meter reading audits and defective meter replacements were carried out throughout the region. New connection estimate issuing software was implemented for 15mm and 25mm dia. connections. Attendance application software was implemented in Manager (C/S) office & remote monitoring system was introduced to cashier point.

Awareness programmes for schools and various government & private institutions were conducted.

Western - South

The Regional Support Centre (Western-South) comprises of RSC (WS) office and 03 Regional Manager Offices Manager (Dehiwala) Region, Manager (Panadura-Horana) Region and Manager (Kalutara) Region.

Many special events were taken place in the RSC during 2018. RSC (WS) office and three Manager Regions

arranged special programs for positive thinking, attitude changing and quality circle tools of productivity improvements and several training and introduction programs were also arranged at regional office to improve their productivity.

Several NRW reduction activities such as special disconnection programs for all regions, AC pipe line replacement of 2,272 m in Beruwala and many more road rehabilitation projects were carried out during the year 2018. The respective NRW figures for Kalutara, Panadura-Horana and Dehiwala Regions were kept below 15%, 15.5% and 23.3% respectively.

Water quality surveillance and water security activities were carried out in several areas including few RWS schemes. All modules of Water Safety plan were completed for 15 Water Supply Schemes while 11 WSS were completed up to Module 10, one WSS up to Module 7 and three WSS was completed up to Module 6.

Furthermore, pipe line extensions for a total length of 92.2 km were completed while many rechargeable and rehabilitation activities were also carried out in all the regions throughout the year. Further, RSC (WS) was conducting accelerated programs for new connection and pipe laying under the 3.5 billion connection enhancement LBF project, Utility Shifting Budget and Pre-Stress Verification Survey funds.

Due to dry weather condition, Manager Kalutara area faced a critical problem of salinity intrusion. As a temporary solution, Bowser supply was arranged to cover whole Kalutara manager area and intake construction was commenced at kolemodara crossing the Kudaganga for delivering water to Kethhena treatment plant as a medium term solution under Aluthgama Mathugama Agalawatta Integrated Water Supply Project. Furthermore, discussions are ongoing with irrigation department to form a salinity barrier as a long term solution for salinity intrusion.

The water losses in the Maggona and Alwis place reservoirs were identified and the procurements to rectify those losses using Rehabilitation Funds were commenced. In addition to the above activities, distribution improvements of 10km and I-Road Projects under the utilization of Rehabilitation Funds were implemented. Installation of Centrifugal pumps at Beruwela high lift pump house was completed under Energy Savings Funds.

All the design works were competed to fulfill the water requirement for Millaniya Industrial Zone under

Manager Panadura-Horana and it is at Construction and Implementation stage.

All three Regions have 100% of their meter readings, taken using meter reader Application Software. In addition a drive through bill payments system was established at Dehiwala region and construction works are in progress in RSC (WS) premises for another drive through bill payment system. As a new achievement a smart zone solution was proposed to construct in Panadura-Horana region targeting 24hrs customer service.

The Special Investigation Unit of NWSDB has inspected 1,400 illegal connections and was able to confirm 111 illegal connections out of which, 59 are within RSC (WS) region where 870 nr. of connections were investigated in RSC (WS) region.

Western North



40 c.u.m Ferro Cement Tank at Randew Mawatha CBO

The Regional Support Centre (Western-North) consists of two Regional Manager areas, Manager (Kelaniya) Region and Manager (Gampaha) Region. During the year 12,371 new water supply connections were given in RSC (WN) region achieving a 114.02% target. Many NRW reduction activities were carried out in 2018 using O&M, Utility Shifting and NRW funds. The present NRW value for the RSC (WN) region is 20.25%.

Supply, installation of solar powered net metering systems for RSC (WN) office, Manager and AE offices Kelaniya; supply & delivery of portable ultrasonic flow meter & power quality analyzer for Gampaha and supply & installation of 02 high lift pumps for Raddolugama old plant are the energy saving activities implemented under Energy Saving Funds in 2018.

The NWSDB store module was implemented; mobile applications for disconnection Programme and Customer Survey was introduced; and Asset

Management Activities were implemented during the year. Water Safety Plans are implemented in every WSS and Raddoluwa WSS achieved highest marks in internal auditing of WSP.

The two laboratories at Kadawatha and Negombo ensure and maintain the drinking water quality for Kelaniya and Gampaha regions while providing services for other private and government organizations. Water quality data base was developed to monitor existing water distribution network maps for Kelaniya. Awareness programmes were carried out for schools, stakeholders, and public; and training facilities were provide for internal staff, university students & Advisory unit for Water Safety Plan.

Meny RWS activities were implemented for Heenatiyana-Goonamadiththa, Kuttivila, Sarasiya, Oruthota (North), Polhena & Randew Mawatha, Kuruduwatththa "Bubula", Ebaraluwa (South); and Kithulakanda, Mangalathiriya and Prakandeniya CBO's and completed in 2018. Consultancy service for district agriculture training center, Walpita was also completed while few other activities are in progress.

DI Pipe Laying along many road sections was carried out by Construction Section of RSC (WN) region under Rechargeable funds. Water Supply Improvement to Biyagama BOI, Dompe Hospital Pipe laying & Kandy - Colombo road Improvement projects are in progress. Further, Several M&E activities, Institutional development activities & renovation works in RSC (WN) region were carried out & completed under Rehabilitation & O&M funds in 2018.

P&D Section in RSC (WN) region has involved in preparation of designs, drawings, estimates and tender documents for Augmentation of new Intake and Improvements to Existing WTP in Divulapitiya WSS and Increasing the capacity of Raddolugama WSS. Designs of the new Iron removal system for Mirigama WSS and supply and laying of raw water pumping main from Welihinda junction to Divulapitiya water treatment plant were also carried out during the year.

RFP Document, of Mirigama Water Supply Project – Stage I and comments for designs of Katana WSP Stage I and GAMIWSP have been submitted. Design review for the proposal was completed for Structural steel warehouses at Aniyakanda, Ekala & Church Hill Reservoir Site to store 300 km length of HDPE pipes supplied from KRB-Stage II project.

Utility shifting of Municipal Council & Pradeshiya sabha roads were carried out under Capital Budget. In 2018 RSC (WN) region has faced both drought and flooding situations and the RSC has supported to mitigate the risk while preparing a risk management plan for the possible future risks.

The main issue that the RSC faced is the insufficient water production to cater the demand. Kelani Right Bank WTP has improved the production capacity from average 185,000 to 193,000 cu.m/day and water supply from Labugama Kalatuwawa has enhanced water supply to RSC(WN) from 6,000 cu.m/day to 12,000 cu.m/day resulting considerable relief to water shortage in Kelaniya region.

Training division of RSC (WN) organized & conducted 26 training programmes. Further "5S" concept and Productivity was continued in RSC (W/N) region.

Southern



Reinforcing of Sedimentation Tank

With the aim of developing Water Supply Schemes in the Southern Province, number of development activities in Electro Mechanical installation and Civil Construction Works were carried out by the Regional Offices in Galle, Matara & Hambanthota.

Under Energy Saving funds, many activities including supply and installation of necessary pumps were implemented for Nadugala, Muruthawela, Elpitiya, Arahena in Dickwella, Ridiyagama, Wakamulla and Ruhunupura WSSs while energy management equipment for RSC (Southren) was also supplied.

Many rehabilitation activities were carried out in all the three regions in RSC(S) utilizing 76% of the allocated amount of rehabilitation budget for the year 2018.

Utilizing 53% of the allocated NRW funds for the year, many NRW reduction works were implemented in Galle and Matara regions. Along with these specific NRW reduction activities, distribution improvements,

checking of illegal connections, replacing of defective meters, checking zero bills, checking estimated bills, planned preventive maintenance activities and other NRW reduction activities were done regularly in all three regions.

Pipeline extensions were done for a total of 35 km in all the three regions while pipe line extensions have been limited in some schemes due to the present production limitations.

For assuring the quality of water, a total of 7,869 water samples in Matara region, 6,192 samples in Hambantota region and 4293 water samples in Galle region were tested for water quality and further to these activities, water quality surveillance in intakes and sources were also done regularly. Further, Water Safety Plans in Tangalle, Kirinda-Puhulwella, Matara group and Pitigala WSS were also in progress during the year.

In Galle region planning & estimating of Neluwa-Thiniyawala - Kalugaldeniya, Opata- Sarwodaya, and Weliwitiya- Diwitura- Kiribathawila; planning, estimating & pipe laying of Karanketiya; pipe line extension in Harithagama; planning, estimating, pump house construction & pipe laying in Pitigala North 'Sidujayapura Uda Gammamanaya" RWS schemes have been conducted during the year.

In Hambantota region, laying of pipes at Godakoggalla(4.9 km) and relaying of 4.5 km pipe line under Minikirula, Barawakumbuka, Diulangate and Walawa Mau Nadee CBOs according to the highway construction were implemented.

Pipe laying works commenced for the transmission main to transmit 2,000 cu.m/day treated water from Ambalantota WTP to Angunukolapelassa WSS and Angunukolapelassa Prison (TEC Rs. 483 million) under Rechargeable funds. As a short term proposal, existing Lunugamwehera treatment plant is to be modified under funds provided by NHDA directly to the contractor to increase the production capacity and to improve the water quality. Design works have been commenced and the TEC of the project is 298 million.

Supply and laying of approximately 6.5 km DI pipes, fittings, valves and accessories for Palapotha pumping main has been completed with utility shifting funds (Rs 145 million) under Capital Budget. This has solved a long outstanding problem of interrupted water supply to 3,000 households in Unakuruwa, Palapotha, Beliatta area in Tangalle WSS.

RSC(Southern) involved in preliminary works of many projects at Pre- Feasibility, Feasibility, design or procurement stages. Feasibility reports for Construction of Morawaka WSP (TEC Rs.3,167million) and

Constructions of Kataragama WSP (TCE -Rs. 5,841 million) have also been prepared while Pre-Feasibility/Feasibility reports for few other projects were in progress.

Lunugamvehera Integrated WSP (Rs. 14,681 million) is at design stage, Greater Galle Stage III (Rs. 10, 810 million) is at procurement stage and Deniyaya WSP is at tender evaluation stage where the coverage areas in RSC(S) region.

Pipe laying for Angunukolapelessa Pumping Main from Ambalantota Water Treatment Plant (TEC Rs. 433 million) which consists of supply and laying of DI pipes, fittings, valves and accessories for Angunukolapelessa pumping main is in progress and 19% of laying of pipes has been completed.

North Central

Under Anuradhapura and Polonnaruwa Regional Manager Offices, 30 water supply schemes were in operation. Total number of connections as at end December, 2018 were 121,540 including the 7,415 number of connections given in the year 2018. Billing Target up to December 2018 was Rs.1,095.56 million and its achievement was Rs.1,155.44 million while collection target up to December 2018 was Rs.1,180.56 million and its achievement was Rs.1,215.94 million.

The total asset value of RSC (NC) was Rs.12,652 million in 2018. Kalawewa & Ranavirugama Water Supply Schemes were capitalized and Minneriya & Medirigiriya Water Supply Projects were partially completed. Total capitalized amount in 2018 was Rs. 1,007 million.

Sixty five land plots have been identified and cleared for the JICA phase II WSP, Town East of Polonnaruwa WSP, Greater Anuradhapura North & Greater Trincomalee Integrated WSP, Eppawala, Rajanganaya, Nochchiyagam & Giribawa WSP and Anuradhapura South phase II WSP.

At end of the year, 289 RWS Schemes which are operated by Community Based Organizations (CBO), have been registered under NWSDB. The technical consultations have been provided by the RWS section for many RWS schemes. In addition to the CBO, the RWS district unit is acted as the main technical consultant for the rural water activities initiated by the Department of Community Water Supply in Anuradhapura District. Technical advice was provided for 08 nrs of CBO schemes in Polonnaruwa district. Further, 150 nrs of rain water tanks were installed in CBO schemes. Catchment protection programs were carried out for Mahaweli river tank near the Gallella treatment plant.

There were number of ground water activities carried out in RSC (NC) during the year 2018. Fifty hand pump

repairs and 50 hand pump flushing were carried out in Pradeshiya Sabha Divisions in Anuradhapura District. Under Pibidemu Polonnaruwa project, 26 production wells have to be constructed and 75% of the project has been completed in 2018. Under ground water development activities, 48 no of drilling, 11 hand pump installation, 47 well flushing, 86 hand pump repairs, one feasibility study and 66 detailed hydrological investigations were completed in 2018.

During the year, 75 small scale RO plants were established for schools and religious places and 98 rain water tanks were constructed under the funding of Ministry of City Planning, Water Supply & Higher Education. Also 743 water samples were collected and checked from wells in NCP. Further, 10 RO plants for villages and 200 rain water tanks were constructed under funding of other agencies.

Sixty one contracts were implemented under Pibidemu Polonnaruwa, Utility shifting, CKD, Rehabilitation, Reachable, O&M, NRW, RWS & LBF Funds. The total cost of the works was Rs.396.96 million. Two contracts were completed under Puraneguma programme amounting to Rs.146.98 million.

Water rights were obtained from Department of Irrigation to extract water from Yan Oya for Greater Anuradhapura & Greater Trincomalee Integrated WSP & Anuradhapura North JICA phase II project. Survey work of all identified lands under Towns East of Polonnaruwa WSP was started. 50% of Geo - Spatial Activities relevant to all WSS in North Central Province has also been completed in 2018.

Many productivity improvement activities for Anuradhapura East, Thuruwila WSSs and treatment facilities at Galnewa were in progress. Identifying 8,019 numbers of leaks & rectifying the same, identifying 3,296 defective meters and rectifying 3,203 out of that, correcting 895 numbers of estimated bills and 6,185 numbers of zero bills, and acquiring 58 numbers of connections with arrears over Rs. 50,000.00 bills were contributing to reduce the NRW in the region.

Laboratory facilities & Water Quality activities have been improved to obtain ISO-17025 and necessary training has been obtained. Basic physical, chemical and bacteriological quality analyses were done throughout the region including water quality analysis in lakes for heavy metal and algae at quarterly basis.

In order to uplift the productivity in North Central region, productivity improvement program has been initiated. A workshop was conducted, and an Action Plan was finalized and implemented for the Human Resource Department at RSC (NC).

North Western

Under RH and NRW budgets, augmentation activities of existing schemes (Dankotuwa, Wariyapola), rehabilitations of RSC office, schemes buildings, removing bottlenecks in the distribution system etc. have been carried out for total expenditure of Rs. 45 million.

RSC achieved 90% completion of awarded contracts in Thorayaya, Thoranegedara and Thumbulla pipe extension worth of Rs.82.373 million under city planning funds.

Under CKD funds, pipe extensions in Maho / Nikawaratiya area and 70% of awarded contracts in Hettiarachchigama and Abukkagama WSP have been completed. Total expenditure of CKD budget in 2018 is Rs. 58.69 million. RSC (NW) has also achieved 90% completion of Maragama and Dideniyawatte Rural Water schemes and 50% completion of contracts in Dankotuwa WSS augmentation. The contracts in Madawakkulama RWS awarded for Rs. 32.61 million were also completed.

As rechargeable works, 23 RW schemes have been carried out under Wayamba Development Ministry funds. Under IT development in the region, efficiency and productivity in letter handling in the RSC have been improved. Three stores have been installed in the region. Computer facilities have been provided for 90% of employees. Under training section, 26 training programmes were held for 756 participants during the year.

In O&M area, 70 CBOs were surveyed and MoUs were signed with 12 CBOs for the bulk supplies. The RSC (NW) was able to achieve 120% of its annual connection target (rank 1 within all RSCs of NWSDB in achieving Connection Targets). RSC has Started O&M works in Kurunegala Zone 3 and Ibbagamuwa schemes. Pipe extensions of 15 km (Rs. 15 million) were carried out in Narammala, Nikawaratiya and Giriulla. In 2018, RSC(NW) has taken over the completed projects: GKWSSP- Water, GKWSSP- Sewerage, ADB V- Puttalam, ADB V- Chilaw and Puraneguma- Ibbagamuwa.

Under NRW Unit activities, 22 Scheme models have been prepared and handed over to O&M section, 8 nrs. existing bulk meters have been replaced and 10 nrs. of new bulk meters to be installed as per the analysis of NRW unit (Rs. 10million).

Under project planning, PAC Approval for Puttalam Stage II, Board approval for Chilaw Stage II & Kalpitiya WSP, NPD approval for Bingiriya Udubaddawa WSP, Cabinet approval for Katupotha Bamunakotuwa WSP have been obtained and Feasibility Study was conducted for Wandurapeenuella Reservoir.

Designing works of Dankotuwa WSP, Wariyapola WSP, NHDA schemes, BOI Bingiriya extension, GKWSSP, ADB 5th Pipe Extensions for Rs. 320 million, CKD pipe extensions, Improvements in Kurunegala TP and Giriulla TP and Wayamba Dev. Ministry RW schemes have been carried out during the year.

RSC (NW) has completed M&E works in Kurunegala, Abukkagama, Madawakkulama and Thorayaya WSPs and installing level monitoring systems in Nelumpokuna and Nikawaratiya WTPs (Rs. 30 million).

Under institutional improvements, RSC premises improvements and Establishment of New Manager's Office have been completed. Starting the workshop building for Kurunegala District, securing lands for RSC expansion and applying for ISO 9001:2015 System Certification are the other institution development activities involved during the year.

The RSC was able to secure funds for Katupotha Bamunakotuwa through Korean funds, Wandurapinu Ella Reservoir feasibility & EIA through Govt. funds, Kurunegala North Water Supply Project through Indian funds and Chilaw Stage II through ADB funds.

Central

The total numbers of connections of RSC(Central) were brought to 271,905 in this year with Rs.1.3 million beneficiaries leading to 41% of coverage population in Central province. An amount of 50 million cubic meter water sales encountered during the year with Rs.1,997 million collection with 100% target achievement. ISO 9001:2015 quality certificate was obtained from Greater Kandy water treatment plant in Central region as an achievement.

Several activities were carried out to reduce NRW, such as introducing DMA, Night flow testing, step testing, bulk meter calibration, etc. Around 46.9km of distribution lengths were covered during the night leak survey. More than 61 invisible leaks were detected during the leak survey done on the request of Managers and Area Engineers. A pilot DMA zone was implemented in Eriyagama Water Supply scheme. Several training sessions were conducted and advanced leak detection equipments & GPS instruments were purchased to strengthen the NRW work.

To improve the operational efficiency through the saving of energy and resources, many activities were carried out mainly in Polgolla, Mathale and Maskeliya WSS while transformer and VFD for GKWSS was installed there by improving the service level. Further, 16 bulk flow meters were supplied and installed in the region improving the accuracy of measuring the water production.

Under the institutional development and productivity improvements, many activities like treatment Plants and Office improvements, distribution system improvement and construction of laboratories were implemented mainly through O&M funds.

Distribution pipe line improvement programmes were carried out in Pathadumbara scheme and Walala-Pitiyegedara road under NRW funds amounting Rs. 10.7 million. Furthermore, laying of distribution pipes in Kandy North – Phase I amounting Rs. 2.19 million was completed. Distribution maps in all schemes were updated completely. Renumbering of the connections in the region is totally completed. Water safety plans were established in Galagedara, Polgolla, Naula and Ukuwela WSS. Four nrs. of CBO schemes were acquired to Wilgamuwa WSS and 5 CBO schemes were acquired to Dambulla WSS.

For the improvements of ground water development activities, hydrological investigations for productive bore holes and hand pump tube wells, construction of tube wells and installing hand pumps, bore hole flushing and cleaning, rehabilitation of tube wells, carrying out pumping tests for productive bore holes and open dug wells were implemented where the estimated income for these activities were Rs. 45 million excluding VAT.

Under RWS activities, estimates were prepared for 20 new schemes, technical advice was provided for CBOs and investigations for recommending installation of RO plants, were preceded. The water supply to Samadhi Centre and Katukithula area is under progress. Four chlorinator units were supplied to the CBO schemes by private sector.

Water Safety Plans were being implemented in the region for the surveillance of water quality, water security and safety achievements and they were at different levels in completing the modules during the year. One internal formal audit was also conducted in Nawalapitiya WTP.



Hand Pump Well Construction - Nuwaraeliya

Rechargeable funds allocated for the projects were Rs. 1,075 million, which includes the rehabilitation of University WSS (714.5 million), Samadhi Centre and Kithulgalavillage (55 million) and the improvement of HaragamaWSS (306 million).

To improve the quality of water and distribution of safe water to the public, Chemical analysis for 4,634 water samples were attended for NWSDB requirements while 2,468 samples were done for out siders. Microbiological analyses were also done for 4,222 samples for NWSDB and 2,915 samples for out siders' requirements. In addition, WSP Audit training and awareness programs for leaders of CBOs, Local Authority schemes, and stakeholders; were carried out in the region.

Sabaragamuwa

At present, RSC (Sabaragamuwa) is providing pipe-borne water to the community of Sabaragamuwa province through more than 100,000 water connections and further development activities are going on to enhance the service coverage and cost reduction.

Many NRW reduction activities, such as distribution improvements, replacing of bundle pipes, changing the damaged valves, pipe replacements, connection transferring, etc. were carried out in the RSC. The leak repairing contract (Rs. 20.163 million) for ground reservoir at Panahaduwa - Udawalawa WSS, was completed in 2018.

Gonagala WSS has been commissioned and about 200 connections have been provided by end of 2018.

The construction works under Water Supply & Sanitation Improvement Project (WASSIP) under World Bank funds has been started. It has been planned to provide safe drinking water for about 48,450 people in Sabaragamuwa region under this project. Many constructions were in progress under the RWS, Urban Water supply, Rural Sanitation and Rural water rehabilitation components of of WASSIP Project. Whenever necessary, the RSC Sabaragamuwa has given their support to implement this project.

Greater Ruwanwella Water Supply Scheme which has been awarded Under the funding of Export Import Bank of Korea includes a 4,000 cu.m /day treatment plant. However the water demand in Ruwanwella area is expected to be 7,000 cu.m/day by year 2032. Therefore, existing plant capacity improvement plan is preceded under rehabilitation funds. Initially Rs. 40 million worth rehabilitation activities have been identified and tender documents

were prepared to award in year 2019 to increase the capacity up to 6,000 cu.m/day.

Supply and laying of 4.5km long, 400mm diameter pumping main from Embilipitiya WTP to proposed water tower at Padalangala, a CKD affected area; has been done by NWSDB under CKD funds and 98% of construction work has been completed. The awarded contract amount was Rs. 92.97 million.

The productivity improvement activities were taken place in the regions and RSC office which included awareness programs for basic productivity concepts. Also RSC office participated to "5S" competition organized by National productivity Secretariat and won the 3rd place of Whole Island from the category of Manufacturing & Service sector.

Implementation of water safety plan was commenced in 2015 and continued in the year 2018 in Ratnapura & Kegalle region. According to the water safety plan, many stake holder awareness programmes and school awareness programmes were conducted during the year. In Kegalle region, initially five water supply schemes namely, Ruwanwella, Moronthota, Warakapola, Hiriwadunna and Mawanella were selected. Hazard identification of catchments of all five schemes was completed and system descriptions were studied. Improvement plan for Ruwanwella Water Supply Scheme was prepared and the identified improvements were in progress.

As catchment protection activities, tree planting and erection of display boards were identified. During the year 2018 around 5,000 plants were distributed in Kegalle district and more than 10,000 plants were distributed in Ratnapura district via Pradeshiya sabas and Divisional Secretariets. Another 1,000 plants were planted by NWSDB together with the Department of National Community Water Supply in catchments of CBOs. Technical support for these activities was provided by the Forest Department.



Padalangala WSS

Uva

Originally Uva Regional Support Center (RSC) of NWSDB was established at Bandarawela, and it has been shifted to new office building constructed at Badulla in 2017. Demodara Water Treatment Plant, of which the capacity is 15,000 cu.m/day, was commenced for operation in 2017. Catchment Protection Programs were carried out for Haputhala, Badulla and Diyathalawa WSS's.

There were many Energy Saving Activities carried out during 2018. Reducing electricity cost by adjusting to the tariff system, replacing of inefficient pumps and avoiding pumping during peak hours were some of the energy saving activities practiced during the year. In addition to reducing electricity cost, by implementing the preventive maintenance in all pumping stations thereby cost involved for maintenance and repairing of pumps has also been reduced.

As the NRW activities, introduction of SCADA System to Buttala WSS, augmentation of Mahiyangana water supply project and Badulla, Haliela, Ella IWSP; supply & installation of bulk meters, replacing old valves, rectification of existing house connections, replacement of bundled pipes and relaying of old pipes and purchasing NRW equipment for establishment NRW section were carried out during the year.

Many rechargeable works were carried out under rechargeable fund during the year. Rehabilitation of Eladaluwa quarters, pipe laying for Uma Oya affected areas in Bandarawela WSS, CBO service contracts for Weheragalathanna, and makulalla were carried out with a physical progress 100%. Pipeline extension works were also done for Rathkinda, Agalaoya, Wheheragalathanna WSSs in Badulla and Kumarapura WSP in Monaragala.

Under rehabilitation funds, many rehabilitation works in treatment plants, distribution systems, office buildings and quarters in the region were conducted during the year.

Kuttiyagolla WSP, Sinnamaligathanna WSP (maintained by CBO), Rahangala WSP (maintained by NWSDB), Galauda WSP (maintained by Pradeshiya Saba Kandaketiya) were carried out under RWS funds.

Under CKD funds, supply & installation of RO plants for 13 schools in Badulla, Mahiyanganaya and Rideemaliyadda DS division, construction and handing over of small schemes such as Agalaoya Ihala WSP, Wewatta WSP and Ginnoruwa rain water project were completed in 2018.

Many other projects were carried out with the funds from other sources. Those projects are Rathkinda WSP under puranaguma providing 803 connections maintained by NWSDB, Pallewella – Govindupura RWS Scheme (CB-RWS funds), rehabilitation of RWS Schemes funded by Uva Provincial Council for Gangodagama, Kolonwinna, Kurugamwatiya and Tanwatta; supply and installation of 4 RO plants with capacity of 10 cu.m/day for CKDu affected villages in Monaragala and Badulla District, benefitting 900 people .

In addition to the completed projects, there are many other projects which are ongoing with various sources of funds. Mahakele WSP (rechargeable) under Ministry of Economics Projects, 03 projects under Capital Budget RWS allocations (Boragas, Pelgathathanna, Rahuppola WSPs); improvement of Indigasella and Thotillakatiya RWS Schemes, Ekiriyankumbura & Kuralewela WSP under Puraneguma Project; Makaldeniya WSP for Koslanda land slide affected community, Balagolla WSP and Vilaoya RWS under CKD fund, Kumarapura Extension with coverage of 250 families, are ongoing.

Further, installation of Village RO plants were being progressed in Dambepitiya and Villaoya. Installation of RO Plants to the schools was done under CKDu fund. 14 nrs of rural schools with assistance of Uva Provincial Council to provide RO plants.

Several training programs for leaders of CBOs in 09 DS divisions in Badulla district and 07 GNDs in Monaragala and for the O&M Staff of some RWS Schemes were conducted during 2018. Further, training programme on water safety and safe sanitation were done in two Schools.

Attampitiya Water Supply Project and Distribution Improvement of Demodara WSS were ongoing in the region as foreign funded projects.



Installation of RO Plant

Northern

Regional Manager (Jaffna) and Regional Manager (Vavuniya) are the two regions in the North for O&M

activities. Total population of the Province is 1.24 million. Total connections maintained by NWSDB in the region, is about 24,436 and the pipe borne water supply overall coverage is 9.82% while rural water supply coverage is about 1.17%.

There are two Regional Manager areas (Jaffna & Vavuniya) covers 5 districts namely; Jaffna, Killinochchi, Mullaithivu, Vavuniya and Mannar. The first full scale conventional Treatment Plant (12,000 cu.m/day) was commissioned in Vavuniya and Marakampalai tower & distribution were taken over. There are 31 WSSs under this region. In Vavuniya, 30 valve chambers were raised and constructed with replacement of valves and pipes as a mitigation measure of NRW. In Jaffna, distribution improvements including AC Pipe line replacement and defective meters replacement were done. Pipe line extension of 57.2km were carried out and 1,219 new connections were given. A cost savings of around Rs. 80,000/month was achieved from Energy saving activities while income through energy sale to CEB is Rs.11,000/month after introduction of solar power systems at RM office (Jaffna). Solar power systems were also installed at Peraru WTP and Murunkan Well filed.

Water Safety Plans were implemented for Point Pedro, Vempirai and Mallavi WSS and initiated for Delft WSS and Mathagal RWSS. Many institutional development activities were also carried out in the region. The Regional Laboratory of Jaffna has been improved and being processed for ISO 17025 accreditation for 8 parameters. Board & PAC approvals were obtained to construct a conventional treatment system for Erukkalampiddy and Madhu area to treat ground water rich in minerals. The five RWSS are being monitored by RWS unit-Jaffna and operated and maintained by CBO of each schemes. Pipeline extension work of 5.7 km in Mathagal RWSS under the DS (Jaffna) fund, 14 individual connections in Kadduwan RWSS under the Department of National Community Water Supply funds, pipe line extension of 14 km in Akkarayan RWSS under the DS (Killinochchi) funds have been carried out under supervision of construction division, RSC(N). Ground water improvement activities were carried out for Akkaryan RWSS under MCPWS funds (Rs.2.5 million) and 5 RWS schemes of Mannar district were improved through the funding of Rs. 2.0 million from DS. Awareness programme for CBOs and new connection beneficiaries were provided. Under other activities, bowser supply has been carried out to the affected areas by oil contamination in Chunnakam. Uduppiddy extension funded by local bank supervised by construction division, RSC(N) is almost completed. The

RM Jaffna has received the 3rd Place award for Point Pedro WSP and 4th Place award for RWS Section for World Water Day Competition.

Under the Sector Planning activities of Northern Province, many proposed WSS were originated. Feasibility study for Greater Vavuniya WSS has been completed, PAC approval was obtained and negotiation for water sharing was initiated with Director General of Irrigation Department (Central) for the water source-Lower Malwathu Oya Reservoir. Feasibility study for Greater Mannar WSS in progress and PAC approval for Mankulam WSS was obtained (TEC amount is Rs.28, 381.91million) and MoU with Provincial Irrigation Department for water sharing under way to use Upper Parangi Aru as water sources. PAC and Board paper approval for Greater Madhu WSS was obtained and the TEC amount is Rs.790.62 million. Under the Mapping Works, Erukkalampiddy and Vavuniya WSS transmission and distribution networks have been digitised in ArcGIS. Digitisation works in ArcGIS is initiated for Mannar WSS. Master data base has been updated in ArcGIS. Three days training programme was conducted at RSC (North) by Head Office Mapping Division for 25 participants.

The Planning and Design Section has carried out Design works worth of Rs. 352.4 million under the funding of Rehabilitation, Rechargeable, CKDu and Capital Budget. Among these designed projects, Supply, Delivery and Laying of pipe lines for Madhu Water Supply Scheme is the biggest Project worth of Rs. 95.2 million. Further on, there are 13 projects under design.

The construction division has carried out construction worth of Rs.155 million using CKDu, Rehabilitation and Rechargeable funds. The works are for enhancing the coverage of Mannar and Jaffna Water Supply Schemes. In addition, RO plants were installed in CKDu affected areas in Mannar and Vavuniya Districts.

M&E section have completed tender documents for RO plants, subsurface instruments & Laboratory equipment and M&E Equipment & accessories worth of Rs.30.06 million and ongoing works under this fund are worth of Rs.47.92 million. In addition to above works, M&E section managed pump & vehicle data base of RSC(N), monitoring plant preventive maintenance programs of water supply schemes in RSC(N), technical supports to projects and organizing energy audit programs with the assistance of M&E Section of Head Office.

Ground Water section in RSC (North) carried out construction of hand pump tube wells for resettled families and requirements proposed by divisional secretaries of Vavuniya and Mannar Districts of fulfill

water needs in Northern Province. 28 nos of hand pump tube wells were constructed. For Mankulam City Development works, catering the initial water demand of 500cu.m/day is already achieved by constructing 7 nos of tube wells. Five water supply schemes were selected and considerable portion of source investigation was done. Rs.43.7 million worth of works have been carried out in this year and Rs. 54.5 million was received as income by Ground Water section.

East

RSC (East) O&M activities are managed by four Regional Managers namely; Trincomalee, Ampara, Batticaloa and Akkaraipattu.

The total number of service connections in the RSC (East) has reached to 264,790. Collection of Rs. 1,773.27 million has been reported against the billing of Rs. 1,687.70 million. Totally 70 tenders were handled and 62 numbers of contracts worth of Rs. 345.07 million were awarded.

Under NRW reduction activities, illegal connections, bypasses, malpractices in the meters, adjustments in the domestic and commercial connections were identified in all regions and this was solved by imposing penalty for the same. Replacing of old water meters with new meters and lockable valves along with new meter posts were also carried out under O&M funds. During the year, changing 6,336 defective meters, repairing 18,443 leaks and detecting 44 illegal connections have been carried out in all regions as major NRW reduction activities.

In Trincomalee region, a large number of illegal connections, bypasses, malpractices in the meters, adjustments in the domestic and commercial connections have been identified and penalty was imposed for around Rs.6.1 million from such consumers. Also, the DI Transmission main at Mullipothana was replaced with PE pipes in order to minimize the frequent pipe burst in the Kantale – Trincomalee transmission main. In addition, 11 air valves were repaired and 17 air valves were serviced in Batticaloa region. In Akkaraipattu region, a team with the help of Head office NRW division worked for locating the visible chambers & Air valves along the transmission main.

Along with the above specific activities, distribution improvements; appointing a team to check and replace of defective meters; checking of illegal connections, zero bills & estimated bills; and planned preventive maintenance were done regularly in all the for regions.

Under Energy Saving Programme in Trincomalee Region, undersized electrical cables were changed in Kantale WTP in order to save energy and servicing of Air valves & cleaning of valve chambers were done in the transmission main. The identified 200m stretch transmission main was

rectified at Mullipothana and it helps to increase the pumping flow rate and the production. Preventive maintenance works in all pumping stations were continuously implemented. A significant reduction in the maintenance cost and reduction of pump breakdown period have been achieved. As a result, Rs. 0.70 million saving per month has been achieved in the Electricity bills of Kantale WTP.

Under Energy Saving Programme in Ampara region, installation of capacitor bank at Bangalawadi WTP, installation of grid solar photovoltaic system at regional office at Ampara and modified operation of intake pump at Dehiyathakandya WTP were carried out as energy saving programmes.



Air valve servicing in Transmission main at Batticaloa

Under the Rehabilitation budget, Rs. 75.0 million and Rs.65.0 million has been allocated for rehabilitation works and NRW activities respectively for the year.

Under the Trincomalee Augmentation Project, Rs.600 million has been allocated to Trincomalee region, out of which Rs. 160.0 million has been allocated for year 2018.

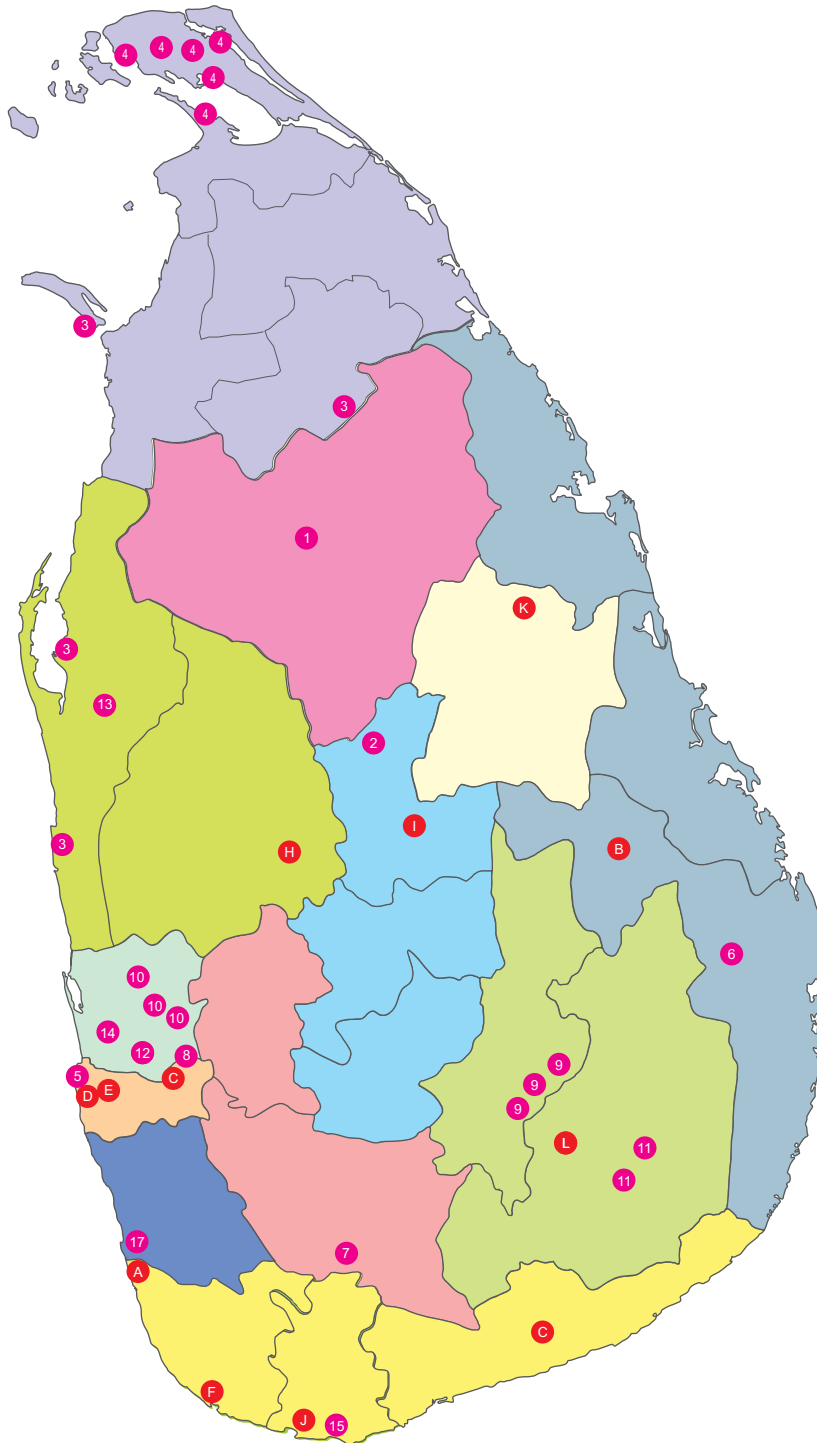
Under rechargeable works, through the funds received from various institutions, Rs. 14.9 million for Trincomalee region, Rs. 21.3 million for Batticaloa region and Rs. 6.0 million for Akkaraipattu region; pipe line extensions of around 17.5 km, 10.0 km and 3.25 km respectively were implemented during the year.

In relevant to reducing stock levels at regional stores, unserviceable and non-moving stocks have been identified during the stock verification of 2018 and will be removed after the board of survey. Excess slow moving materials are being shared with other regions when requested. Centralized data base has been established with respect to available materials in all regional stores and all supply (uPVC/DI) tenders are reviewed with the data base before calling tenders. Various asset management activities were also implemented in the year 2018.

The Akkaraipattu Region Consumer Relation section of Commercial Section has obtained the first place in best consumer relations office category in World Water Day Competition in 2018.

Ongoing Foreign/ Local Bank Funded Water Supply Projects

Accomplishments of Major Water Supply Projects under the Ministry of City Planning, Water Supply & Higher Education
Location Map of Foreign-funded/ Local Bank Funded Projects under Construction/ Augmentation during 2018



Foreign Funded Projects

Project Name	Funding Agency
1 Anuradhapura North WS	JICA
2 Greater Dambulla WS - Stage I	India
3 Dry Zone Urban Water & Sanitation	ADB
4 Jaffna - Kilinochchi WS & Sanitation	ADB
5 Greater Colombo Water & Wastewater Management Improvement Investment	ADB
6 Integrated WSS for the Unreserved area of Ampara District Phase III	ADB
7 Badulla, Haliela & Ella WS	US Exim Bank
8 Gampaha, Attanagalla & Minuwngoda WS	China
9 Ambatale WS Systems Improvement & Energy Saving Project	AFD
10 Anamaduwva Intergrated WSP	Spain
11 Kelani Right Bank WSP - Stage I I	France
12 Matara Stage IV	NDB
13 Aluthgama Mathugama Agalawatta Intergrated WSP	Exim bank of India
14 Polgahawela, Pothuhera & Alawwa Intergrated WSP	India
15 Grater Matale WSP	French
16 Kandy North Pathadumbara WSP	China
17 Deduru Oya WSP	Korea
18 Replacing of Transmission and Distribution Mains from Orugodawatta to Kaduwela	Austria
19 Katana WSP	China

Local Bank Funded Projects

A Bentota WSP
B Ampara Distribution Network WSP
C Ruhunupura Distribution WSP
D Colombo Water Supply Improvement Project
E Towns East of Colombo District WSP - Package I
F Galle Cluster WSP
G Avissawella & Kosgama Integrated WSP
H Galagedara / Mawathagama WSP
I Laggala New Town WSP
J Weligama WSP
K Medirigiriya WSP
L Attampitiya WSP
M 3.5 billion project (22 Projects)

FOREIGN FUNDED WATER SUPPLY PROJECTS

1. Anuradhapura North Water Supply Project (Phase II)

The main scope of Anuradhapura North Water Supply Project Phase II is to ensure supply of safe pipe borne drinking water to a population of around 193,319 (in 2040) in DSDs of Padaviya, Horowpothana, Kahatagasdigiliya and Kebithigollewa in Anuradhapura District covering 119 GNDs. Kallikulam and Vedivaitthakallu GN divisions in Vavuniya District will also be partially covered under this scheme in addition to the 119 GNDs.

The donor agency of the project is JICA and the initial project cost is JPY 19,409 million and Rs.4,732 million. The loan was effective from 14th June 2017 and the consultancy contact for design and procurement was commenced on 1st of May 2018.

The project components are construction of 34,800 cu.m/day intake at Yan Oya Reservoir left bank canal, construction of 16,500 cu.m/day capacity water treatment plant at Wahalkada, electrical and mechanical installations, instrumentation and automation system for intake and water treatment plant, construction of 13 nrs. of ground sumps, laying of approx. 145 km of DI transmission network and approx. 1,100 km of HDPE distribution network. Detailed design and procurement is expected to be finished in February 2020.

The Project has been divided into five packages. The physical and financial progress of the design and procurement consultancy contract at the end of 2018 was 30% and 11.62% respectively.

2. Greater Dambulla Water Supply Project - Stage I

The Greater Dambulla WSS– Stage I is a design and build contract and was commenced in March, 2012. It was funded by Exim Bank of India and People's bank of Sri Lanka. Total project cost is US\$77.8 million.

The objective of this project is to implement the water supply scheme to cover Dambulla development area. The beneficiaries will be 174,100 people living in Dambulla, Galewela, Kekirawa, Palagala, Palugaswewa and surrounding areas.

The project components are 65,000 cu.m /day capacity intake, 32,000 cu.m/day capacity fully automated water treatment plant with 2,500 cu.m clear water tank including secondary pumping station and ground reservoir with 1,350 cu.m and other 6 ground reservoirs and 2 elevated towers for a total capacity of 5,500 cu.m.

0.7 km long DI raw water transmission main with 900 mm dia., 71.5 km long DI transmission mains of 450mm to 250mm dia., 218 km long distribution mains of 280 mm to 63 mm dia. uPVC pipes and operational buildings (an OIC office, maintenance office, staff quarter and 03 operator quarters).



Intake

The Intake, Raw Water Main, Water Treatment Plant, Inamaluwa Secondary Pumping Station and Two Distribution Zones (Inamaluwa and Sigiriya) were pre-commissioned in August, 2017 and all other reservoirs, towers, transmission and distribution systems were 100% completed by 31st March, 2018 and currently being operated by the NWSDB.

3. Dry Zone Water Supply and Sanitation Project (ADB 5th Project)

NWSDB is implementing the DZUWSP for water supply and sanitation improvements in North Western and Northern Provinces. Under this project Vavuniya, Mannar, Chilaw and Puttalam towns were to be provided with enhanced water supply and sanitation facilities. The total cost estimate of the project is USD 144.73 million (Approx. Rs. 17,196.39 million). The overall physical and financial progress at the end of December 2018 is 96.22% and 95.35% respectively.

Vavuniya : The water treatment plant of capacity 12,000 cu.m/day and the impounding reservoir with capacity of 3.83 MCM across the Peru Aru stream including causeway construction have been completed. Both surface water and ground water to be combined to provide 9,800 cu.m/day of treated water to 15,950 families in 2018. The major elements consist of 3 new water towers, a reservoir and 245 km of distribution pipelines which are in completion stage out of which about 8.5 km distribution line and 10.6 km transmission main are remaining. The sanitation improvement component has been constructed planning to cover 109,432 numbers of beneficiaries in the year 2035.

Mannar: All the original scope of work has completed handed over to O&M division of NWSDB. After commissioning the project in 2017, upon request by the

general public, it was decided to extend the transmission and distribution system up to Pesalai which are now being constructed. Sanitation component is in progress.

Total number of beneficiaries are 55,000 after the commissioning the scheme in 2017. Total of 90,000 numbers of beneficiaries will be covered in year 2035.

Chilaw: All the construction work including sanitation component has been completed and handed over. Additional scope of work has been implemented for distribution system extension of about 40 km.

Puttalam: All the construction work including sanitation component has been completed and handed over.



Puttalam Water Treatment Plant

4. Jaffna - Kilinochchi Water Supply & Sanitation Project

The Jaffna Kilinochchi Water Supply and Sanitation Project (JKWSSP) was restructured due to the change of water source from Iranamadu tank to a desalination plant and to strengthen the water supply component. The proposed changes are cancellation of water treatment plant and bulk water transportation from Iranamadu tank originally cofinanced by the Agence Française de Développement (AFD); exclusion of the sewerage component; inclusion of a desalination plant, household water connections, water resource management and outreach activities. Based on the revised cost estimates and the cancellation of the AFD financing, the government has requested additional financing of \$120 million from ADB to meet the change in project scope and the additional loan was signed on 15th December 2017. The closing date of current loan had been extended from 14 August 2017 to 31 December 2020 to complete the revised project scope through the current project and the proposed additional financing.

The total restructured project cost estimate is US\$ 266 million (additional financing USD 120 million from

ADB and 33 million USD from GoSL).



Pipe laying along A9 Road

Out of the major packages under this project, five packages including AGM office, staff quarters, two elevated water tower packages for 15 towers and supplying and laying of distribution networks are completed. Three contract packages including two water transmission mains (187 km) and distribution networks (248 km) are on going. Under the Iranamadu Component, Iranamadu tank head works are completed. The balance package Reverse Osmosis Plant at Thalayiadi (24,000 cu.m / day) and elevated water tower package for 5 of the towers are at awarding stage. Jaffna city area (285 km) and M&E SCADA are at procurement stage. The Chunnakam Water Supply Scheme is at document preparation stage. Overall physical & financial progress of the Project as at the end of 2018 was 37.34% & 19.51% respectively.

5. Greater Colombo Water and Wastewater Management Improvement Investment Programme (GCWWMIIIP)

The Government of Sri Lanka initiated the Greater Colombo Water and Wastewater Management Improvement Investment Program (GCWWMIIIP) with the recommendation of NWSDB and with the financial assistance of the ADB and GoSL. In this project, it is expected to rehabilitate the water supply network in Colombo city area with a view to reduce the present high level of NRW below 18% and to increase of water supply availability and efficiency in Colombo city. It is also intended to establish DMA to enable NWSDB to monitor NRW on a continuous basis.

GCWWMIIIP project mainly covers CMC area of Colombo, which has been divided to 78 DMAs for easy operation & maintenance, and these DMAs establishment are executed by four major contract packages. Key deliverables of the project are replacing the 600km pipe, installation of seventeen System Input Meters at the Colombo city boundary, relocating the

water meter and replacing the defective water meters, calibrating and updating of the GIS network and construction of buildings and training center for supportive activities.

The overall physical progress for Project 01 and Project 02 is 53% and 23% respectively and the financial progress for Project 01 and Project 02 is 60% and 31% respectively.

The pipe laying work is ongoing in 26 DMAs and construction almost completed in 21 DMAs, in which 9 DMAs NRW deduction activities are assessed and the results were obtained. As per the results, completed 4 DMAs indicate that the NRW has reduced below 18%.

In addition, under the supportive activities, construction of many buildings were in progress and some of them were completed during the year.



Ellie House area engineer's office

6. Integrated Water Supply Scheme for the Unserved Areas of Ampara District - Phase III Project

This project is to serve about 200,000 people living in the un-served areas of Ampara District and some areas of Monaragala and Batticaloa Districts as well. Main components of the projects are construction of 27,000 cu.m/d treatment plant and intake, elevated towers (Koneshapuram and Bakkiella 1,000 cu.m, Namal Oya, Inginiyagala, Central Camp 750 cu.m., Tottama 600 cu.m.), Water Sumps (Himidurawa 2,500 cu.m, Paragahakele, Dhadayanthalawa and Gonagolla 1,600 cu.m.), supply and laying of DI transmission mains for 100km and supply and laying of PE pipes and fittings for distribution system (1119 km). This project can provide nearly 40,000 new water connections and total cost of the project has been estimated as Rs. 20,825 million under foreign component and 6 nrs. of Water Towers construction projects are in progress under local component.

The project has achieved 99.5% physical progress and 76.42% financial progress as at end of December 2018. Project is on schedule, and all the works would be

completed by end of August 2019.

7. Badulla, Haliela and Ella Integrated Water Supply Project

Badulla, Haliela and Ella Integrated Water Supply Project is a design and build contract and was commenced in March, 2013. It was funded by Exim Bank of India and People's bank of Sri Lanka. Total project cost is Rs. 11,880 million. The objective of this project is to implement the water supply scheme to cover Badulla, Haliela and Ella development area benefitting approximately 110,000 people.

The water supply system originates at the new Demodara Dam, on Badulu Oya (Badulla River). Raw water is transferred to water treatment plant of 15,000 cu.m/day capacity at Demodara. Storage and distribution facilities in the integrated water system included eight bolted steel tanks and skid-mounted booster pump stations at multiple remote sites. The pipeline system included 46 km of transmission, trunk mains and 91 km of distribution system lines. Further, 2,090 new service connections have been provided due to the augmentation of existing treatment plant and the new treatment plant. The new RSC office building and seven staff quarters are completed being accommodated. Rehabilitation of existing treatment plants and intake structures at Bandarapura, Eladaluwa, Madiriya and Haliela were also completed by the project. Construction of the project was completed on November 2017 and the one year maintenance period was successfully completed.

The project enhanced the continuous water supply and mitigated the prevailed issues. A long anticipated water demand to Ella tourism zone was enhanced and an energy saving from the replacement of existing pumping system with the new gravity system is another gain of the project.

8. Gampaha, Attanagalla & Minuwangoda Integrated Water Supply Scheme

The scope of the Project is to provide safe and reliable drinking pipe borne water to 449 GNDs in Gampaha, Attanagalla, Minuwangoda DSDs and part of Meerigama, Mahara DS Divisions. The project duration is from 20th February, 2017 to 19th February, 2020.

It is expected to provide new service connections for 300,000 persons and service level improvement of existing system for 100,000 consumers. Water source is Basnagoda Reservoir in Attanagalu Oya.

The Project components are 3.5 MCM capacity impounding reservoir, 85,000 cu.m/day capacity intake facility, 54,000 cu.m/day capacity water treatment plant, 10,000 cu.m capacity high level reservoir, five nrs. of 1,500 cu.m capacity elevated water towers, 89.2 km DI gravity transmission main, 630 km pipe laying, regional office, area engineer's office, two OIC offices and five quarters.

The main contractor has almost completed the design work and construction of the treatment plant components was commenced. Some of the sub projects have been awarded and work in progress while few other are at procurement stage.

The extend of inundation for the Basnagoda Reservoir is about 115 hectares, accordingly 117 land plots in the Attanagalla DSD and 282 land plots of the Ruwanwella SDS are acquired. Further 35 families in Attanagalla Divisional Secretariat Division and 62 families in the Ruwanwella DSD shall be evacuated from their lands. A cabinet paper is to be submitted for provisioning of relief to the affected families.



Water Supply Scheme

9. Ambatale Water Supply Systems Improvement & Energy Saving Project

The purpose of this project is to enhance the reliability of production, introducing Energy Saving measures & improving the Efficiency of the conveyance facilities at Ambatale Water Supply System. The GoSL undertaken AWSSIESP with the assistance of ADB and AFD who is the co- financier of the Project. The total estimated Project cost is US \$100 Million that divided among Foreign and GoSL, with 70% and 30% respectively.

This project consists of five contract packages, namely 1) Design Review & Construction Supervision Consultancy Service (DRCSC), 2) Construction of Gothatuwa 15,000 cu.m Reservoir and Booster pump station with supply and laying of 5 km, 1200 mm DI Pipes (ICB - 03), 3) Supply and laying of 9km DI pipes (1,200mm dia.) and Accessories from Ambatale to Ellie House Reservoir (ICB - 04), 4) Design and Build Contract for Reliability Enhancement &

Energy Saving of Amabatale Production Facilities – Electrical, Mechanical, Instrumentation & Civil Works (ICB - 05) and 5) Supply of Equipment & Machineries to Western Production, NWSDB (ICB – 06), and all of the five packages have already been awarded.

DRCSC Consultancy Contract commenced on 01st June, 2016 and indicated slow progress. Experts were not mobilized as per the original schedule since the other construction contracts were delayed due to numerous reasons.

The awarded ICB-03 contract was mutually terminated due to poor performance and the NWSDB is looking for the possibilities to award the contract to the next substantially evaluated lowest Bidder of this Contract. Further, as a consequence of the delay of payments caused due to the Addendum of Loan Facility Agreement in between AFD and the Ministry of Finance, the contractor initiated Termination of Contract, ICB-04 which was commenced in 2016 and the NWSDB is negotiating with the Contractor to re-commence the works with a mutual Agreement. ICB -05 and ICB – 06 Contracts were also awarded in the end of 2018.

However, the overall Project is far behind the schedule and the overall physical project progress and Financial Progress are 10.84% and 11.63% respectively.

10. Anamaduwa Integrated Water Supply Project

The project is funded by Government of Spain and Hatton National Bank in Sri Lanka. The project is implemented under NWSDB and has been designed to increase access to safe pipe-borne water supply facilities in the Puttalam & Kurunegala districts.

The proposed Anamaduwa Integrated Water Supply Project will cover a population about 81,700 addressing the drinking water issue in Anamaduwa Divisional Secretariate area and surrounding areas.



Anamaduwa Tower

The Anamaduwa Integrated Water Supply Project is to construct a new intake at Inginimitiya reservoir with a capacity of 12,500 cu.m/day, a modern full treatment plant with capacity of 11,000 cu.m/day including

wastewater treatment, 1 km long raw water main, 61 km long clear water transmission main, service water towers with capacities of 1,500 cu.m, 1000 cu.m, 300 cu.m and 328 km long distribution system to cover 125 GNDs of Anamaduwa, Kotawehara Nawagaththegama, part of Galgamuwa, Puttalama, Mundalama and Mahakumbukkadawala divisions including all electro-mechanical equipment which are included in the proposed Anamaduwa Integrated Water Supply Project.

Detailed design for transmission and distribution systems & towers along with geotechnical & hydrological investigations are completed. Construction of all four towers have been started and predicted to be completed before end of 2019 while 50% of pipes are imported and laying works are going to be started within couple of months. The overall physical and financial progress of the project as at end 2018 is 25% and 25.8% respectively.

1.1. Kelani Right Bank Water Supply Project - Stage 2

The Kelani Right Bank Water Supply Project Stage II is Plant & Design-Build contract for Civil and M&E works, with primary objective to enhance the water supply capacity of Towns North of Colombo where there is an increasing demand, by constructing a new drinking water treatment plant of 180,000 cu.m /day capacity in the vicinity of the existing one including all mechanical, electrical and control systems. The purified water shall be distributed to Kelaniya, Kadawatha, Mahara, Wattala, Peliyagoda, Ragama, Biyagama, Welisara, Kandana, Jaela, Pamunugama, Ekala and Katunayake. Number of beneficiaries are 1,750,000 with 120,000 of new water connections.

The project was commenced on 23rd January 2017 and the cost is approximately Rs.32,700 million. The funding agencies are Credit Agricole Corporate and Investment Bank of France, HNB and GoSL.

Under the project, improvements to the transmission mains network is done by laying of approximately 26 km of DI pipes and by the end of year 2018, 50% of the laying is completed.

To improve the quality of river water at intake of the treatment plant, Pattivila canal diversion to downstream of intake and BOI Treated Effluent Line diversion to downstream of salinity barrier were proposed. IEE Study has to be carried out according to the recommendations of CEA, and the work involved enormous time causing delay in construction progress. Delay in paying Custom Duties has also affected the pipe laying progress.

Funding for feasibility study & EIA for the proposed Wee Oya Reservoir at Kegalle district and completion of the

existing salinity barrier Ambatale, were in the original scope of the project. But Irrigation Department has undertaken the same and will be handled by Climate Resilience Improvement Project (CRIP).

The overall physical and the financial progress of the project as at end 2018 are 55.2% and 55.6% respectively. The project is expected to commission in year 2020.



Water Treatment Plant

1.2. Matara Stage IV Water Supply Project

Objective of this project is to increase the level of service and service coverage and to achieve effective & sustainable use of water in proposed service area in Matara District & a part of Hambantota District. The project is implemented with the financial assistance of NDB and the Total Estimated Cost of the Project is Rs. 18,208 million (Rs. 14,000 million- foreign and Rs. 4,208 million local). The contract period is 36 months (excluding 90 days O&M period) and the project was commenced on 11th October 2017.

The present service coverage of existing Matara - Mirissa integrated water supply scheme is a population of 284,808 and it has been estimated to cover additional 285,000 population in year 2046 in divisional secretary areas of Matara, Thihagoda, Devinuwara, Dickwella, Weligama, Welipitiya, Malimbada, Kamburupitiya, Kirinda-Puhulwella, Athuraliya, Beliatta & Tangalle under the new project.

Nilwala River is the water source of the project. The main components are Intake(60,000 cu.m/day) at Katuwangoda, treatment plant (30,000 cu.m/day) at Katuwangoda, raw water main (approx.- 300m), transmission main (approx. 78 km), distribution system (approx. 100km), 06 nrs. of ground reservoirs, and 04 nos. of water towers. All the structures, including pipe lines will be constructed to support 60,000 cu.m/day but the treatment plant capacity will be 30,000 cu.m/day under this stage (Stage I).

Project Staff has been established with required staff. Construction of salinity barrier, intake, treatment plant, Pipe laying of transmission main and ground reservoir at Yatiyana have been commenced in progress. Overall physical & financial progress of the project as at end of 2018 was 12% & 24% respectively.

13. Aluthgama Mathugama Agalawatta

The objectives of this project are to provide safe drinking water facility to meet the increasing demand for water in 269 GN Divisions of Mathugama, Dodangoda, Kalutara, Beruwala, Agalawatta and Madurawela DS areas by expanding the production capacity of Kethena Water Treatment Plant and to mitigate the current salinity intrusion issue by transmitting raw water from Kuda Ganga and construction of new intake at Kolemodara.

The project is designed to provide 32,000 new water supply connections and improved service facilities for 573,000 beneficiaries.

This project is financed by Exim bank of India, Bank of Ceylon and GoSL. Total estimated cost is SL Rs. 32,278 million. The project was commenced on 15/05/2017 & planned to be completed on 14/05/2020.

The main components of the project are Construction of new intake at Kolemodara and raw water transmission system to Kethena water treatment plant (the total capacity of the Kethhena water treatment on completion of the project will be 74,250cu.m/day) rehabilitation of Thebuwana intake & Kethhena existing water treatment plant with new WTP having 3MGD capacity; 2 nrs. of reservoirs, 3 nrs. of water towers, 58km transmission mains (800/300mm dia. DI/PE), 260 km distribution system, offices & staff quarters and Complete automation with SCADA system.

Construction works of the Kolemodara new intake, Kethhena water treatment plant, Dodangoda ground reservoir, water tower sites at Mathugama-Kanda, Agalawatta, Neboda and transmission main from Beruwala to Darga-Town have been commenced and work is in progress.

The overall physical & financial progress as at end 2018 are 20% and 38% respectively.



Foundation Excavation Neboda Water Tower

14. Polgahawela Pothuhera & Alawwa Integrated Water Supply Project

The Polgahawela Pothuhera & Alawwa Integrated Water Supply Project is a Plant, Design & Build contract for Civil and M&E works and was commenced in March, 2017. It is funded by Exim Bank of India and Bank of Ceylon. Total project cost is US\$ 108 million. The objective of this project is to implement the water supply scheme to Supply & Distribution of safe drinking water to 162,725 people within 167 GNDs in Polgahawela, Alawwa, Kurunegala, Weerambagedara and Mallawapitiya DSDs.



Water Treatment Plant site

The project components are 31,000 cu.m/day capacity intake at Karadana, 29,000 cu.m/day capacity fully automated conventional water treatment plant, 6 ground reservoirs and one elevated tower with total capacity of 5,175 cu.m, 700 mm dia. 1.5 km long DI raw water transmission main, 42 km long DI transmission mains, 320 km long distribution mains and operational buildings (area engineer's office, OIC building at Alawwa, OIC building at Polgahawela, admin. building at WTP, 02 staff quarters).

The intake, raw water main, water treatment plant, clear water transmission and 4 reservoirs are in progress. The progress of intake and WTP are 3% and 4.2% respectively. The overall physical and the financial progress of the project as at end of December 2018 are 39.39% and 36.37% except advance recovery of 12.26%. The project is expected to complete in March 2020.

As general issues faced during 2018, GOSL funds was not available on time while the land acquisition was progressing slowly.

15. Greater Matale Project

The project commenced its works on 17th April 2017. During year 2017, the project moved on with the design activities and the construction works commenced in April 2018.

This project comprises of five treatment plants and five intakes, five separate distribution systems with ten service reservoirs; within Matale District. The project expects to provide safe drinking water, covering the areas of Matale, Raththota, Ukuwela, Pallepola, Yatawatta and Naula DS divisions.

The contract amounts EUR 105,645,791 + Rs. 8,210,959,043 and the contract period is 36 months. The project is a Design and Built type contract, where the initial design was done by Sector Planning Section of RSC (Central) of NWSDB. The part of the project has to be done under GOSL funds, and Rs. 5,081 million has been allocated for the same.

The project progress is satisfactory, and follows the base line program. Construction works of treatment plants and intake structures, pipe laying and land acquisition works are in progress.



Ukuwela Treatment Plant

The water source for 04 water supply schemes is Mahaweli river and approval has been granted for extraction of required quantity as well. However, the proposed water sources for Rattota water supply scheme are still under negotiations.

Delay in interim payments and pipe supply due to unavailability of funds has become a critical issue for the move of the project.

16. Kandy North – Pathadumbara Integrated Water Supply Project

KNPIWSP covers the northern part of Kandy District which includes 6 DSDs, Pathadumbara, Pujapitiya, Akurana, Harispattuwa and part of Gangawata Korale and Galagedara. The Project will be benefited for a population of 474,000 in year 2035. This project would

increase the production of Greater Kandy Water Treatment Plant from 50,000 cu.m/day to 96,000 cu.m/day thereby increasing the water supply of Kandy North region by almost 100%.

KNPIWSP is to be implemented with the funding of Exim Bank of China and the government of Sri Lanka. Contract was awarded on 16th June 2015 with a contract sum of USD 194,830,918.47 plus Rs. 8,356,251,478.00 and GoSL funds of Rs. 6,352,797,326.84. Loan agreement was signed and the loan has been effective from 29th, May 2018.

Scope of the project mainly consists of design & construction of water treatment plant, 28 service reservoirs with total capacity of 7,700 cu.m, 16 new pump houses, improvement of 6 existing pump houses, distribution lines with total length of 567 km, transmission lines with total length of 86 km and Intake improvements.

Though the advance payment is in progress the date of commencement is still not finalized. However the main contractor has mobilized for implementing the preliminary activities such as soil investigation, road mapping and surveying works which are required for designing. Staff recruitment, approval for road clearance and land acquisition is in progress. Total physical progress is about 7.42% up end December, 2018.

It has been a serious issue for the progress of the project as the advance payment is hold at the External Recourse Department (ERD) due to insufficient fund allocation in year 2018.



Site Layout for the improvement of WTP of KNPIWSP

17. Deduru Oya Water Supply Project

Deduru Oya WSP is a design and build contract and was commenced in January, 2017. It is funded by Exim Bank of Korea. Total project cost is Rs. 10,227 million (Foreign - USD 58 million & GoSL Rs. 1,326 million).

The Objective of the project is to provide safe drinking water to people live in Mahawa and Polpithigama DS Divisions. The beneficiaries of the project are 97,700 people as by the design year 2032. It is expected to provide drinking water to CKD affected people in the project area by implementing the project.

The project components are 34,500 cu.m/day capacity Intake, 15,000 cu.m/day capacity Water Treatment Plant, 3 elevated water towers and a sump for storage of 3,750 cu.m , 39 km long transmission mains, 266 km long distribution system, operational buildings (OIC office and one quarter at Polpithigama and 2 quarters at WTP).

The overall physical progress of the project is 50% and it has been planned to complete the construction of structures at the end of February, 2019. The target date of project completion is 15th March, 2020. However, delay in clearance of imported material has affected to the progress of pipe laying work.

18. Replacing Of Transmission And Distribution Mains From Orugodawatta To Kaduwela Project

The main Objective of this Project is service level improvement for 1.5 million water consumers in Kaduwela, Kolonnava and Colombo City area, minimizing inconveniences for water consumers by eliminating frequent pipe line bursts in very old water transmission lines.

The project replaces old water transmission lines from Labugama and Ambathale to Colombo city and water distribution mains from Orugodawatta to Kaduwela, in parallel with Rehabilitation and Improvements to B-435 road implemented by RDA.

The main activities of this Project are supply and laying of 10.7 km of 1,200 mm dia. DI pipes, 3.96 km of 1,000 mm dia. DI pipes for replacing of transmission mains; and 16.25 km of 355 mm dia. HDPE pipes and 19.37 km of 160 mm dia. HDPE pipes for feeder mains and distribution mains. In addition, supply and laying of another 4.4 km with diameters varies from 63 mm to 350 mm for Junction connection transferring is also included in the project activities.

The total project cost is Euro million 50.83 including provisional sums and physical contingencies, and the project was funded by Uni Credit Bank of Austria (85% of

the cost) and Peoples bank of Sri Lanka (15% of the cost). The Commencement date of the Project was 3rd of September 2018 and the project duration is 24 months. The Physical Progress and the Financial Progress of the project is 7.4% and 22.1% respectively by the end of year 2018.

19. Katana Water Supply Project

Katana water supply project is a design and built project. Under this project, safe drinking water is to be supplied to people living in 46 GNDs in Katana DSD. The number of beneficiaries in the project is 156,753 populations at the year 2020 and 207,887 population at the year 2035. It is planned to provide 39,100 new connections in 2020.

Project Scope consist of supply and laying 252 km of transmission & distribution pipe lines, supply of 180 km of PVC pipes for infilling pipe lines, construction of 3 elevated water towers with capacity of 2,000 cu.m, a pump house, two OIC office buildings at Demanhandiya and Raddoluwa with stores buildings, one OIC quarter and 3 plant operator quarters, supply and installation of 6 secondary pumping sets with surge tanks, Chlorinators, generators, SCADA systems and other related M&E Works.

The total project cost is about Rs. 9,500 million and funding source is China Development Bank (85%) & Bank of Ceylon (15%). In addition to that GoSL component of Rs. 2,031 million is allocated to the project. The project commenced on 16th April 2018 and project duration is 2 years.

Project was running smoothly during the year within the targeted physical and financial progress limits. At the end of 2018, expected physical target was 25% while the achievement was 26.2% which was beyond the targeted progress. There are several issues including unavailability of funds for GoSL component which are being faced by the project, affecting its progress.



Water Tower at Polpithigama

LOCAL BANK FUNDED WATER SUPPLY PROJECTS

1. Bentota Water Supply Project

The objective of the project was to extend distribution main pipes along Galle-Colombo road about 9 km length and approximately 29km of distribution pipe lines in interior by roads of 22 GNDs in Bentota DS division from Kosgoda to Bentota Bridge. The total project cost was Rs.1,239 million. The Project was executed through a loan obtained from National Savings Bank. Other components of the Project was, supply & installation of surge vessel & accessories at Baddegama and Booster pumps and accessories at Keraminiya Booster Pumps Station. The works were completed and handed over in October 2017 to O&M section for connections. Expected number of connections are 3,000 and number of beneficiaries are 15,000. Further, 1000 consumers have already registered requesting connections and 70 connections have been provided.



Completed Booster Pumps installation at Keraminiya Booster Pump Station

2. Galle Cluster Water Supply Project

This project is being implemented under Local Bank Funds and Uragasmanhandiya, Gonapinuwala, Dikkumbura and Weligama are the sub project areas under Galle Cluster Water Supply Project in Galle and Matara districts. It was awarded for an accepted contract sum of Rs.1,595.26 million plus Rs. 159.53 million as 10% contingencies. The construction work commenced on 15/03/2017 and intended completion date is 19/03/2019. The financing is obtained from two local banks (Peoples Bank and Bank of Ceylon).

This project is intended to cover 82,000 beneficiaries in 55 GNDs altogether and expected numbers of connections are 20,000.

Main project components are Supply of 80.09 km PVC/DI pipes valves & accessories, laying of total length of 100.17 km PVC/ DI pipes and accessories, supply & installation pumps at Uragasmanhandiya, Baddegama, Kowulhena,

Wakwella and Weligama. Further, 100 cu.m capacity ground reservoir & high lift pump house at Uragasmanhandiya and 225 cu.m ground reservoir, caretaker quarters and pump house at Weligama are to be constructed under the project scope.

The overall physical & financial progresses achieved in the project during the year 2018 are 23.01% and 37.57% respectively.



Concreting the Base of Ground Reservoir in Weligama WSP

3. Ampara Distribution Network WSP

Ampara phase III Project (2010 -2014) completed the construction of main components (27,000 cu.m/d treatment plant and intake, water sumps, supply and laying of DI transmission mains for 100km and supply PE distribution network length of 698 km).

However due to the unavailability of necessary funds, it was remote to supply and laying of required distribution system. Final endeavor of the project is 40,000 new connections for needy people living in the area. Therefore, GoSL decided to initiate the Ampara Distribution Network Water Supply Project under the funds from several local Banks of Sri Lanka.

Accordingly, under Ampara Distribution Network project, NWSDB awarded the construction of 1,119 km distribution network, supply of 527 km length PE pipes, necessary fittings, specials, quarters for several categories of NWSDB staff, in several packages.

Ampara Distribution Network Water Supply Project was on schedule and all most all the works were completed by 30th September 2018. Further, 12,000 connections have also been provided as at 31st December 2018.

4. Colombo City Water Supply Improvement Project - Phase I

Colombo City Water Supply Improvement Project - Phase I was implemented to improve the existing Colombo City Distribution network in Kollupitiya, Fort, Galle Face, D.R. Wijewardena Mawatha, Borrella and Union Place areas to cater future developments by considering the year 2040 demands. Under this project it

is planned to lay approximately 6.1 km DI pipe, construct five numbers bridge crossings, two no of railway crossings and 3.6 km length of HDPE pipes. The total project cost is USD 6.3 million + Rs. 1,948 million and implemented under the aid of local Bank funds. Physical progress of the project is 100% and financial progress is 99.2%. Project was delayed due to objection from CEB to cross a 132 KVA power cable.



5. Towns East of Colombo District WSP

Towns East of Colombo District Water Supply Project is implemented with the aim of providing safe pipe borne water to an estimated population of 373,000 in Homagama, Kaduwela, Padukka, Seethawaka and Horana DS areas. Over 91,000 water supply connections are proposed to be provided by this water supply project.

The project consist of 03 contract packages and the project cost of Package-01 (transmission main – 4 km and distribution main – 229 km), Package 02 (transmission main – 8 km, distribution main – 10 km, ground reservoir – 18,000 cu.m capacity and buildings) and Package 03 (Distribution main – 400 km and house connections - 10,000) are Rs.5,170 million, Rs. 4,823 million and Rs. 10,049 million respectively.

All the three packages were in progress and as at end 2018, Contract Package 1 - Was having Physical progress of 94.5% & financial progress of 64%; Contract Package 2 - Was having physical progress of 39.92% & financial progress of 40.30%; and Contract Package 3 - Was having physical progress of 81.01% & financial progress of 65.40%.



Steel Struss Work at Bridge no. 33/3

In spite of all the constraints faced, it is programmed to complete the Transmission Main & Distribution Main in year 2019, so that the benefits of the project could be provided to general public.

6. Avissawella and Kosgama Integrated Water Supply Project

The objective of this project is to enhance the water pipe line distribution system in Avissawella and Kosgama area.

The contract has been awarded for Rs. 1382.4 million for the supply and laying of PVC/ DI pipes, fittings and accessories and other works of Avissawella and Kosgama Integrated Water Supply Project. The source of funding is local bank funds (LBF) and the project duration for Kosgama sub project is 12 months while the same for Avissawella is 18 months from the date of start. The actual date of commencement of the project was 01/06/2016.

The works under this project includes supply and laying of 51 km (revised total length) long distribution pipe system in Kosgama and Avissawella area, intake improvement works at Kosgama and building construction and rehabilitation works at Avissawella site. At end of the year 2018, the progress of the project was physical - 99.00%, financial- 45.29% and the total loan disbursement is Rs 626.1 million.



Permanent road reinstatement after the pipe laying

7. Galagedara/Mawathagama Water Supply Project

The NWSDB has initiated this project to supply drinking water facilities to Galagedara, Mawathagama and suburbs including all the GNDs in Galagedara DSD, 23 GNDs and BOI at Mawathagama DSD 02 GNDS in Mallawapitiya DSD. The project cost is Rs. 3,126 million and the funds are from DFCC Bank PLC under LBF. The expected beneficiaries are 33,000 families.

Under this project 5,000 cu.m of treated water will be diverted from Katugastota WTP of Greater Kandy Water supply Project. Out of this, 3000 cu.m/day will be provided to Mawathagama & suburbs including BOI Mawathagama and the balance 2000 cu.m/day will be provide to Galagedara WSS.

The project components are supply & laying of transmission main 27 km long HDPE/DI, 113 km long uPVC distribution system; construction of 1,000 cu.m water tower at Mawathagama, 450 cu.m reservoir at Pillassa, , two break pressure tanks, office building and Chlorinator room.

The project commenced in was suspended for the period 12/02/2015 to 23/08/2016 and re-commenced on 23/08/2016. With the two time extensions received later, the expected completion date is 31/03/2019. As at end 2018, over all physical progress is 90.44% and financial progress is 55%.



Chamber concreting

8. Laggala New Town Water Supply project

Laggala New Town WSP has been implemented in order to provide safe drinking water facility mainly to resettlement area of the population displaced due to Moragahakanda - Kaluganga Irrigation Development Project. It will cater 16 GNDs including adjacent areas in Laggala Pallegama DSD.



Pipe Laying Work of Distribution System

The total number of beneficiaries will be 30,133 by the year 2036. The Project is funded by HNB under LBF and the cost is Rs. million 4,496. Project was commenced on 21.07.2016 and was expected to be completed by July 2018. However, as a result of a change in the scope of work, contract period was extended up to 29.12.2019.

The water source is the Rambukoluwa stream, which is a tributary of Kaluganga. The original scope of the project consist of an intake of capacity 4,250 cu.m/day, a treatment plant of capacity 4,000 cu.m/day, 05 nrs.

service reservoirs, transmission mains, distribution mains & distribution system of approximate lengths 23.5 km, 17.5 km & 190 km respectively. However, this is subjected to change with the revised proposal for relocating the intake & treatment plant. In addition, other infrastructure facilities such as OIC office & quarters, laboratory, stores and 03 nrs. caretaker quarters will be provided under this project.

Construction work was commenced in November, 2017 and pipe laying, construction of office, quarters and reservoirs are in progress. The overall physical and financial progress of the project is 54% and 29.35% respectively by end of year 2018.

9. Wilgamuwa Water Supply Project

Wilgamuwa Water Supply Project is a local bank funded project on a loan from National Development Bank with a contract sum of Rs. 3,580 million. The project commenced on 1st August 2016 and the scheduled date of completion is 18th February, 2019.

Wilgamuwa Water Supply Project was launched in order to provide water supply facilities to Wilgamuwa DSD as a measure to address the CKD issue prevailing in the area. Population to be covered is 33,725 by 2034 and it is expected to cover all 39 GNDs in Wilgamuwa DSD. Water shall be abstracted from Heenganga and pumped to the treatment plant with a capacity of 5,500cu.m/day at Sulugune. Transmission and distribution of treated water is transmitted entirely by gravity.

The main Components of the project are, construction of 5,500 cu.m/day capacity treatment plant, 800 cu.m storage tank, 02 elevated storage tank, an OIC office, an operator quarter, a staff quarter, a care taker quarter and laying of 1 km raw water main, 26 km clear water transmission lines and 100 km of distribution lines. The physical and financial progress are 42.0% and 28.97% respectively.



Construction of Water Treatment Plant at Sulugune

10. Attampitiya water Supply project

Attampitiya water supply project intends to provide drinking water facilities to Attampitiya town and suburbs. The proposed area is affected with shortage of drinking water supply. During the drought, people suffer to get drinking water supply and most of the shallow wells get completely dry. Also there are high Public requests to supply drinking water to the area.

It is proposed to abstract water from Puhulpola reservoir which is constructed under Uma Oya multipurpose development project. The treatment plant has been proposed to locate 4km away from intake. Raw water will be transmitted through gravity transmission main from proposed intake to treatment plant. Due to the high level variation in between Puhulpola and Attampitiya areas, two booster pump stations have been proposed. Since the distribution area expands from intake towards Attampitiya area, ground reservoirs are proposed to construct at every booster station to cater the demand of lower elevated households. The main distribution tank is proposed in Jayasinghagama and the total demand of high elevated area around Attampitiya is proposed to cover from this ground reservoir.

The treatment plant capacity is 3,000 cu.m/day. The total cost estimate is Rs. 2,244 million. The physical and financial progresses at the end of 2018 were about 49% and 43% respectively.



Jayasinghagama 800m³ Tank after completion

11. Medirigiriya Distribution Phase II

Medirigiriya Distribution Phase II project was started as a LBF project and the objective of this project is to provide safe drinking water to 31 GNDs of the Medirigiriya DSD. The contract has been awarded for Rs. 1363.6 million plus 10% contingencies for the supply and laying of PVC/DI pipes, fittings and accessories, including surveying and design work, construction of pipe bridge across Kaudulla Oya and design & construction of office and quarters of Medirigiriya Water

Supply Project Phase II. The project duration is 18 months. The project commencement date was 01/03/2016 and the expected date of completion is 21st February 2019.

Total length (Original scope) of pipe laying was 243.85 km and it was revised to 391.39 km with the additional 150 km pipe laying work continued as a variation. As at 31st December 2018, overall physical progress was 98.03% and financial progress was 71.61 %.



Completion of Pipe Bridge

12. 3.5 Billion project (22 Water Supply projects)

This project was implemented under LBF projects. The objective of the project is to improve the no. of connections in the 11 RSC's (Uva, Southern, North, WC, WN, WS, East, NW, NC, Central, Sabaragamuwa) providing the extensions and infillings to the existing distribution systems. The total estimated cost of project is Rs. 3.5 billion and the expected number of connections is 33,250 at the end of the project. The project was commenced in 2014 and extended up to year 2019. The overall physical progress is 95% and the financial progress is 65.6% as at December 2018.



GOSL FUNDED SMALL AND MEDIUM SCALE WATER SUPPLY PROJECTS

Matara short term improvement project

The TEC of Matara Short Term Improvement Project is Rs. 300 million. Implementation works commenced for water supply capacity improved by 6,000 cu.m/day in Matara Group WSS which results water supply improvement and reduce curtail hours in the area. In addition, procurement works for upgrading Hallala WTP have also been commenced. Also, provision of safe water to 100 families living in marginalized rural areas in Thihagoda area is expected under this project.

Improvement of Bandarawela WS project

This project focused on the area of the depletion of water levels in shallow wells due to water ingress in Uma Oya tunneling constructions. About 2000 families in Bandarawela Makul Ella and suburbs are proposed to cover by improving the drinking water facilities. Scope includes zoning arrangements, pipe supply & laying and supply of intake and booster pumps for Aluthwela and augmentation of Diyatjalawa wss etc.

Augmentation of Trincomalee water supply scheme

Under the Trincomalee Augmentation Project, Rs.600 million has been allocated to Trincomalee region, out of which Rs.160.0 million has been allocated for the year 2018. During the year, Rs.132.45 million has been expended and in addition, Rs.33.76 million worth of bills were in hand as at end 2018.

Pipe laying from Andaragasyaya underground tank to Gonnoruwa

The objective of the scheme is to serve Andaragasyaya and Bandagiriya areas and expected numbers of beneficiaries are 12,000. Works under this scheme consist of Supply & laying of DI pipes fittings and the entire components under this scheme have been already completed. The TEC of the project is Rs.66 million.

Thissamaharama water supply scheme

The scope of this project is to augmentation of Thissamaharama WTP to improve the water quality programme. The TEC of the project is Rs.393 million and the expected number of beneficiaries is about 10,000. Overall physical progress of the project at end 2018 was 33%.

Water Supply Facilities for Resettlement Village in Kegalle District

Many construction activities were carried out in the Kegalle region under resettlement funds. As per the cabinet approval, Rs. 455 million has been granted for Providing Water Supply Facilities for Resettlement Villages of Landslide Victims in Kegalle District. As per

the action plan for the year 2018, the project covered the construction of 11 Water supply schemes in 6 DS divisions and the allocation was Rs. 197 million.



Projects in Pipeline (WSP)

Kandy North Pathadumbara Integrated Water Supply Project

The objective of this project is to improve the service level and provide new connections to 06 DS divisions namely Pathadumbara, Pujapitiya, Akurana, Harispattuwa, Gangawata Korale and Thumpane providing water supply facility to a total population of 470,000 in year 2035. Contract amount of the project is Rs. 44,185 million.

Hemmathagama WSP

This project is formulated to cater for the increasing demand as well as infill the partially covered areas from existing water supply facilities in Hemmathagama, Aranayaka and Mawanella towns and its suburbs. Asupiniella which is a tributary of Mahaoya has been proposed as a potential water source to feed the proposed demand. It is expected to cover about 169,204 populations under this project in the year 2037 and the project cost is Rs. 145,25 million.

Kirama Katuwana WSP

Objective of this project is to improve the provision of safe and reliable drinking water to the people living at Kirama and Katuwana areas. At present there is a gravity pipe borne water supply system based on 3 streams.

Under this proposal, it is proposed to cover 34 GNDs in Katuwana Pradeshiya Sabha. A total population of 36,495 is expected to be benefitted in the design horizon 2029 and the total project cost is Rs. 1,837.5 million.

Giridara WSS

The objective of this project is to find out the suitable method to provide potable water to Giridara and surrounding water scarcity areas. The proposed project is anticipated to supply water to uncovered 18 GNDs in Dompe Ds division in Gampaha district. Kelani River has been identified as the only reliable water source in Dompe DS Division. A total population of 27,842 is expected to be benefitted in year 2038 through this project and the project cost is Rs. 513 million.

Kundasale Haragama Water Supply Project

Kundasale Haragama Water Supply Project was proposed to provide a sustainable water supply solution to people living in Kudasale, Medadumbara (partially), Kandy Four Gravets (partially) and Pathahewaheta (partially) Divisional Secretariats covering 142 GNDs with an expected beneficiary population of 330,000 in year 2038 design horizon. Project cost will be Rs. 26,056 million

Distribution system of Greater Rathnapura WSP

This project is proposed to be implemented to address the drinking water issues in the Rathnapura district. It is expected to expand the pipe network of Greater Rathnapura area where the drinking water production was improved by the already implemented Greater

Rathnapura WSP project. A total population of 80,000 is expected to be benefitted from this project in year 2028 and the project cost is Rs. 1,529 million.

Hasalaka Water Supply Project

The project area under this proposed scheme is within the Minipe Divisional Secretariat of Central Province covering 33 out of 48 GNDs due to complex geographical terrain in the area. Forecasted population of 49,370 in year 2037 will be benefitted. Gurulupotha spring and Mahaweli River have been identified as the water sources and the project cost is Rs. 6235 million.

Valachchenai WSP

The objective of this project is to provide safe and reliable drinking water supply to the conflict affected people in the proposed Valachchenai area as well as for the initiated tourism developments in Pasikudah area. The proposed area under this project includes 44 GN divisions in 06 divisional secretariats covering the area starting from Eravur up to Valachchenai along the coastal divisions.

About 162,465 populations in year 2041 will directly be benefitted by this project and the water is extracted from intake at Rugam irrigation reservoir. The total estimated cost for the project is Rs. 12,275 million.

Towns East of Polonnaruwa WSP

Main objective of the project is to provide safe pipe borne water supply facilities to Welikanda, Dimbulagala, Thamankaduwa, Lankapura, Hingurakoda and Elehara DS areas covering 183 GNDs. It has been decided to have two new water treatment plants and the water sources will be Mahaweli River and Ambanganga. A population of 345,471 will be benefitted in year 2037 and the project cost is Rs. 54,870 million.

Bandarawela, Haputale, Diyathalawa Integrated Water Supply Scheme

The objective of this project is to provide pipe borne water to the people living in Bandarawela, Haputale and Diyathalawa areas. The project area covers Bandarawela, Diyathalawa and Haputhale towns and their suburbs which consist of 64 GND's. The most feasible surface water source in the vicinity is Dayabara reservoir and about 107,839 populations will be benefitted from this project in the design horizon 2042. The total estimated cost for the project is Rs. 21,684 million.

Ruwanwella Water Supply Scheme

The objective of this project is to provide pipe borne water supply facility to the population living in Ruwanwella town and suburbs. It is expected to enhance the coverage for about 13 GN division in Ruwanwella, 04 GN divisions in Bulathkohupitiya and 01 GN division in Dehiowita. About 110,000 populations will be benefitted from this project in the design horizon 2030 and the total estimated cost for the project is Rs. 3,182 million..



Planning and Design (WSP)

Planning and Design (Water Supply)

Western Section

Planning works carried out during 2018

- Preparation of Feasibility Report for Jubilee System Improvement Project
- Expansion of Ambatale Water Treatment Plant by 50,000 cu.m / day (continuation of planning works carried out from year 2018)
- Preparation of RFP Document for expansion of Ambatale water treatment plant by 50,000 cu.m / day
- Water supply to Techcity Development Project, under Ministry of Megapolis Development
- Pre-feasibility study for Kandana Water Treatment Plant Augmentation Project
- Planning of head office improvement works

Detailed Designs Carried out

- Detailed design and preparation of drawings for 15,000 cu.m capacity Ground Reservoir at Gothatuwa
- Preparation of drawings, Bill of quantities and draft bidding document for Jubilee System Improvement Project
- Renovation/Improvement of Head Office Buildings
- Detailed design and preparation of drawings for distribution system improvement of Katunayake EPZ
- Detailed design and preparation of drawings for treated water transmission main for Sapugaskanda Refinery

Design Review work carried out

- Gampaha, Attanagalla and Minuwangoda Integrated Water Supply Scheme
- Kelani Right Bank Water Supply Project -Stage II
- Towns East of Colombo District Water Supply Project Packages 1, 2 & 3
- Katana Water Supply Project
- Aluthgama, Matugama & Agalawatta Integrated Water Supply Project

(North / North Central) Section

Planning Work carried out during 2018:

- Planning of Erukkalampiddy water supply scheme
- Planning of Mulankavil water supply scheme (under World Bank funds) for revised scope
- Planning of Kilinochchi new water supply scheme (under World Bank funds)

- Planning of improvement of rehabilitated Kilinochchi water supply scheme

- Planning of extension of Mannar WSP to Pesalai

Design Review work carried out

- Anamaduwa Integrated Water Supply Project
- Pothuhara, Polgahawela, Alawwa Integrated Water Supply Project
- Deduru Oya Water Supply Project
- Greater Matale Water Supply Project
- Thambuttegama Water Supply Project

Detailed Designs carried out

- Designs of Ancillary items as per the site conditions for Mullaitivu water supply scheme (under World Bank funds)
- Revising the designs of aerator, lime dosing tank, roughing filter, tower and sump, pump house & ancillary buildings for Mulankavil water supply scheme (under World Bank funds) and completion of drawings
- Design of aerator, roughing filter, ground sump, pump house & ancillary buildings for Erukkalampiddy water supply scheme & completion of drawings
- Design of 4000 cu.m/day Kilinochchi new WSS with aerator, flocculator, sedimentation tank, rapid sand filter, GAC filter, ground sump, pump house & sludge disposal system & completion of drawings.

Southern/Eastern Section

Planning Works Carried out during 2018

- Planning works of Eheliyagoda Water Supply Scheme including finalizing all the investigations, approval for water abstraction and intake design from the Department of Irrigation; and preparing project appraisal report for the ADB funding
- Obtaining PAC approval for the pre-feasibility study report of Augmentation of Kataragama Water Supply Scheme
- Preparation of Pre-feasibility report for Baddegama Group Water Supply Scheme Phase III.
- The 4th revision of Engineer's Estimate of Ruwanwella Water Supply Project was as requested by the SCAPC.

Preparation of Procurement Document

- Preparation of Bid document for Yard piping of six tower sites of Ampara Phase III project.

Detailed Designs carried out

- For Eheliyagoda Water Supply Scheme; the designs of infrastructure facilities for river intake, WTP, storage structures and transmission mains were completed and the drawings and the BOQQ for the procurement of package-1 and the designs the drawings and the BOQQ of the transmission system and the distribution system of stage – 1 for package-2 were completed.
- For Lunugamvehera Integrated Water Supply Scheme; the designs of the 36,000 cu.m /day intake and detail designs of stage -1 components of the WTP and storage reservoirs are in progress.
- Review of the retaining wall designs of Haldumulla Water Supply Scheme for NBRO approval.

Design Review Works carried out:

- Preliminary designs of water treatment plant, transmission mains and distribution system of Kirama Katuwana Water Supply Project
- Detailed designs of water treatment plant Hambegamuwa Water Supply Project
- The Matara Stage IV detailed designs of transmission and distribution system

M&E Section

The M&E sub selection of Planning & Design Section has carried out the following Design works during the year 2018.

Design of Schemes & Documents

- Design of Gothatuwa – Moragasmulla pump house electrical works
- Proposed office premises for Audit / Sewer / IT section A/C & Electrical works specification & BOQ preparation
- Moratuwa - Ratmalana sewer project - RFP preparation
- Updating D5 manual & ICTAD publications
- Design of power & lighting for E-branch & Audit section
- Solar proposal for Jubilee pumping station
- Design of power & lighting for New Japanese project unit at Thelawala
- Design of air conditioning system for New Japanese project unit at Thelawala.

- Design of power & lighting for P&D section at Head Office
- M&E design work & document preparation works of Eheliyagoda WSP
- M&E design works & document of Jubilee improvements project
- Preparation Tender Documents for Raja Mawatha Sewage Pump House
- Ministers quarters A/C system installation
- Preparation of Engineering Estimate for Dankotuwa WSP
- Document preparation for Grit removal system at Mt. Lavinia pump house (MLP2)
- Surge analysis of Mannar transmission
- M&E design input Talawakele septage treatment plant
- Design of Erukalampidy water treatment plant improvements in Mannar district
- Preparation of pre-feasibility report and engineer's estimate for Baddegama
- Preparation of pre-feasibility report and engineer's estimate for Kataragama
- M&E design for Lunugamwehera water treatment plant
- M&E design of Ruwanwella septage treatment plant

Design Review work carried out

The following Design Review works have been carried out during the year 2018.

- Gampaha, Attanagalle & Minuwangoda Integrated WSP
- Water supply scheme for un-serviced area of Ampara district phase III
- South wing Building Mechanical & Electrical work supervision work
- Polgahawela Alawwa IWSP
- Aluthgama, Matugama & Agalawatta IWSP
- Katana WSP
- Kirama-Katuwana IWSP
- Thambuttegama WSP

Documentation Section

Documentation Section comprises three sub sections, namely Documentation Sub Section, Design Manual Updating Sub Section and Quantity Surveying Sub Section.

1. Documentation Sub Section

The Documentation Section under takes preparation and updating of Standard Bidding Documents, Standard, Specifications, Pre-Qualification Documents and uploading to NWSDB website.

Completed in year 2018 has been summarized as follows

- Preparation of 07 new Standard Bidding Documents
- Revisions of 62 Standard Bidding Documents
- Revision of 65 Specifications
- Evaluation of 03 DI pipe manufacturers for prequalification
- Evaluation of 06 DI/CI valve manufacturers for pre-qualification

In Addition to the above activities, the documentation sub section also functioned as the Secretariat for the Standard Bidding Document Review Committee which was re-established in year 2008 to review the Bidding Document and to resolve the procurement issues in National Water Supply & Drainage Board. The Standard Bidding Document Review Committee held 15 meetings.

Further the Documentation Sub Section has been acting as the secretariat for the monthly progress review meeting conducted by the P&D Section.

2. Design Manual Updating Sub Section

Design Manual section of P&D undertakes updating/preparation of Procedure/Design Manuals of NWS&DB. During year 2018 following works have been carried out under the guidance and instructions of the Planning & Design Manual Review Committee (PDMRC).

- Final draft of the P1 Manual was completed and it is to be submitted for the printing.
- Although the final draft of the D3 Manual was approved by the PDMRC, newly appointed PDMRC decided to make it corrected by the Water Treatment Specialist and then send it for printing.
- Final draft of the Pre Stressed Concrete Manual for Circular Tanks (DI0) and detail structural calculation has been completed with the participation of Contractor ABE Nikko, JPU Section and CE (Design Manual). It was circulated to the PDMRC for the final approval.
- Review of the D2 Manual was partially completed and subcommittee is to be appointed.

- First draft of the D5 (Mechanical, Electrical & Instrumentation Aspect of Water Supply Design) has been submitted to the subcommittee to review and compile.

- Design Manual Section participated for seminars on Preparation of Guidelines for Asset Management for pipe lines conducting by RSC Western South through a JICA project.

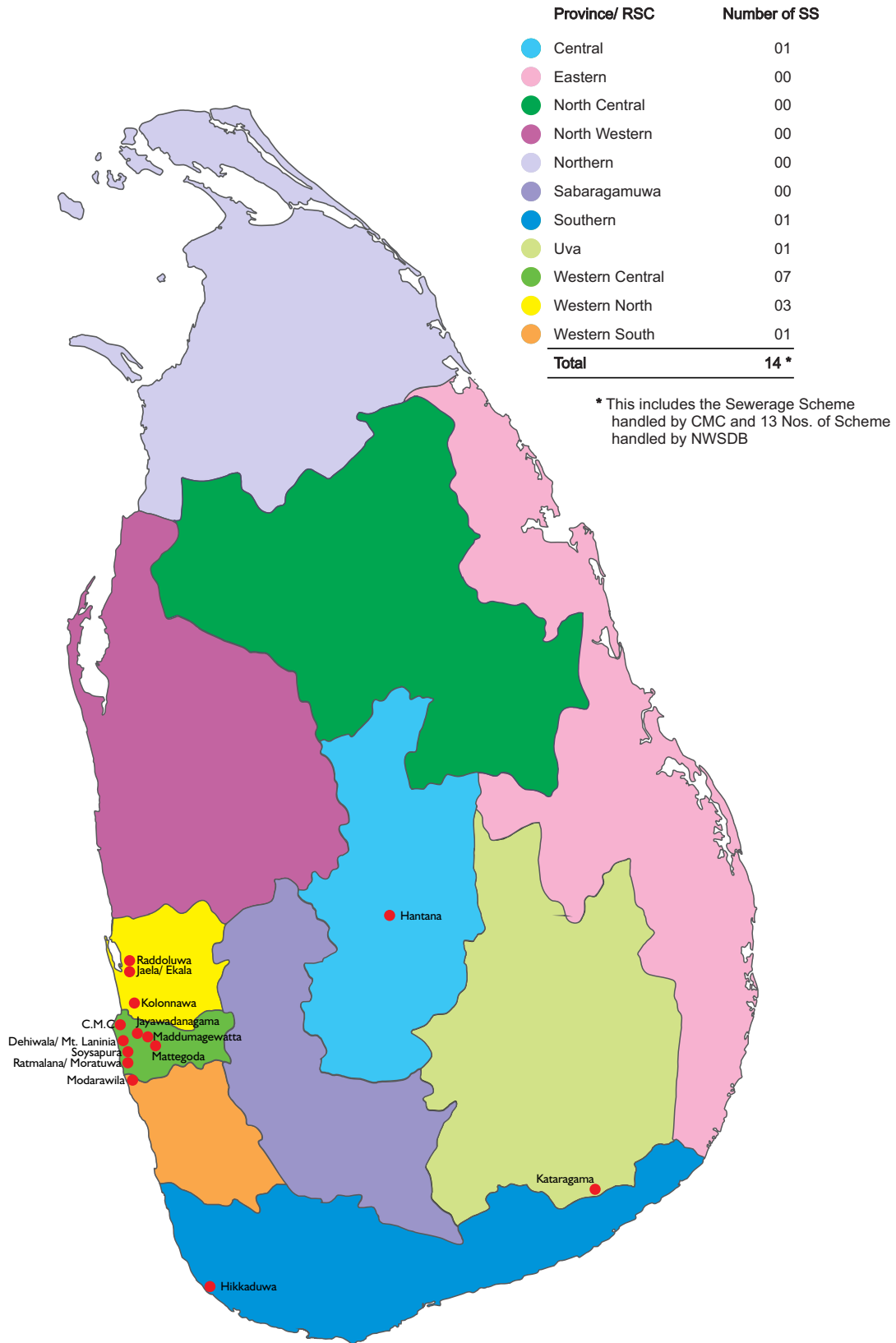
3. Quantity Surveying Sub Section

The Quantity Surveying work includes the preparation of BOQ of all the Design Works carried out by the P&D Section of Head office, preparation of Engineer's Estimates,

Rate Book for Water & Sewerage works, valuation of variations, Water & Sewerage work studies to prepare work norms for pricing of work items and reviewing of Engineers Estimates prepared by projects and cost advising for RSC & projects.

During year 2018 this sub section has prepared 126 BOQs (Water BOQs - 116 and Sewerage BOQs- 10), 11 nrs. of Engineers Estimates (Water Engineer Estimates- 10 and Sewerage Engineer Estimates - 01) for local funded contracts, 02 nrs. of Engineers Estimate for Foreign Funded Water Supply and Sanitation Projects, cost proposals for 02 nrs. of Design & Build Projects for partially treated Water Supply Schemes, Annual Rate Book for Water Supply (Volume I & II) and Annual Rate Book for Sewerage for year 2018. The section also has checked 05 variations. Three numbers of training programs were conducted for technical staff (for improving knowledge of estimating with using the Rate Book). Site visits were done for preparation of BOQQ and Engineers Estimates for some projects, and involved in price negotiations with Contractors for some projects.

Existing Sewerage Schemes



Sewerage activities

With the expansion of sewerage services, the NWS&DB created a separate division for wastewater activities headed by an Additional General Manager in 2007. Sections coming under this division are Greater Colombo Sewerage Operations Section, Planning & Designing Section and Sewerage Projects section.

Sewerage Section is taking maximum effort to fulfilling of all required sanitation facilities of the country through projects formulation and implementation, providing sanitation solutions, operation and maintenance of facilities for satisfying and influencing of stake holders by guiding and sharing knowledge and experience with the fullest support of competent staff.

The existing sewerage systems having 18,850 connections at the end of 2018 in Ratmalana, Moratuwa, Jaela, Ekala, Dehiwala, Kolonnawa, Hikkaduwa, Kataragama areas and in few housing schemes such as Hantana, Raddoluwa, Mattegoda, Maddumagewatta and Jayawadanagama. In addition, the NWS&DB has been given the responsibility to maintain a number of BOI sewerage schemes such as Seethawaka, Biyagama and Koggala due to reliability of NWS&DB services and comprehensive technical know-how of its staff.

O&M Activities

The Greater Colombo Sewerage Section (GCS) is responsible for the operation and maintenance of the sewerage systems of Dehiwala-Mt.Lavinia Municipal Council area, Moratuwa MC area, JaEla UC area, Kolonnawa Urban Council area and sewerage systems of some NHDA housing schemes and several government institutions in the Greater Colombo area.

There are about 17,800 sewer connections maintained by the NWSDB. Accordingly, Soysapura, Mattegoda, Jayawadanagama, Raddolugama, Maddumagewatta and Modarawila housing schemes and the government institutions like Presidential Secretariat, Speaker's Residence, Parliament, Sethsiripaya, Isurupaya, Jayawardanapura Hospital etc. are maintained by the GCS.

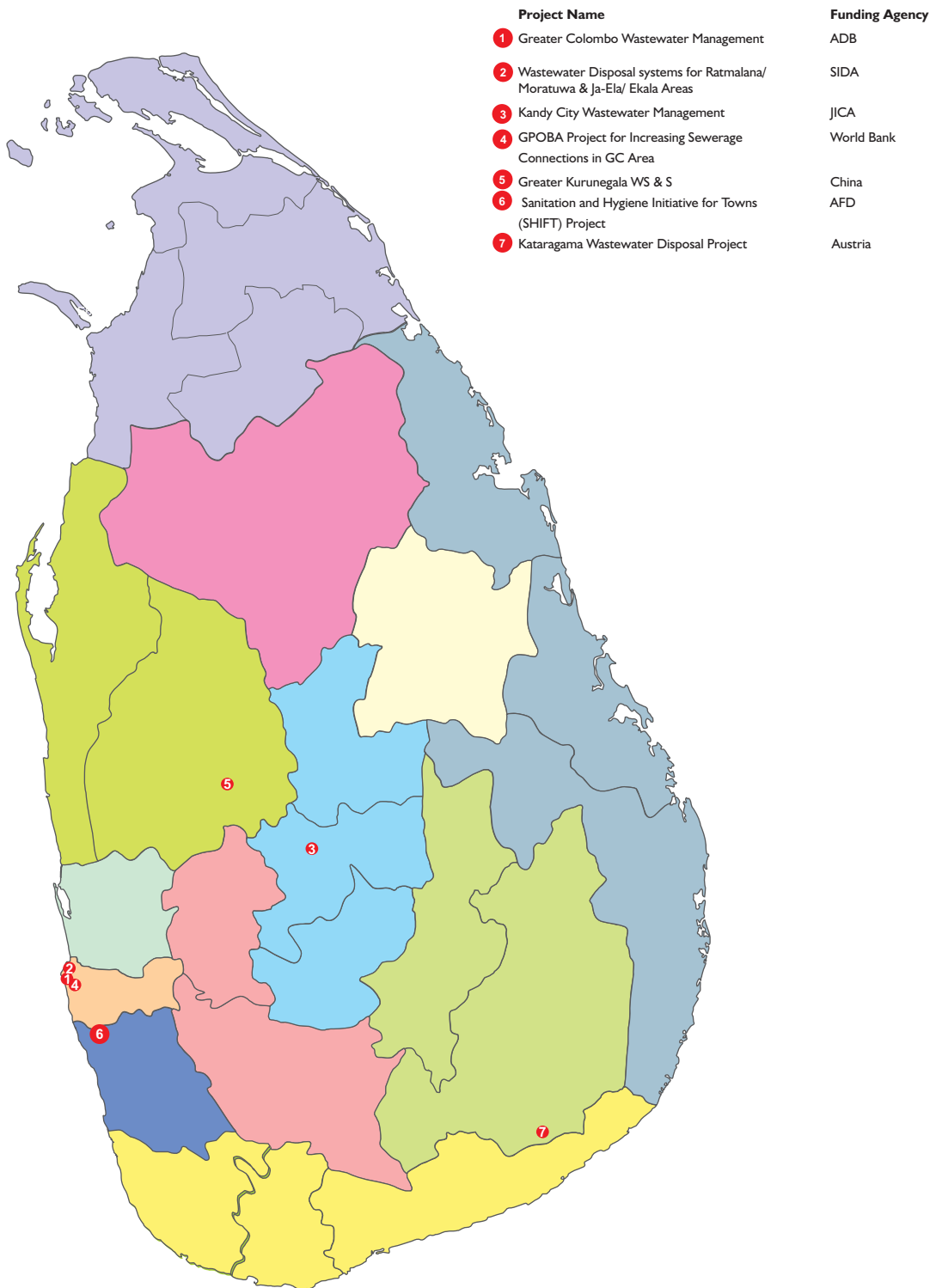
In addition, sewerage systems of Kataragama, Hikkaduwa and Hantana housing scheme are also maintained by respective area managers under RSCs. Furthermore, maintenance services are provided on contracts basis to BOI owned industrial parks such as Koggala, Biyagama and Seethawaka.

Grater Colombo sewerage section has implemented project for rehabilitation of existing wastewater treatment system in National Youth Services Maharagama under rechargeable funds from National Youth Services Maharagama. Total project cost was Rs. 48.3million and Capacity of the treatment plant is 45cu.m per day.

Under the programme of legalization of illegal connections, 30 nrs. of illegal connections had been legalized during the year. Length of 959 m PVC pipes had been laid under Sewer extension programme. 219 nrs of new sewer connection given in Manager areas in Kolonnawa, Dehiwal-Mount Lavinia, Moratuwa-Ratmalana and JaEla-Elaka.

Ongoing Sewerage Projects

Accomplishments of Major Sewerage Projects under the Ministry of City Planning, Water Supply & Higher Education
Location Map of Foreign-funded Projects under Construction/ Augmentation during 2017



Foreign Funded Sewerage Projects

1.) Greater Colombo Wastewater Management Project

The scope of this project in brief is Rehabilitation/ Augmentation of 6 wastewater pump stations located within Dehiwala / Mt. Lavinia MC and Kolonnawa MC Areas. This project has been designed to improve the collective wastewater and sewage systems in Dehiwala / Mt. Lavinia and Kolonnawa - Meethotamulla areas, managed by the NWSDB. The project is funded by ADB.

The project scope has been prepared to carry out all the construction activities as a single contract which was awarded for a value of USD 7.795 million, following an ICB process. The total ADB fund allocation for the project (together with the reallocation received in 2016) is USD 9.43 million while the GOSL contribution is Rs. 364 million. The total estimated cost of the project is Rs. 1430 million (as per Central Bank exchange rate, 1 USD = SLRs. 151.66 valid for 30th Dec. 2016).

The date of commencement was 16th September, 2014 while the date of completion has been extended up to 0 December 2018. All the project activities within the Original Scope are completed. Risk of overflowing in the Pump stations are managed by efficient pumping and Interruption to the live system in place has been minimized. Electrical Panels and SCADA instrumentation are in operation.

2.) Expansion of Pipe Borne Sewer Coverage to Moratuwa and Ekala Areas

Wastewater Disposal Systems (WWDS) for Ratmalana/Moratuwa and Ja-Ela/Ekala were constructed under SIDA funds and completed in June 2016 with a collection network of 20% target area.

The Expansion of Pipe Borne Sewer Coverage to Moratuwa and Ekala areas project was planned to expand the existing collection networks in both Ratmalana/Moratuwa and Ja-Ela/Ekala areas to increase the present coverage up to 65%. Due to the availability of funds and other resources, the expansion is undertaken in two phases namely Ratmalana / Moratuwa - Stage I Phase II and Ja-ela/ Ekala -Stage II.

Stage I Phase II -Ratmalana / Moratuwa Area:

AFD funds have been identified to implement this project where the main components are construction of 07 new pumping stations, laying of 110 Km collection pipe network, 11,600 nrs of lateral connections and Improvements in existing pumping stations and wastewater treatment plant. The project cost has been

estimated as Rs.16,073 million and the number of beneficiaries has been estimated as 56,429 in 2040.

The detailed design of the collection network and the conceptual design were completed using NWSDB in-house resources. Design review; bidding documents for network, treatment plant improvements and ump houses are ongoing. Cabinet approval for financial assistance from AFD and MSD approval for cadre requirement were received.

Stage II - Ja-Ela/Ekala Area:

AFD has shown their willingness to fund for Ja-Ela/Ekala areas in year 2019. The project components are construction of 07 new pumping stations, laying of 75 Km collection pipe network, 4,100 nrs. lateral connections, improvements in existing pumping stations and wastewater treatment plant. The project cost has been estimated as Rs. 8,105 million and the number of beneficiaries has been estimated as 19,945 in 2040. Preliminary works including land acquisition work is in progress.

3.) Kandy City Wastewater Management Project



Package I

This project proposed as a solution for high pollution caused by indiscriminate disposal of wastewater in the Kandy City, intends to collect wastewater in an area of 732 hectares in the city and then divert to a treatment plant of capacity 14,000cu.m/day through a network of 92km long pipelines.

The project will be completed in 2019 and around 55,000 resident populations and 150,000 migrant population in Kandy will be benefitted from this project. The total cost estimate of the project is Rs. 22,588 million. JICA loan amount of Japanese Yen 14,087 million and GoSL funds of Rs. 4,060 million is allocated.

There are 4 main packages in the project. As of 2018, only 3 packages are under implementation and Package 4 is already completed.

Package I consists of design and construction of

wastewater treatment plant, main pump station treated effluent disposal system and sludge drying beds and supply of O&M equipment. Design activities of Package 1 were commenced on 03rd March 2015 while construction activities were commenced on 19th February 2016. Physical progress– 83.27% and financial progress-41.7% as at 31st December 2018.

Package 2 consists of design and construction of trunk sewers, branch sewers and service connections, manhole pump stations and supply of O&M equipment. Construction works of package 2 was commenced in April 2015 and works are in progress. Physical progress is 52.15% and financial Progress- 23.0% as at 31st December 2018.

Package 3 consists of design & construction of property connections & testing and commissioning and this contract covers the 9,205 nrs. of property connections. Contract activities were commenced on 05th July 2016. Physical progress is 25.24% and financial progress is 23.92% as at 31st December 2018.

Package 4 consists of construction of communal sanitation facilities in designated low-income areas and testing & commissioning. Contract activities were commenced on 03rd February 2016. Physical progress is 99.75% and financial progress is 28.31% as at 31st December 2018. Package 4 was successfully completed.

Private Latrine Programme

Under this programme, 512 nrs. of individual toilets are to be constructed through CBOs. Construction works are ongoing in Bogodawatte area and in Deyyanawela area. Physical progress is 11.12% and financial progress is 18.00% as at 31st December 2018.

As productivity improvement activities, ISO 9001:2015 Quality Management System Certificate obtained.

4.)GPOBA (World Bank) Funded Project for Increasing Sewerage Connections in GC Area

The brief scope of this project is increasing household sewerage connections and off-network sanitary solutions in Greater Colombo low income households. Direct Connections to Households in Dehiwala / Mount Lavinia, Jaela / Ekala, Ratmalana / Moratuwa and Kolonnawa Area sub project has been completed by giving 1234 sewerage connections including somananda mawatha within the premises 100 connections. DEWATS for Diyawarapura 64 number of fisheries houses successfully commissioned and defect liability period Three pumping stations constructed and commissioned in Badovita simplified extension with pumping and 1500 sewerage connections have been delivered.

DEWATS for Ratmalana TSUNAMI Housing scheme sub project has been completed by rehabilitation of existing treatment plant and 328 sewerage connections were delivered.

Construction of 12km of gravity sewer extension was completed in Sub project of Simplified and conventional extensions in Dehiwala/Mt.Lavinia, Moratuwa, Kolonnawa and Ja-Ela/Ekala area project and 1503 connections delivered.

On site sanitation improvement facilities have already been provided for 3200 families with a target to provide 3400 facilities at the end of the project (84% progress).

Decentralized Wastewater Treatment System for Lunawa Samudra Shakthi Housing Scheme which includes construction of 12 nrs. of filters, pumping station, sea outfall etc. benefitting 160 families, was completed. was completed.

Under Communication Campaign, awareness programs and meetings were conducted in project areas and poster campaigns and mobile announcing programs were conducted. Meetings were held at DS offices to aware GS and development officers. Letters were sent to local authorities. Communication campaign was concluded in December 2018.

5.) Greater Kurunegala Water Supply & Sewerage Project

The scope of the project is to improve the living standards of the people living in and around Kurunegala city by providing safe drinking water supply & adequate sanitary facilities. The project is consisted with two major components namely water supply component and sewerage component. The project is funded by the Exim Bank China and the GoSL. The contract value is USD 77million and Rs. 3,200 million. The project was commenced in February 2014.



Sewerage Treatment Plant

The water Supply component of the project includes construction of raw water intake, transmission main with a 15,000 cu.m/day, construction of new water treatment plant with a capacity of 5,000 cu.m/day, improving the existing treatment plant and distribution network of 110 km.

The sewerage component includes construction of complete sewerage treatment plant with a capacity of 4,500 cu.m/day, auxiliary buildings, collection network of 138 km with 06 lifting stations and providing 3,500 sewerage property connections within the city limits.

The project was successfully completed and both the water supply component sewerage component were commissioned and handed over for O&M during 2018.

6.) Sanitation and Hygiene Initiative for Towns (SHIFT) Project

The SHIFT Project aims to provide wastewater disposal infrastructure facilities to 200,000 people living in South and West coastal areas namely Negambo, Galle – Unawatuna and Kelaniya – Peliyagoda.

SHIFT I includes provision of wastewater infrastructure for Negambo city, Studies, detailed design and tender documentation for Galle-Unawatuna and Kelaniya–Peliyagoda areas, pro – poor fund to provide sanitation facilities for the low-income people in the project area.

In addition, it will provide a Technical Assistance (TA) programme to provide recommendation to enhance the water and sanitation sector institutional framework, ensure its sustainable financing and to implement a sewerage management skills development plan.

The loan agreement with AFD amounting to EUR 76 million and the grant agreement for the TA component amounting to Euro 5.7 million which is funded by European Union through AFD were signed 2016. With the contribution of GoSL of EUR 26 million, the total project cost is EUR 107.7 million.

Negombo Wastewater Management Project was ceremonially inaugurated on 08th June 2018.

Consultants of Management Support Consultancy (MSC) contract were conducting their activities according to their scope such as assistance to NWSDB PMU, capacity building of PMU staff and preparation of project progress reports. Actual physical and financial progress of MSC as at 31st December 2018 was 27% and 32% respectively.

Design and Supervision Consultancy (DSC) Contract has been awarded on 18th April 2018 and overall actual physical and financial progress of DSC was 10.4% and 3% respectively.

7.) Kataragama Wastewater Disposal Project

The main scope of the project includes upgrading of the existing system by expanding the sewer network and improving the sewerage treatment plant. By installing mechanical aerators, the capacity of the existing treatment plant would be upgraded from 750 cu.m/day to 3000 cu.m/day in order to accommodate the huge floating population visiting Kataragama. Uni Credit Bank Austria AG was providing funds for implementation of this project. The total estimated cost was Rs.2,040 million and the beneficiaries will be 15,000 people in addition to the floating population.

The project components are construction of 07 pumping stations installation with pumps and necessary electrical items, 16.5 Km length of sewer pipe network and 3,000 cu.m/day capacity wastewater treatment plant with aerated lagoons with downstream maturation pond and sludge treatment system.

The contractor has completed main scope of the project and system is in operation except sludge treatment system, the sludge treatment system to be completed under local component and tender documents have been already prepared and the contract to be called.



Completed Aerated Lagoon

GOSL Funded Small and Medium Scale Sewerage Projects

Western Province

Expansion of Pipe Borne Sewer Coverage in Moratuwa/ Ratmalana Area – Expansion of Pipe Line up to Raja Mawatha in Ratmalana.

Under the provision for urgent Water Supply & Sewerage Projects – 2016, a sum of Rs. 48.7 Million has been allocated for implementation of the sewer extension of

Raja Mawatha, Ratmalana by Ministry of City Planning, Water Supply and Higher Education.

250 households in the catchment of phase II of Ratmalana/ Moratuwa Sewerage project are included to this project.

The contract has been awarded in June 2017 & 85% of the construction work has been completed.

Projects in Pipeline (Sewerage)

Projects Ready for Implementation

1. Maharagama & Boralasgamuwa Wastewater Disposal System

This project is to treat wastewater generated in Maharagama and Borlesgamuwa area. Wastewater flow of Maharagama and Boralasgamuwa will be brought to the Rathmalana/Moratuwa treatment plant which was constructed under Ratmalana-Moratuwa Wastewater Disposal Project. It is expected to provide about 5,000 sewer connections. The total estimated cost is Rs.5,125 million. The contract was awarded on 05th November 2014 and the funding agency is Export Import Bank of China. The loan Agreement has to be signed and the completed IEE report has to be sent to CEA for public review. The lands acquisition is in progress for the pump houses.

2. Dehiwala/Mt.Lavinia Wastewater Disposal project

The unsewered areas in Dehiwala and Mt.Lavinia together with adjacent three GN divisions of Kesbawa DSD are incorporated into the proposed project. The expected population to be served in the year 2040 is 138,230. The total estimated cost of the project is Rs.28,523 millions.

The contract has been awarded and the contract agreement has been signed. The final report of EIA has been submitted to CEA for environmental clearance. Acquisition of lands for pump houses, are in progress.

3. Chilaw Wastewater Disposal System

Under the proposed scheme, a 1000 cum/day capacity treatment plant with 500m Short sea outfall is proposed. The total cost of the project is Rs. 3,776 million and 1,050 houses will be connected to the scheme. The contract was awarded on 05th November 2014 for the implementation of the project and the proposed Bank for funding is Export Import Bank of China. The loan Agreement has to be signed. The final EIA report has to be submitted to the UDA for public opening. Awareness meeting to the Chilaw Municipal Council was held and public awareness meeting has to be held for allocation of the WWTP land to the project use.

4. Puttalam Wastewater Disposal System

Under the proposed scheme, a 1000 cu.m/day capacity treatment plant with 500m short sea outfall is proposed. The total cost of the project is Rs. 4,025 million and 1,250 houses will be connected to the scheme. The contract was awarded on 05th November 2014 for the implementation of the project and the proposed Bank for funding is Export Import Bank of China. The loan Agreement has to be signed and the final EIA report to be submitted to UDA for public opening.

5. Hambantota Wastewater Disposal Project

A waste water project has been proposed for Hambantota which is a proposed economic hub interconnected to the international Sea Port, Airport and other developments. It is expected to provide about 9,034 sewer connections and the total estimated cost is Rs. 11,519 million. In the proposed wastewater disposal system, wastewater will be collected and treated in a 12,000 cu.m/day capacity wastewater treatment plant and the treated effluent is planned to be reused for irrigation purpose.

The project has been awarded and the agreement has been signed. The lands for the pump houses and treatment plant have been acquired already. Environmental clearance has been obtained. The funds are to be finalized and the loan agreement to be signed to implement the project by 2020.

6. Kattankudy Wastewater Disposal Project

Kattankudy consisting of 18 GN Divisions and It is expected to provide about 13,308 sewer connections and the total estimated cost is Rs. 11,407 million. The treatment plant is proposed to locate within Kattankudy and the consent from the land owners have been obtained this year.

Kattankudy wastewater project has already been awarded and the agreement also has been signed between the contractor and NWSDB. The loan

agreement has to be signed and the implementation of the project will be started in the year 2019. The IEE clearance has been obtained. The land acquisition is in progress for the pump house lands and the ownership of treatment plant lands are already obtained.

Projects under EOI stage

1. Batticaloa Wastewater Collection, Treatment and Disposal Project

Batticaloa town is to be developed as a second order service center by 2030, in the proposed hierarchy of urban centers. Therefore, it has been identified that one of the greatest and most urgent needs is a suitable sewerage system to address the health and well-being of the Batticaloa population and to reduce the contaminated waters discharging directly to the lagoon, which is used for fisheries-related livelihoods. The tentative cost estimate for construction of above project would be Rs. 18,704 million.

PAC and Board approvals have been obtained for the Batticaloa Wastewater Project and the Project Concept Paper has been sent to NPD approval. A land of 50 acres has been obtained from the DS for the construction of Treatment Plant. Land acquisition for the pump houses is in progress. EIA study has to be carried out to the project in 2019. The EOI has been submitted by Ion Exchange (India) Ltd for developing this project.

2. Wastewater Collection, Treatment and Disposal System for Eravur

The township is expected to achieve economic growth with agriculture investment and infrastructure development. The ground water table is very shallow and the population density is high making on-site sanitation not sustainable. Therefore, it has been identified that one of the greatest and most urgent needs is a suitable sewerage system to address the health and well-being of the population of Eravur. About 40,364 populations in 17 GN divisions (families of 8,073) will directly be benefitted by this project. The tentative cost estimate for construction of above project would be Rs. 12,127 million.

The NPD clearance has been obtained for the Project. A lands are being identified and acquisition process to be started. An EOI has been submitted by China Machinery Engineering Corporation for developing this project.

3. Wastewater Collection, Treatment and Disposal System for Kalmunai

Kalmunai town is expected to achieve economic growth with fisheries and agriculture investment and infrastructure development. The proposed area includes

three divisional secretariat areas namely Kalmunai Tamil Division, Kalmunai DS Division and Sainthamaruthu DS Division. About 137,230 populations in 75 GN divisions (families of 34,307) will directly be benefitted by this project. The waste water will be collected and treated in the proposed wastewater treatment plant in Kalmunai. The tentative cost estimate for construction of above project would be Rs. 34,667 million.

PAC and Board approvals have been obtained and the Project Concept Paper has been sent for NPD approval. Lands acquisition is in progress. An EOI has been submitted by Canadian commercial Corporation (CCC) jointing with JV drivers for developing this project.

4. Polonnaruwa Wastewater Collection, Treatment and Disposal project

The project is to implement a wastewater collection, treatment and disposal system to Polonnaruwa urban area which is planned to be developed as three main cities namely Polonnaruwa town (Heritage city), New Town (Administrative city) and Kaduruwela (Commercial city) under proposed "Awakening of Polonnaruwa" development plan of Urban Development Authority.

This proposed project for wastewater disposal covers 16 GN Divisions including Polonnaruwa Town, Kaduruwela and Newtown. Apart from that provision has been made to connect the Gallella area at the latter stage. The anticipated population, to be directly served in year 2046 is 38,529. In addition to permanent residence a floating population of 130,000 will be benefitted by the proposed project. The tentative cost estimate for proposed project is Rs. 16,185 million.

PAC and Board approvals were obtained for the project and the NPD approval has to be obtained. Land acquisition for the treatment plant and pump house lands is in progress. The Metallurgical Corporation of China (MCC) has submitted an Expression of Interest (EOI) for this project.

Projects in Pipeline (Sent to NPD)

1. Sri Jayawardenapura Kotte Wastewater Collection & Disposal System

It has been identified that a centralized sewerage system is essential to cater for the rapid development that has taken place in Welikada - Rajagiriya area as well as the Sri Jayawardenapura Kotte urban council area and adjacent parts of Kaduwela D.S. Division and Maharagama UC area in order to provide proper wastewater disposal for these areas. The wastewater generated will be collected by gravity and pumping mains, treated in the treatment

plant located in Koswatta Road, Battaramula and the treated effluent will be discharged to Diyawanna Oya. A feasibility study by JICA and EIA study of are in progress.

2. Gampaha Wastewater Collection and Disposal Project

The proposed project area covers 21 GN divisions in Gampaha Municipal Council including Gampaha town, Yakkala and Miriswaththa. The anticipated domestic population, to be directly served in year 2045 is 33,601. In addition to permanent residence an estimated floating population of 172,175 will be benefitted by the proposed project. Total cost estimate of the project is Rs. 20,751 million. Under the proposed wastewater disposal system, wastewater will be collected through the reticulation network, treated in 15,000 cu.m/day capacity wastewater treatment plant and the treated effluent is planned to be discharged to Attanagalu oya via 3.1km length of river outfall.

The project proposal has been submitted to obtain NPD clearance and the land acquisition is in progress. The PwC consultants are studying this project as a PPP model with World Bank assistance.

3. Anuradhapura Wastewater Disposal System

AFD and AIIB are willing to finance for the project. The feasibility study is ongoing under the consultation assignment of Anuradhapura Strategic City Development Program conducted by the Urban Development Authority. The feasibility study is being supervised by the P & D (Sewerage) section of NWSDB. The feasibility study is about 75% completed. Further, the land identification is in progress.

4. Matara Wastewater collection, treatment and disposal system

Since Matara city is being developed to act as a first order city, it is important to tackle the waste water generation of the city. About 74,193 populations live in the Matara four gravets and the MMC area contains 38 GNDs and, by the proposed project 37 GNDs will be benefitted. It is proposed to cover about 69,471 population (approximately 80%) by the proposed sewerage system and to provide 15,312 sewer connections.

The Total estimated cost of the above project would be Rs. 21,362 million. PAC and Board approvals have been obtained for the project and the Project Concept Paper has been submitted for NPD approval. Furthermore, the TEC was revised in 2017 and PAC, Board approval is obtained for the revised estimate. After the discussions held on Cabinet Committee on Economic management, the feasibility study was completed.

5. Badulla Wastewater Collection and Disposal Project

Badulla Municipal council area is highly urbanized, residential and commercial area which is experienced considerably high volume of wastewater generation. Due to the absence of proper wastewater collection and disposal facility in Badulla city, there is a considerable environmental pollution is occurred specially in Baduluoya.

The proposed project area covers Badulla urban area and suburb including highly residential Badulupitiya, Badulla East, Badulla Central GN Divisions. The anticipated population, to be directly served in year 2044 is 16,798 in 03 GN Divisions (3,732 households). In addition to permanent residence a floating population of 27,000 will be benefitted by the proposed project. Total cost estimate of the project is Rs. 7,473 million.

Under the proposed wastewater disposal system, wastewater will be collected, treated in the treatment plant and the treated effluent to be discharged to Badulu Oya.

Presently, the project proposal has been sent to National Planning Department for project approval. The World Bank has shown interest to fund this project.

The Total estimated cost of the above project would be Rs. 21,362 million. PAC and Board approvals have been obtained for the Matara Wastewater Project and the Project Concept Paper has been sent to NPD approval. Furthermore, the TEC was revised in 2017 and PAC, Board approval is obtained for the revised estimate. After the discussions held on Cabinet Committee on Economic management, the feasibility study was completed by M/s ISAN corporation Korea with the corporation of NWSDB with the funds provided by Korea Environmental industry and technology institute (KEITI) and M/s ISAN corporation of Korea.

5. Badulla Wastewater Collection and Disposal Project

Badulla Municipal council area is highly urbanized, residential and commercial area which is experienced considerably high volume of wastewater generation. Due to the absence of proper wastewater collection and disposal facility in Badulla city, there is a considerable environmental pollution is occurred specially in Baduluoya which is surrounded the city. The water quality of the Badulu Oya which is the main source of water of the people residing in downstream of the

city is drastically decreased and giving rise the demand for establishment of piped sewerage system for Badulla municipality area.

The proposed project area covers Badulla urban area and suburb including highly residential Badulupitiya, Badulla East, Badulla Central GN Divisions. The anticipated population, to be directly served in year 2044 is 16,798 in 03 GN Divisions (3,732 households). In addition to permanent residence a floating population of 27,000 will be benefitted by the proposed project. Total cost estimate of the project is Rs. 7,473 million.

Proposed wastewater disposal system comprises of a wastewater reticulation system, wastewater treatment plant including 16.9km of Gravity sewers, 10km of Rider mains, 5.3km of pumping mains, 11 number of pumping stations, 4,000 cu.m/day capacity wastewater treatment plant and finally the treated wastewater to be discharged to Badulu Oya.

Presently, the project proposal has been sent to National Planning Department for project approval. The World Bank has shown interest to fund this project.



Planning and Design (Sewerage)

•Planning work carried out during 2018

Planning and Design (Sewerage) Division is functioned under Addl. General Manager (Sewerage) Office of National Water Supply and Drainage Board which has the primary functions of carrying out feasibility studies for proposed sewerage schemes, design review of ongoing wastewater disposal projects, carrying out detailed designs for rechargeable projects for different government and non-government institutions and coordinating, monitoring environmental studies (Environmental Impact Assessments) of proposed sewerage projects etc.

During year 2018, feasibility studies for providing piped wastewater infrastructure facilities for Kalmunai, Eravur and Polonnaruwa urban areas were completed and approvals were obtained from project appraisal committee. New feasibility studies were started for providing piped wastewater infrastructure for Kaluthara, Trincomalee, Wattala and Aluthgama urban areas including coastal belt.

For the World Bank funded Water and Sanitation Improvement Project (WaSSIP) the Waste Stabilization Pond (WSP) systems were designed for Monaragala, Mulativ, Kilinochchi, Badulla and Embilipitiya Septage Treatment Plants whereas a mechanical treatment system was designed

for Thalawakele Septage Treatment System.

In addition, as an extension for existing wastewater disposal system of Moratuwa/Ratmalana the detailed designs and tendering for sewer reticulation system and sewerage pumping station for Raja Mawatha, Rathmalana were carried out under the instruction of Ministry of City Planning, Water Supply and Higher Education. Furthermore, designing of grit removal system for septage unloading at Mt. Lavinia Sewerage Pumping Station, design of Hoist arrangement for fine screen and cover for fine and coarse screens for Soysapura Wastewater Treatment Plant were also carried out. In order to improve the functions of delaying process of wastewater of Iodine Therapy wards of Apeksha Hospital of Maharagama the designing of Delay tanks with pumping station were started.

The documentation, tendering and execution of EIA/IEE studies for the major sewerage projects in pipeline are carried out by P&D (Sewerage) section. Under this, Initial Environmental Examinations (IEE) for Kattankudy wastewater disposal project was completed and CEA clearance was obtained. Furthermore, IEE studies for Dehiwala/Mt.Lavinia, Chillaw-Puttalam, Maharagama-Boralessamuwa and Sri Jayawardannapura Kotte

•Wastewater Disposal Project were continued.

•Under land acquisition, most of the land acquisition works of the Maharagama-Boralessgamuwa, Dehiwala/Mt.Lavinia, Sri Jayawardannapura Kotte and Kattankudy Wastewater Disposal Projects, were completed wheareas land acquisition works were continued for Matara, Badulla,

Gampaha, Wattala, Aluthgama, Kaluthara, Polonnaruwa, Batticaloa, Kalmunai and Eravur Wastewater Disposal Projects for obtaining lands for Wastewater Treatment Plants and Pumping Stations.

Expected Key Performance

Key Performance for the Period 2019 and 2020

Water Supply & Sewerage Coverage

Year	Actual	Planned	
	2018	2019	2020
Population (Estd)	21,670,000	21,886,700	22,105,567
Pipe borne Water supply Coverage	10,943,950	11,562,515	12,162,465
NWSDB pipe borne water supply connected coverage (%)	40.1	42.9	44.8
Overall pipe borne water supply connected coverage (%)	50.5	53.2	55.0
Pipe borne sewerage coverage	447,503	491,645	496,669
Pipe borne sewerage coverage (%)	2.06	2.24	2.25

Expected Access to Safe water Coverage

	Actual	Planned	
	2018	2019	2020
Total Pipe borne	50.5	53.2	55.0
Pipe borne by NWSDB	40.1	42.9	44.8
Protected Dug wells	36.4	36.4	36.4
Tube wells/ Hand Pumps	3.2	3.2	3.2
Rain Water Harvesting & other	0.5	0.5	0.5
Overall Access to safe water	90.6	93.3	95.1



Sustainability and Emergency Response

While all day to day activities of National Water Supply & Drainage Board are naturally oriented towards the realization of SDG Goal 6 “Ensure availability and Sustainable Management of Water and Sanitation for all”, NWSDB actively engaged in the National level activities for implementing Sustainable Development Goals in Sri Lanka. Transforming from the Millennium Development Goals to Sustainable Goals, the NWSDB under the guidance of the Ministry of City Planning, Water Supply and Higher Education was engaged in developing national indicators and setting targets in order to monitor and report the achievements related to Goal 6.1; achieve universal and equitable access to safe and affordable drinking water for all and Goal 6.2; achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations by 2030 . NWSDB also held several discussions under the guidance of the Ministry, with the Department of Census & Statistics regarding development of the questionnaire for data collection for this purpose, during the year 2018.

In keeping to the Human Rights Action Plan of the GOSL, the NWSDB developed an “Emergency Response Plan” in 2018. The Emergency Response Plan has been designed to address various emergency situations that may occur in water supply systems as well as a guideline for the Operators and administration in order to minimize disruption of normal water supply services to its consumers and to the general public at large and provide public health protection and safety during an emergency. NWSDB under the guidance of the Ministry of City Planning, Water Supply and Higher Education took action to review the Drinking Water Policy too in 2018. The draft new policy is being reviewed before submission to the approval of the Cabinet of Ministers..

Report of the Audit and Management Committee

“Every recommendation of the Audit and Management Committee was forwarded to the Board and some matters were discussed further at the Board meetings.”



During the year under review the Audit and Management Committee met 4 times and the following were important matters discussed under agenda items.

- i. Financial Statements of the year ended 31.12.2017.
- ii. Internal Audit Plan 2018.
- iii. Revised delegation of Financial Authority.
- iv. Audit summaries of 3rd & 4th quarters of year 2017 and Audit summaries of 1st & 2nd quarters of year 2018.
- v. Status of response to Government Audit Queries.
- vi. COPE directives and minutes of 8th meeting of the COPE held on Wednesday, 8th August, 2018.
- vii. Annual Report 2016/2017.
- viii. Statutory Payments.
- ix. Revision of Tariff (Water & Sewerage)
- x. Statement of Budget Income and Expenditure and Cash Flow for the year 2018 – Online Systems
- xi. Enterprise Resource Planning (ERP) System

Every recommendation of the Audit and Management Committee was forwarded to the Board and some matters were discussed further at the Board meetings.

The Audit & Management Committee was formed as per PF/PE/3 circular dated 19th November 1999, obtaining concurrence of the Board of Directors of National Water Supply & Drainage Board via Board Decision No: 2965(b) of Board Meeting No. 590.

The purpose of Audit & Management Committee is to extend its assistance to Board of Directors as per the guidelines of PED 55 dated 14/12/2010.

The prescribed roles & responsibilities of the Committee have been cited as follows.

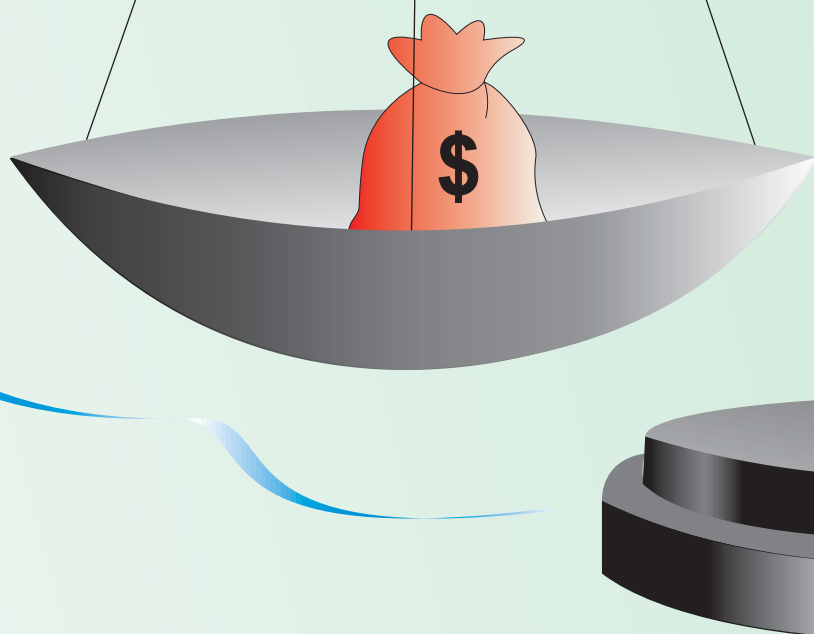
- The Audit & Management Committee is required to review the continuing impartiality of the Internal Auditors and their effectiveness.
- The Audit & Management Committee should assist the Board in the task of overseeing to ensure that Financial Reporting is done in compliance with relevant Sri Lanka Accounting Standards and other applicable legal requirements.
- The Audit & Management Committee should assist the Board to ensure that all relevant rules & regulations and circulars issued by the government are adhered to, with continuous reviewing and monitoring, also making recommendations to the Board on non-Compliance.
- The Audit & Management Committee should review the Internal/External Audit Reports, Management Letters and the recommendations of COPE, and help the Board to take remedial actions.
- The Audit & Management Committee should assist the Board to introduce and implement adequate Internal Control System.

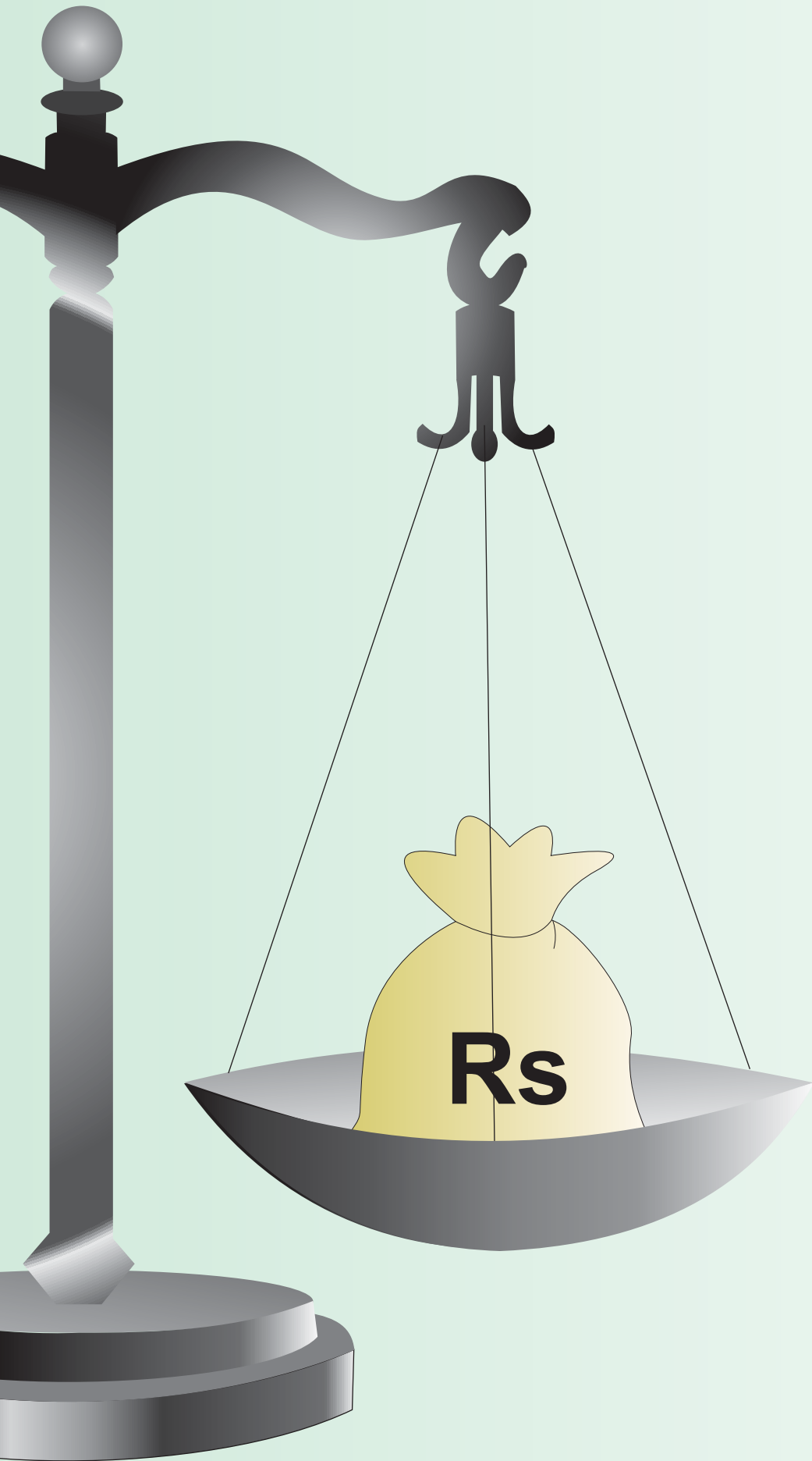
In the year 2018 the Committee was consisted of the following members.

1. Mr. J. M. U. P. Jayamaha - Board Member - Chairman of the Committee
2. Mr. Shantha Rathnayaka - Board Member
3. Ms. K. A. Subadra Walpola - Board Member
4. Mr. D. U. Sumanasekara - General Manager
5. Mr. D. Thotawatta - Addl.GM (F)
6. Mr. G. K. Iddamal goda - Addl.GM (HRM)
7. Mr. K. J. V. A. Perera - Addl.GM (CS)
Mr. B. S. Wijemanna - Actg.Addl.GM (CS)
8. Mr. R. M. A. S. Weerasena - DGM (IA)
9. Mr. M. H. M. Salman - Vice Chairman
10. Ms. D.N. Peiris - Audit Superintendent
11. Ms. S. W. Gunawardene - Chief Internal Auditor
Ministry of City Planning,
Water Supply and Higher Education
12. Ms. W. P. Sandamali de Silva - Secretary to the Board

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National Water Supply And Drainage Board

STATEMENT OF COMPREHENSIVE INCOME

Year ended 31 December 2018

		Budget 2018 Rs.	Actual 2018 Rs.	Restated 2017 Rs.
Revenue (Net of VAT)	7	25,175,195,348	24,806,457,684	23,859,760,119
Cost of Sales	8	<u>(16,973,253,060)</u>	<u>(15,821,034,600)</u>	<u>(14,196,350,460)</u>
Gross Profit		8,201,942,288	8,985,423,084	9,663,409,658
Other Operating Income and Gains	9	1,301,632,860	1,061,966,069	1,724,463,148
Administrative Expenses	10	(11,878,731,100)	(10,957,751,720)	(9,940,454,063)
Other Operating Expenses	11	<u>(550,000,000)</u>	<u>(906,753,982)</u>	<u>(714,465,635)</u>
Operating Profit / (Loss)		(2,925,155,952)	(1,817,116,550)	732,953,109
Finance Income	12	340,000,000	1,574,439,901	1,157,359,094
Finance Cost	13	<u>(4,897,320)</u>	<u>(262,731,394)</u>	<u>(12,994,621)</u>
Profit / (Loss) Before Tax		(2,590,053,272)	(505,408,042)	1,877,317,582
Income Tax (Economic Service Charges)	14	<u>(135,000,000)</u>	<u>(63,287,387)</u>	<u>(53,881,978)</u>
Profit / (Loss) for the Year		<u><u>(2,725,053,272)</u></u>	<u><u>(568,695,429)</u></u>	<u><u>1,823,435,605</u></u>

Accounting Policies & Notes from pages 8 to 27 form an integral part of these Financial Statements.

National Water Supply And Drainage Board

STATEMENT OF OTHER COMPREHENSIVE INCOME

Year ended 31 December 2018

	Budget 2018 Rs.	Actual 2018 Rs.	Restated 2017 Rs.
Profit / (Loss) for the Year	<u>(2,725,053,272)</u>	<u>(568,695,429)</u>	<u>1,823,435,605</u>
Other Comprehensive Income for the Year.			
Impairment Loss on Treasury Bond	-	-	(79,301,168)
Actuarial Gain on Defined Benefit Obligation.	-	<u>277,616,559</u>	-
Total Comprehensive Income for the Year	<u><u>(2,725,053,272)</u></u>	<u><u>(291,078,870)</u></u>	<u><u>1,744,134,437</u></u>

Accounting Policies & Notes from pages 8 to 27 form an integral part of these Financial Statements.

National Water Supply And Drainage Board
STATEMENT OF FINANCIAL POSITION

Year ended 31 December 2018

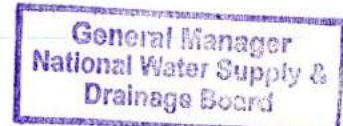
		Actual 2018 Rs	Restated 2017 Rs.
Assets			
Non- Current Assets	Notes		
Property ,Plant & Equipment	15	193,056,331,321	172,557,898,461
Intangible Assets	16	5,667,741	6,485,383
Capital Work in Progress	17	247,666,512,803	194,344,972,478
Financial assets	18	3,737,585	8,230,469
Total Non Current Assets		440,732,249,449	366,917,586,791
Current Assets			
Inventories	19	8,624,993,857	7,374,367,615
Trade & Other Receivables	20	8,595,125,398	8,708,945,991
Deposits & Advances	21	42,424,890,816	42,124,651,650
Investments	22	12,421,212,748	14,619,460,049
Cash & Cash Equivalents	23	1,588,511,391	1,398,197,000
Total Current Assets		73,654,734,210	74,225,622,304
Total Assets		514,386,983,659	441,143,209,096
Equity and Liabilities			
Equity			
Assets taken over from Government Dept.	24	185,480,387	185,480,387
Government Equity	25	81,053,316,307	75,254,960,972
Staff Welfare Fund	26	23,463,597	22,527,125
Retained Earnings		(8,437,463,522)	(8,145,448,178)
Government Grant	27	98,257,467,850	94,838,588,669
Capital Grants	28	218,168,251,014	192,631,358,038
Total Equity		389,250,515,633	354,787,467,012
Non-Current Liabilities			
Loan Payable	29	94,906,026,334	64,327,755,750
Other Deferred Liabilities	30	4,051,404,991	4,110,746,151
Total Non Current Liabilities		98,957,431,324	68,438,501,901
Current Liabilities			
Trade & Other Payables	31	17,044,660,094	13,922,360,994
Loan Capital Payable (Note 29)		5,353,649,911	2,833,921,592
Loan Interest Payable		3,780,726,696	1,160,957,598
Total Current Liabilities		26,179,036,701	17,917,240,183
Total Equity and Liabilities		514,386,983,659	441,143,209,096

R.M.A.S.Weerasena

Actg. Addl.G.M.(Finance)

D.U.Sumanasekara

General Manager



The Accounting policies on pages 08 to 14 and Notes on pages 15 to 27 form an integral part of these Financial Statements. The Board of Directors is responsible for the preparation and presentation of these Financial Statements. These Financial Statements were approved by the Board of Directors and signed on their behalf

K. A. Ansar

Chairman

Colombo

on 11 February 2018

M.H.M. Salman

Vice Chairman

National Water Supply And Drainage Board
STATEMENT OF CHANGES IN EQUITY

Year ended 31 December 2018

Note	Government Departments		Govt Grants		Government Equity		Capital Grants		Staff Welfare Fund		Accumulated Profit/Loss		Total Rs.
	Rs.		Rs.		Equity		Rs.		Rs.		Rs.		
Balance as at 1 January 2017	185,480,387	-	92,742,583,734	-	69,470,969,610	-	181,542,682,665	-	17,228,139	-	(9,785,684,856)	-	334,173,259,679
Prior Year Correction													
Assets recognised and derecognised		34.1.1									(16,015,155)		(16,015,155)
Depreciation adj. for assets recognised and derecognised		34.1.2									24,753		24,753
Rehabilitation & Construction works		34.2									(198,901,201)		(198,901,201)
Recognized/Derecognized trade & other receivables		34.2									(8,181,121)		(8,181,121)
Recognized ESC Receivable (Note 14 & 34.2)											117,169,365		117,169,365
Correction of trade & other payables		34.2									2,716,586		2,716,586
Restated Balance as at 1 January 2017	185,480,387		92,742,583,734		69,470,969,610		181,542,682,665		17,228,139		(9,888,871,629)		334,070,072,906
Net profit for the year											1,744,134,437		1,744,134,437
Assets recognised and derecognised		34.1.1									4,588,000		4,588,000
Receipts / Transfers during the year			2,096,004,935				8,831,136,779						10,927,141,714
Loan to Equity conversion (Including adj. to opening balanc		34.2			8,041,529,956								8,041,529,956
Correction of Classification Error					(2,257,538,594)		2,257,538,594						
Transfers to Staff welfare fund									5,298,986		(5,298,986)		
Restated balance as at 31 December 2017	185,480,387		94,838,588,669		75,254,960,972		192,631,358,038		22,527,125		(8,145,448,178)		354,787,467,012
Net profit for the year											(291,078,870)		(291,078,870)
Receipts / Transfers during the year			3,418,879,181				25,536,892,975						28,955,772,157
Loans conversion to equity					5,798,355,335								5,798,355,335
Transfers to staff welfare fund									936,472		(936,472)		
Balances as at 31 December 2018	185,480,387		98,257,467,850		81,053,316,307		218,168,251,014		23,463,597		(8,437,463,521)		389,250,515,633

Accounting Policies & Notes from pages 8 to 27 form an integral part of these Financial Statements.

National Water Supply And Drainage Board

STATEMENT OF CASH FLOW

Year ended 31 December 2018

For the year ended	Notes	Actual 2018 <u>Rs.</u>	Restated 2017 <u>Rs.</u>
Cash Flows from/(used) in Operating Activities			
Net Profit/(Loss) before Tax		(505,408,042)	1,877,317,582
<i>Adjustments for</i>			
Interest Income	12	(1,574,439,901)	(1,157,359,094)
Profit on disposal of Fixed Assets		24,193,893	4,495,307
Depreciation	10.2	3,651,944,639	3,339,769,596
Retiring gratuity provision	28.1	706,912,095	488,661,467
Interest Expense	13	<u>262,731,394</u>	<u>12,994,621</u>
Operating Profit before Working Capital Changes		2,565,934,077	4,565,879,478
(Increase)/Decrease in Inventories		(1,250,626,242)	(730,895,060)
(Increase)/Decrease in Debtors, Rece'bles & Deposits		(186,418,573)	(17,489,300,135)
Increase/(Decrease) in Creditors, Provisions & Deposits		<u>3,135,402,377</u>	<u>4,079,753,701</u>
Cash Generated from Operations		4,264,291,639	(9,574,562,016)
Tax Paid		(63,287,387)	(53,881,978)
Gratuity Paid	29.1	<u>(501,739,973)</u>	<u>(488,661,467)</u>
Net Cash from Operating Activities		<u>3,699,264,278</u>	<u>(10,117,105,461)</u>
Cash Flows from/(used) in Investing Activities			
Investments in Fixed Assets & Work-In-Progress		(71,528,606,310)	(44,534,585,092)
Financial assets		4,492,884	2,792,594
Sale proceeds for disposal assets		12,695,977	2,001,798
Investment Income Received		1,574,439,901	1,157,359,094
(Investment) / Withdrawl of Investments	34.2	<u>2,198,247,301</u>	<u>(11,162,423,266)</u>
Net Cash Flows used in Investing Activities		<u>(67,738,730,246)</u>	<u>(54,534,854,872)</u>
Cash Flows from/(used in) Financing Activities			
Government Grant during the Period		3,418,879,181	2,096,004,935
Capital Grant during the period		26,888,700,506	12,276,641,879
New Loans & Loans Receipts for the Equity Conversion		43,262,797,713	38,538,296,016
Loan Repayments		(4,366,443,474)	(659,977,136)
Interest Paid		(4,974,153,567)	(5,130,346,746)
Sales proceeds of treasury bond		-	6,836,828,662
		<u>64,229,780,358</u>	<u>53,957,447,610</u>
Net Increase in Cash & Cash Equivalents		190,314,390	(10,694,512,722)
Cash & Cash Equivalents at the beginning of the year		<u>1,398,197,000</u>	<u>12,092,709,720</u>
Cash & Cash Equivalents at the end of the period		<u>1,588,511,391</u>	<u>1,398,197,000</u>

The accounting policies and notes on Pages 8 to 27 Form an integral part of the financial statements.

NATIONAL WATER SUPPLY AND DRAINAGE BOARD
NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2018



CORPORATE INFORMATION

1.1 General

National Water Supply & Drainage Board is a statutory board enacted by the Parliament under the National Water Supply & Drainage Board Law No. 2 of 1974. The registered office of the board is located at Galle Road, Ratmalana, and the principal place of business is situated at the same location.

National Water Supply & Drainage Board (NWS&DB) is an institution under the purview of Ministry of City Planning, Water Supply and Higher Education.

1.2 Principal activities

The principal activity of the Board is to produce and sell treated drinking water to the community.

The objectives of the National Water Supply & Drainage Board are to develop treated drinking water throughout the country and it's accessibility among the people of Sri Lanka.

2. BASIS OF PREPARATION

2.1 Statement of Compliance

The Financial Statements have been prepared in accordance with Sri Lanka Accounting Standards (SLFRS/LKAS) as issued by The Institute of Chartered Accountants of Sri Lanka.

2.2 Basis of Measurement

The Financial Statements have been prepared on the historical cost basis except for financial instruments and other financial assets and liabilities held for trading that have been measured at fair value and liabilities for defined benefit obligation is recognized as at the present value of the defined benefit obligation.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

3.1 Property Plant and Equipment

Property, plant and equipment is stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the property, plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced at intervals, NWS&DB recognises such parts as individual assets with specific useful lives and depreciates them accordingly. Likewise, when a major inspection is performed, it's cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred.

The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

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The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

3.1.1 Depreciation

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets as follows:

Plant Property and Equipment	Rate
Building & Structures	1.67% - 2%
Plant & equipment pumping treatment	5%
Service & Bulk water meter	10%
Transmission & Distribution: Equipments	1.67% 10%
Furniture & fittings	10%
Computers Peripherals & Mobile Phones	20% - 33.3%
Motor Vehicles	10% - 20%
Lease hold Vehicles	14.3%

3.1.2 Capital Work In Progress

Capital expenses incurred during the year, which are not capitalized as at the reporting date are shown as capital work in progress, whilst the capital assets which have been capitalized during the year and put to use have been transferred to Property Plant & Equipment.

3.1.3 Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at the inception date, whether fulfillment of the arrangement is dependent on the use of a specific asset or the arrangement conveys a right to use the asset, even if that right is not explicitly specified in an arrangement.

3.1.4 Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less accumulated amortization and accumulated impairment losses, if any. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditure is reflected in the income statement in the year in which the expenditure is incurred. Acquisition of computer software are recognized as intangible assets and amortized over the period of 7 years.

3.1.5 Research and development costs

Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when NWS&DB can demonstrate:

- The technical feasibility of completing the intangible asset so that the asset will be available for use or sale
- Its intention to complete and its ability to use or sell the asset
- How the asset will generate future economic benefits
- The availability of resources to complete the asset
- The ability to measure reliably the expenditure during development

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is completed and the asset is available for use. It is amortized over the period of expected future benefit. During the period of development, the asset is tested for impairment annually.

3.1.6 Impairment of Non-Financial Assets

The NWS&DB assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the NWS&DB estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating units (CGU) fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, recent market transactions are taken into account, if available. If no such transactions can be identified, an appropriate valuation model is used.

3.2.1 Inventories

Inventories are valued at cost or net realizable value whichever is lower after making due allowance for obsolete and slow moving items which are valued at 'First In First Out' basis. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

Measurement of inventories

3.2.2 Cost of Inventories

Raw Materials

Cost of purchases together with any incidental expenses.

Other Stocks

Cost is arrived at weighted average basis.

3.3. Cash and Cash Equivalents

Cash and cash equivalents comprise cash in hand and bank balances and short term investment, net of outstanding bank overdrafts if any

4. LIABILITIES, PROVISIONS AND EQUITY

4.1. Retirement Benefit Obligation

4.1.1 Retirement Benefit Obligations (LKAS 19)

a) Defined Benefit Plan – Gratuity

Provision has been made for retiring gratuity from the first year of service for all employees, in conformity with Sri Lanka Accounting Standard No. 19 (LKAS 19).

b) Retirement Benefit Cost

NWSDB operates a defined benefit pension plan. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Actuarial gains and losses for the defined benefit plan are recognized in full in the period in which they occur in other comprehensive income. Such actuarial gains and losses are also immediately recognized in retained earnings and are not reclassified to profit or loss in subsequent periods.

National Water Supply And Drainage Board
NOTES TO THE FINANCIAL STATEMENTS
Year ended 31 December 2018

Unvested past service costs are recognized as an expense on a straight line basis over the average period until the benefits become vested. Past service costs are recognized immediately if the benefits have already vested immediately following the introduction of, or changes to, a pension plan.

The defined benefit asset or liability comprises the present value of the defined benefit obligation (using a discount rate based on high quality corporate bonds), less unrecognized past service costs and less the fair value of plan assets out of which the obligations are to be settled.

Retirement benefit obligation is measured through the service of an actuarial valuer in every three years interval and maintains such liability over the period of three years in line with the salary revision. Hence, the gratuity liability occurred for the next two consecutive years are treated as expense immediately after the actuarial liability is identified in the first year.

Defined Contribution Plans- EPF & ETF

Employees are eligible for Employees' Provident Fund Contributions and Employees' Trust Fund Contributions in line with respective Statutes and Regulations. The Board contributes 12% and 3% of gross emoluments of employees to EPF and ETF respectively.

4.2 Provisions

General

Provisions are recognized when NWS&DB has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When NWS&DB expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the income statement net of any reimbursement.

4.3 Government Grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the costs, which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in equal amounts over the expected useful life of the related asset.

When NWS&DB receives non-monetary grants, the asset and the grant are recorded at nominal amounts and released to profit or loss over the expected useful life in a pattern of consumption of the benefit of the underlying asset by equal annual installments. When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favorable interest is regarded as a government grant.

5. INCOME STATEMENT

For the purpose of presentation of the Income Statement, the function of expenses method is adopted, as it represents fairly the elements of NWS&DB performance.

5.1.1 Revenue Recognition

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the NWS&DB and the

National Water Supply And Drainage Board
NOTES TO THE FINANCIAL STATEMENTS
Year ended 31 December 2018

revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable taking into account contractually defined terms of payment.

The following specific recognition criteria must also be met before revenue is recognized.

Sale of goods

Revenue from the sale of goods is recognized when the significant risks and rewards of ownership of the goods have passed to the buyer, usually on delivery of the goods.

Sale of Water

Revenue from sale of water is recognized according to the number of consumed unit within 30 days of time by the consumer, when the meters are read and when bills are processed within the system.

Other Income

Other income is recognized on an accrual basis.

Interest income

For all financial instruments measured at amortized cost and interest bearing financial assets classified as available for sale, interest income or expense is recorded using the effective interest rate (EIR), which is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability. Interest income is included in finance income in the income statement.

Rechargeable Works

Revenue from fixed price construction contracts is recognized on the percentage of completion method, measured by the work done of the contract.

5.1.2 Expenses

All expenditures incurred in the running of the business have been charged to income in arriving at the profit for the year. Repairs and renewals are charged to profit and loss in the year in which the expenditure is incurred.

5.2 Deferred Tax

The NWSDB is having massive deductible tax losses and other deductible expenses including interest against the tax liability. Hence, it is unlikely that arising of tax liability in foreseeable future period therefore, NWSDB does not adjust differed tax in Financial Statement.

6. FINANCIAL INSTRUMENTS- INITIAL RECOGNITION AND SUBSEQUENT MEASUREMENT

6.1 Financial Asset

6.1.1 Initial recognition and measurement

Financial assets within the scope of LKAS 39 are classified as financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments and available-for-sale financial assets, as appropriate and determine the classification of its financial assets at initial recognition.

All financial assets are recognized initially at fair value plus, in the case of assets not at fair value through profit or loss, directly attributable transaction costs.

The financial assets of NWS&DB include cash and short term investment, trade and other receivables, staff loans and other receivables.

6.1.2 Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows

6.1.2.1 Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. NWS&DB did not have any financial assets at fair value through profit or loss during the years ended 31 December 2017 and 2018.

6.1.2.2 Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest rate method (EIR), less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance income in the income statement.

6.1.2.3 Held-to-maturity investments

Non-derivative financial assets with fixed or determinable payments and fixed maturities are classified as held to-maturity when the NWS&DB has the positive intention and ability to hold it to maturity. After initial measurement, held-to-maturity investments are measured at amortized cost using the effective interest method, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance income in the income statement. The losses arising from impairment are recognized as finance cost in the income statement in finance cost.

6.1.2.4 Available-for-sale financial investments

Available-for-sale financial investments include equity and debt securities. Equity investments classified as available for-sale are those, which are neither classified as held for trading nor designated at fair value through profit or loss. Debt securities in this category are those which are intended to be held for an indefinite period of time and which may be sold in response to needs for liquidity or in response to changes in the market conditions.

After initial measurement, available-for-sale financial investments are subsequently measured at fair value with unrealized gains or losses recognised as other comprehensive income in the available-for-sale reserve until the investment is derecognized.

6.1.2.5 Derecognition

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognized when,

- i) The rights to receive cash flows from the asset have expired
- ii) NWS&DB has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either
 - (a) NWS&DB has transferred substantially all the risks and rewards of the asset, or
 - (b) NWS&DB has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

6.1.2.6 Impairment of financial assets

The NWS&DB assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset and that loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency, the probability that they will enter bankruptcy or other financial reorganization and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

6.1.2.7 Financial assets carried at amortized cost

For financial assets carried at amortized cost, the NWS&DB first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the NWS&DB determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognized are not included in a collective assessment of impairment.

If there is objective evidence that an impairment loss has been incurred, the amount of the loss is measured as the difference between the assets carrying amount and the present value of estimated future cash flows (excluding future expected credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate.

The NWS&DB performed specific impairment for each debtor categories during the year 2018

6.2 Financial Liabilities

Initial Recognition and Measurement

Financial liabilities within the scope of LKAS 39 are classified as financial liabilities at fair value through profit or loss, at amortized cost, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. NWS&DB determines the classification of its financial liabilities at initial recognition.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings, carried at amortized cost. This includes directly attributable transaction costs. NWS&DB's financial liabilities include trade and other payables.

Subsequent Measurement

Subsequent measurement of financial liabilities is at amortized cost.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

	Actual	Restated
	2018	2017
	Rs.	Rs.
7. REVENUE		
Metered Sales	22,365,059,366	21,348,160,939
Bulk Sales	292,627,223	258,804,307
Bowser Supply	86,201,995	85,469,891
Income from main operations	7.1 <u>2,062,569,100</u>	<u>2,167,324,981</u>
	<u>24,806,457,684</u>	<u>23,859,760,119</u>
7.1 Income from Main Operations		
Income related to New connection and other main operations	2,320,114,785	2,477,538,710
Capital Recovery Charges	610,898,296	650,943,128
Expense related to New connection	<u>(868,443,982)</u>	<u>(961,156,857)</u>
	<u>2,062,569,100</u>	<u>2,167,324,981</u>
8. COST OF SALES		
Personnel Cost	7,306,094,365	6,352,852,297
Pumping Cost	4,255,907,527	4,064,774,139
Chemicals	937,904,605	818,014,323
Repairs & Maintenance	1,501,705,207	1,358,047,056
Establishment Expenses	560,775,595	510,408,988
Rent, Rates, Taxes, Security & Other Expenses	1,156,620,923	991,127,078
Rebates	<u>102,026,377</u>	<u>101,126,579</u>
	<u>15,821,034,600</u>	<u>14,196,350,460</u>
9. OTHER OPERATING INCOME		
Other Income	9.1 1,006,969,875	1,709,234,921
Staff loan benefit	<u>54,996,194</u>	<u>15,228,227</u>
	<u>1,061,966,069</u>	<u>1,724,463,148</u>
9.1 Other Income		
Sewerage and ground water income	251,270,810	272,787,008
Miscellaneous Income including Surcharge, Penalties etc.	<u>755,699,065</u>	<u>1,436,447,913</u>
	<u>1,006,969,875</u>	<u>1,709,234,921</u>

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

	Actual	Restated
	2018	2017
	Rs	Rs.
10. ADMINISTRATIVE EXPENSES		
Repairs & Maintenance	197,583,294	221,799,539
Establishment Expenses	721,904,016	698,631,095
Rent,Rates,Taxes, Security & Other Expenses	33.2 438,489,560	454,807,662
Staff Cost	10.1 5,937,830,211	5,222,246,171
Depreciation	10.2 3,651,944,639	3,339,769,596
Audit Fee-AGDSL including continuous audit	10,000,000	3,200,000
	<u>10,957,751,720</u>	<u>9,940,454,063</u>
10.1 Staff Cost		
Staff Cost on Loan Granted	54,996,194	15,228,227
Personnel Cost	5,882,834,017	5,207,017,944
	<u>5,937,830,211</u>	<u>5,222,246,171</u>
10.2 Depreciation		
Building and structure	1,192,150,329	1,079,876,909
Plant & Machinery	3,168,496,310	2,804,843,946
Equipments	327,741,442	322,100,055
Furniture and Fittings	38,415,037	47,597,987
Computers & Periparels	74,609,050	62,692,861
Motor Vehicles	201,522,359	209,799,457
Total Depreciation	5,002,934,527	4,526,911,215
Less: Depn. for Grant funded Assets	(1,358,041,183)	(1,195,058,205)
Less: Depn. for Rechargeable funded Assets	(9,362,975)	(8,326,397)
Add: Amortization of leased Assets	15,949,142	15,949,142
Add: Amortization of Intangible Assets	465,128	293,841
Depreciation Cost	<u>3,651,944,639</u>	<u>3,339,769,596</u>
Depreciation amounting 75,594 has been adjusted to the year 2017		
11. OTHER OPERATING EXPENSES		
Bad & Doubtful Debts	27,374,836	28,571,639
Provision for Irrecoverable Staff Loans	5,717,794	2,440,340
Provision for Obsolete Stock	32,416,706	63,131,636
Retiring Gratuity	706,912,095	488,661,467
Revenue grant	134,332,552	131,660,553
	<u>906,753,982</u>	<u>714,465,635</u>
12. FINANCE INCOME		
Investment Income	1,574,439,901	1,157,359,094
	<u>1,574,439,901</u>	<u>1,157,359,094</u>
13. FINANCE COST		
Interest On Loans	7,593,922,666	6,291,304,344
Less: Capitalised Interest on Construction Projects	(7,331,191,272)	(6,278,309,723)
	<u>262,731,394</u>	<u>12,994,621</u>
14. INCOME TAX		
Economic Service Charge (After Two Years)	63,287,387	53,881,978
	<u>63,287,387</u>	<u>53,881,978</u>

National Water Supply And Drainage Board
NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

15. PROPERTY, PLANT AND EQUIPMENT

15.1 Gross Carrying Amounts	Restated Balance As at 01.01.2018 Rs.	Additions after Adjustments Rs.	Transfers Rs.	Disposals Rs.	Balance As at 31.12.2018 Rs.
Cost					
Freehold Assets					
Land Freehold	8,362,074,820	218,225,565	(14,347,400)	-	8,565,952,985
Land Leasehold	626,329,991	10,141,915	(9,710,723)	-	626,761,182
Infrastructure	5,876,642,824	202,149,340	(1,569,016)	-	6,077,223,147
Building - Freehold Structures	12,112,876,855	1,100,100,991	(175,221,302)	(3,160,000)	13,034,596,545
Plant & equipment-pumping treatment Service meter	31,283,400,371	4,972,024,067	(476,179,558)	-	35,779,244,880
Bulk water meter	19,439,577	74,078	-	-	19,513,655
Transmission & Distribution	539,275,728	74,848,624	(35,036,718)	-	579,087,634
Mobile Equipments	84,971,844,664	15,703,680,393	(1,572,331,289)	(3,400,000)	99,099,793,768
Survey Equipments	572,030,469	136,429,296	(4,550,515)	-	703,909,250
Laboratory Equipments	41,833,582	4,292,243	568,300	-	46,694,125
Other Equipment	644,499,621	158,302,460	(40,201,627)	-	762,600,454
Furniture & fittings-computer	2,172,566,317	517,816,451	(43,088,224)	-	2,647,294,544
Computers & Periparels	532,971,140	80,491,492	(19,042,367)	-	594,420,265
Motor vehicles cars	493,440,966	100,020,579	(11,090,130)	-	582,371,415
Van busses & jeeps	163,609,127	850,500	(4,903,599)	(1,200,000)	158,356,028
Lorries & trucks	543,194,697	11,950,000	(52,100,000)	(3,000,000)	500,044,697
Tractors & trailers	2,123,288,754	215,096,039	(113,938,729)	(10,250,000)	2,214,196,064
Water bowsers, Heavy veh:	75,630,211	-	11,060,000	(700,000)	85,990,211
Motor cycles	1,347,607,072	88,699,330	29,060,554	(50,671,000)	1,414,695,956
Three Weelers	23,474,132	1,441,684	(1,441,684)	(260,430)	23,213,702
Lease hold Vehicles	7,106,876	-	553,099	-	7,659,975
	23,180,000	-	-	-	23,180,000
Total Value of Depreciable Assets	<u>197,227,567,915</u>	<u>32,006,524,349</u>	<u>(6,468,267,093)</u>	<u>(72,641,430)</u>	<u>222,693,183,741</u>

National Water Supply And Drainage Board
NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

15.2 Depreciation	Restated Balance As at 01.01.2018 Rs.	Charge for the Period Rs.	Adjustments Rs.	Disposal Rs.	Balance As at 31.12.2018 Rs.
Depreciation					
Freehold Assets					
Land Freehold				-	-
Land Leasehold				-	-
Infrastructure	691,658,562	119,432,577	(128,628)	-	810,962,511
Building - Freehold	1,387,753,922	251,607,581	200,087	(758,000)	1,638,803,590
Structures	4,417,732,025	821,110,171	(71,460)	-	5,238,770,736
Plant & eq: pumping treatment	7,063,660,879	1,611,591,460	-	-	8,675,252,339
Service meter	16,233,935	1,869,143	-	-	18,103,077
Bulk water meter	195,144,221	51,091,785	-	-	246,236,007
Transmission & Dist:	7,410,826,931	1,503,943,922	-	(681,360)	8,914,089,493
Mobile Equipments	221,850,227	49,950,890	-	-	271,801,117
Survey Equipments	10,837,358	4,212,667	261,249	-	15,311,274
Laboratory Equipments	325,948,484	50,672,036	-	-	376,620,519
Other Equipment	895,719,169	222,905,849	(261,249)	-	1,118,363,769
Furniture & fittings-computer	269,337,292	38,415,037	6,880	-	307,759,210
Computers & Periparels	397,342,791	74,609,050	(6,880)	-	471,944,960
Motor vehicles cars	152,125,255	-	-	(1,141,140)	150,984,115
Van busses & jeeps	372,864,840	26,286,038	-	(2,852,850)	396,298,028
Lorries & trucks	496,908,836	105,028,149	-	(5,842,500)	596,094,485
Tractors & trailers	65,444,897	389,300	-	(665,000)	65,169,197
Water bowsers, Heavy veh:	256,867,702	67,490,637	-	(23,563,301)	300,795,038
Motor cycles	11,377,704	732,348	-	(247,409)	11,862,644
Three Wheelers	1,374,667	756,813	-	-	2,131,481
Lease hold Vehicles	8,659,758	839,073	-	-	9,498,831
	<u>24,669,669,453</u>	<u>5,002,934,527</u>	<u>(0)</u>	<u>(35,751,560)</u>	<u>29,636,852,421</u>

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

15. PROPERTY, PLANT AND EQUIPMENT (Contd...)

15.3 Net Book Values	2018	2017
	Rs.	Rs.
At Cost		
Land Freehold	8,565,952,985	8,362,074,820
Land Leasehold	626,761,182	626,329,991
Infrastructure	5,266,260,636	5,184,984,262
Building - Freehold Structures	11,395,792,955	10,725,122,933
Plant & equipment-pumping treatment	43,907,612,524	40,253,518,098
Service meter	27,103,992,541	24,219,739,491
Bulk water meter	1,410,578	3,205,642
Transmission & Distribution	332,851,627	344,131,507
Mobile Equipments	90,185,704,275	77,561,017,733
Survey Equipments	432,108,132	350,180,242
Laboratory Equipments	31,382,851	30,996,224
Other Equipments	385,979,935	318,551,138
Furniture & fittings-computer	1,528,930,776	1,276,847,149
Computers & Periparels	286,661,055	263,633,848
Motor vehicles cars	110,426,455	96,098,176
Van busses & jeeps	7,371,913	11,483,872
Lorries & trucks	103,746,669	170,329,857
Tractors & trailers	1,618,101,577	1,626,379,918
Water bowsers, Heavy veh:	20,821,014	10,185,314
Motor cycles	1,113,900,919	1,090,739,370
Three Wheelers	11,351,058	12,096,428
Lease hold Vehicles	5,528,494	5,732,209
	13,681,169	14,520,242
Total Carrying Amount of Property, Plant & Equipment	193,056,331,321	172,557,898,461

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

	Actual	Restated
	2018	2017
	Rs.	Rs.
16. INTANGIBLE ASSETS		
Computer Software	<u>5,667,741</u>	<u>6,485,383</u>
	<u>5,667,741</u>	<u>6,485,383</u>
<p>Durring the year Rs 1,506,412 has been provided for amortization for above software and new software amounting to 688,770 was added .</p>		
17. CAPITAL WORK IN PROGRESS		
Construction Work	34.2 243,501,731,056	190,287,353,765
Rehabilitation	<u>4,164,781,747</u>	<u>4,057,618,713</u>
	<u>247,666,512,803</u>	<u>194,344,972,478</u>
18. FINANCIAL ASSETS		
HDFC Investment for Staff Housing Loans	2,426,217	6,968,542
Bank of Ceylon Saving - II	<u>1,311,367</u>	<u>1,261,927</u>
	<u>3,737,585</u>	<u>8,230,469</u>
19. INVENTORIES		
PVC Steel Pipe	3,995,347,403	3,596,506,695
Water Meter & Fitting & Brass Items	897,566,903	1,010,013,091
Chemical Material	185,659,879	132,869,718
Electricals	727,917,726	562,303,793
Building Material	51,147,926	34,335,045
Pump & Spare Parts	1,270,259,226	1,145,954,807
Vehicle Spare Parts	111,153,294	139,120,998
Stationary & Office Equipment	60,314,025	49,246,438
Other Items	567,238,346	786,994,194
Stock in Transit	1,345,932,727	352,151,303
Stock Adjustments	<u>(1,320,385)</u>	<u>2,505,677</u>
	9,211,217,070	7,812,001,758
Less- Major Spares		
Property Plant and Equipment at Stores	(435,811,837)	(319,639,473)
*Provision for Obsolete Stock	<u>(150,411,377)</u>	<u>(117,994,671)</u>
	<u>8,624,993,857</u>	<u>7,374,367,615</u>

National Water Supply And Drainage Board
NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

		Actual 2018 Rs.	Restated 2017 Rs.
20. TRADE AND OTHER RECEIVABLES			
Trade Debtors		4,779,721,487	4,816,900,998
Other Debtors	34.2	259,238,207	292,533,944
Less : Debtors Impairment		(1,218,931,427)	(1,197,444,350)
Debtors Collection Control		524,428,698	735,476,738
VAT Receivable	34.2	662,227,360	1,239,677,252
WHT Receivable		187,742,562	114,867,966
ESC Receivable	34.2	199,550,908	128,970,813
Advances to Staff		13,309,832	12,818,410
Loans To Employees		3,073,006,814	2,468,034,087
Receivable on Interest & Others		<u>114,830,958</u>	<u>97,110,133</u>
		<u>8,595,125,398</u>	<u>8,708,945,991</u>
To expedite the reporting process, 2018 December month main revenue has been estimated based on 2018 November actual main income.			
21. DEPOSITS AND ADVANCES			
Pre Payments		3,280,000	585,500
Mobilization and Other Advances		42,194,242,006	41,900,934,928
Deposits		<u>227,368,810</u>	<u>223,131,222</u>
		<u>42,424,890,816</u>	<u>42,124,651,650</u>
22. INVESTMENTS			
Held to Maturity (Including rechargeable funded investments 34.2		<u>12,421,212,748</u>	<u>14,619,460,049</u>
		<u>12,421,212,748</u>	<u>14,619,460,049</u>
23. CASH AND CASH EQUIVALENTS			
Cash In Bank		1,164,143,607	994,458,651
Cash Imprest Head Office		4,799,200	1,337,464
Cash Imprests Regions		4,044,813	8,955,594
Cash In Transit		336,043,725	316,176,266
Savings Account		<u>79,480,045</u>	<u>77,269,025</u>
		<u>1,588,511,391</u>	<u>1,398,197,000</u>
24. ASSETS TAKEN OVER FROM GOVERNMENT			
Assets taken over from Government Dept.		<u>185,480,387</u>	<u>185,480,387</u>
		<u>185,480,387</u>	<u>185,480,387</u>
25. GOVERNMENT EQUITY			
Equity loan conversion	34.2	67,153,332,381	61,354,977,046
Government contribution (bond)		<u>13,899,983,925</u>	<u>13,899,983,925</u>
		<u>81,053,316,307</u>	<u>75,254,960,972</u>

Policy decision has been taken by government of Sri Lanka to convert foreign funded loans and interest payable thereon as at 31.12.2014 to government equity. Further, the debt service done by the treasury for the certain foreign funded projects were also recognized as government contribution during the year.

National Water Supply And Drainage Board
NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

		Actual 2018 Rs.	Restated 2017 Rs.
26. STAFF WELFARE FUND			
Opening Balance		22,527,125	17,228,139
Received during the year		936,472	5,298,986
		<u>23,463,597</u>	<u>22,527,125</u>
27. GOVERNMENT GRANT			
Tresuary Grant		98,257,467,850	94,838,588,669
		<u>98,257,467,850</u>	<u>94,838,588,669</u>
28. CAPITAL GRANTS			
Foreign Grants	34.2	217,065,024,840	191,565,288,219
Local Grants		1,103,226,173	1,066,069,820
		<u>218,168,251,014</u>	<u>192,631,358,038</u>
29. LOAN PAYABLE			
Foreign Loans		69,901,712,319	40,512,242,399
Local Loans		25,004,314,014	23,815,513,351
Long term portion of loan payable		94,906,026,334	64,327,755,750
Current portion loan payable		5,353,649,911	2,833,921,592
Loan Payable		<u>100,259,676,245</u>	<u>67,161,677,342</u>
30. OTHER DEFERRED LIABILITIES			
Provision for defined benefit plan	30.1	4,003,984,078	4,076,428,515
Customer and Employee Security Deposits		47,420,912	34,317,636
		<u>4,051,404,991</u>	<u>4,110,746,151</u>
30.1 Movement of Retiring Gratuity Provision			
Balance at the Beginning of the Period		4,076,428,515	4,076,428,515
Add Provision for the Period (Interest and Current Service Cost)		706,912,095	488,661,467
Less: Gratuity Payments during the Period and Net Actuarial Gain		(779,356,532)	(488,661,467)
		<u>4,003,984,078</u>	<u>4,076,428,515</u>
Interest Cost at the rate of 12% is Rs.485,314,522, Current Service Cost is Rs.221,597,573 & Gratuity Paid is for the year is Rs. 501,739,973 hence, net Actuarial Gain is Rs. 277,616,559.			
31. TRADE AND OTHER PAYABLES			
Rechargeable Work - Customer Advances		6,302,459,963	6,634,430,544
Contractors Retention		7,529,652,312	5,042,274,861
Lease Hold Creditors		10,848,635	18,506,495
Less: Interest in Suspense		(778,737)	(2,214,055)
Creditors Control	34.2	1,918,128,500	830,936,011
Other Creditors		94,052,159	97,725,057
Accrued expenses	34.2	896,707,898	1,034,875,560
Deposits		97,343,295	74,663,873
With Holding Tax	34.2	10,092,770	94,132
Salaries and Other Payables		186,153,298	191,068,515
		<u>17,044,660,094</u>	<u>13,922,360,994</u>

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

32. RELATED PARTY TRANSACTIONS

Transactions with State and State Controlled Entities

In the normal course of its operations, the Board enters into transactions with related parties. Related parties include the Government of Sri Lanka (State: as the ultimate owner of the Board), various government departments, and State controlled entities. Particulars of transactions, and arrangements entered into by the Board with the State and State controlled entities which are individually significant and for other transactions that are collectively, but not individually significant.

33. EVENTS AFTER THE BALANCE SHEET DATE

All the material events after the balance sheet date have been considered and appropriate adjustment and disclosures have been made in to the financial statement, where necessary.

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

34. PRIOR YEAR ADJUSTMENTS

34.1 Board assets were revalued as at 31.12.2007 by obtaining the service of Department of Valuation. Revalued amount of assets were taken to the books during the year 2010 and those values are continuing as deem cost of PPE at present. There were some duplications and omissions occurred in 2010 due to the immensity of the assets base and have been rectified as prior year adjustments with retrospective effect. Accordingly net effect of Rs. 21.3 million had been adjusted for carrying amount of PPE and Rs.4.8 million had been adjusted for depreciation as at 31.12.2017 as follows.

34.1.1 Gross Carrying Amounts

Cost	Balance As at 31.12.2017 Rs.	Prior Year Adjustments Rs.	Restated Balance As at 31.12.2017 Rs.
Freehold Assets			
Land Freehold	8,362,074,820		8,362,074,820
Land Leasehold	626,329,991		626,329,991
Infrastructure	5,876,642,824		5,876,642,824
Building - Freehold	12,118,079,463	(5,202,608)	12,112,876,855
Structures	44,673,962,536	(2,712,413)	44,671,250,123
Plant & eq: pumping treatment	31,278,812,371	4,588,000	31,283,400,371
Service meter	19,439,577	-	19,439,577
Bulk water meter	539,275,728	-	539,275,728
Transmission & Dist:	84,979,801,103	(7,956,439)	84,971,844,664
Mobile Equipments	572,030,469		572,030,469
Survey Equipments	41,833,582	-	41,833,582
Laboratory	644,499,621		644,499,621
Other Equipment	2,172,566,317		2,172,566,317
Furniture & fittings-computer	532,979,772	(8,632)	532,971,140
Computers & Periparels	493,576,029	(135,062)	493,440,966
Motor vehicles cars	163,609,127	-	163,609,127
Van busses & jeeps	543,194,697	-	543,194,697
Lorries & trucks	2,123,288,754	-	2,123,288,754
Tractors & trailers	75,630,211		75,630,211
Water bowsers, Heavy veh:	1,357,504,072	(9,897,000)	1,347,607,072
Motor cycles	23,474,132	-	23,474,132
Three Weelers	7,106,876	-	7,106,876
Lease hold Vehicles	23,180,000	-	23,180,000
Total Value of Depreciable Assets	197,248,892,069	(21,324,155)	197,227,567,915

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

34.1.2 Depreciation	Balance	Prior Year	Restated Balance
Freehold Assets	As at	Adjustments	As at
	31.12.2017		31.12.2017
	Rs.	Rs.	Rs.
Land Freehold	-		-
Land Leasehold	-		-
Infrastructure	691,529,934	128,628	691,658,562
Building - Freehold	1,387,753,922		1,387,753,922
Structures	4,417,732,025		4,417,732,025
Plant & eq: pumping treatment	7,063,622,646	38,233	7,063,660,879
Service meter	16,233,935	-	16,233,935
Bulk water meter	195,144,221	-	195,144,221
Transmission & Dist:	7,410,826,931	-	7,410,826,931
Mobile Equipments	221,850,227	-	221,850,227
Survey Equipments	10,837,358	-	10,837,358
Laboratory	325,948,484		325,948,484
Other Equipment	895,719,169		895,719,169
Furniture & fittings-computer	269,344,172	(6,880)	269,337,292
Computers & Periparels	397,446,415	(103,625)	397,342,791
Motor vehicles cars	152,125,255	-	152,125,255
Van busses & jeeps	372,864,840	-	372,864,840
Lorries & trucks	496,908,836	-	496,908,836
Tractors & trailers	65,444,897	-	65,444,897
Water bowsers, Heavy veh:	261,707,572	(4,839,870)	256,867,702
Motor cycles	11,377,704	-	11,377,704
Three Wheelers	1,374,667	-	1,374,667
Lease hold Vehicles	8,659,758	-	8,659,758
Total Value of Depreciation	<u>24,674,452,967</u>	<u>(4,783,514)</u>	<u>24,669,669,453</u>

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

34.2 In addition to the prior year adjustments for Property Plant & Equipments, the following items also have been adjusted retrospectively.

	Balance As at 31.12.2017 Rs.	Prior Year Adjustments Rs.	Adjustment For 2017 Rs.	Restated Balance As at 31.12.2017 Rs.
Capital Work In Progress (Note 17)				
Construction Work	190,486,254,966	(198,901,201)	-	190,287,353,765
Trade And Other Receivable (Note 20)				
Other Debtors	300,715,065	(8,181,121)	-	292,533,944
VAT Receivable	1,239,703,052		(25,800)	1,239,677,252
ESC Receivable	-	63,287,387	65,683,426	128,970,813
Investment (Note 22)				
Held to Maturity	12,240,208,742	2,379,251,307	-	14,619,460,049
Cash and Cash Equivalents (Note 23)				
Call Deposits	2,379,251,307	(2,379,251,307)	-	-
Government Equity (Note 24)				
Government Equity	63,612,515,640	(2,257,538,594)	-	61,354,977,046
Capital Grant (Note 28)				
Foreign Grants	189,307,749,625	2,257,538,594	-	191,565,288,219
Trade And Other Payable (Note 31)				
Creditors Control	833,652,597	(2,716,586)	-	830,936,011
VAT Payable	65,265	-	(65,265)	-
With Holding Tax	54,667	-	39,465	94,132
Audit fee AGDSL	3,200,000	-	(3,200,000)	-
Accrued expenses	1,031,675,560	-	3,200,000	1,034,875,560
Others				
Rent,Rates,Taxes, Security & Other Expe	449,593,829	5,213,833	-	454,807,662

National Water Supply And Drainage Board

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2018

35. NWSDB Loan Commitments

	2018 Rs.	2017 Rs.
35.1 As at 31.12.2017 Board Has Committed Following Loans .		
Local Bank Funded Project Loans	54,947,573,117	54,434,291,379
Foreign Funded Project Loans	<u>198,073,792,465</u>	<u>123,202,731,614</u>
Total	<u>253,021,365,581</u>	<u>177,637,022,993</u>
35.2 Loan Exposure Durring The Period	Foreign Loans	Local Loans
Opening Balance as at 31.12.2017	40,512,242,399	26,649,434,943
Receipts	29,536,502,865	7,927,939,512
Payments	<u>(147,032,945)</u>	<u>(4,219,410,529)</u>
Closing Balance as at 31.12.2018	<u>69,901,712,319</u>	<u>30,357,963,925</u>
35.3 Interest Expenses	2018 Rs.	2017 Rs.
Interest Expenses	7,593,922,666	6,291,304,344



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தேசிய கணக்காய்வு அலுவலகம்

NATIONAL AUDIT OFFICE



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Your No. }

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திகதி }
Date }

14 June 2019

The Chairman
National Water Supply and Drainage Board

Report of the Auditor General on the Financial Statements and Other Legal and Regulatory Requirements of the National Water Supply and Drainage Board for the year ended 31 December 2018 in terms of Section 12 of the National Audit Act, No 19 of 2018.

1 Financial Statements

1.1 Qualified Opinion

The audit of the financial statements of the National Water Supply and Drainage Board (NWSDB) for the year ended 31 December 2018 comprising the statement of financial position as at 31 December 2018 and the statement of comprehensive income and other comprehensive income, statement of changes in equity and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with provisions of the National Audit Act No.19 of 2018 and Finance Act, No.38 of 1971. My report to Parliament in pursuance of provision in Article 154(6) of the Constitution will be tabled in due course.

In my opinion, except for the effects of the matters described in the Basis for Qualified Opinion section of my report, the accompanying financial statements give a true and fair view of the financial position of the Board as at 31 December 2018, and of its financial performance and its cash flows for the year then ended in accordance with Sri Lanka Accounting Standards.

Going Concern of the Board

Total outstanding loan balances of the Board had been increased from Rs. 67.16 billion to Rs. 100.26 billion or by 49 per cent as compared with the previous year loan balances mainly due to increase in foreign loan exposure during the year under review. Hence, the debt to equity (gearing) ratio had been increased from 24 per cent in 2017 to 32 per cent in 2018..

Further, the Board had committed for another Rs. 253 billion local and foreign loans as at 31 December 2018. Accordingly, the Board is required to pay an average of Rs.19 billion annually as capital and interest on local and foreign loans over the next 5 years. Since the Board is not having a proper revenue enhancement or cost reduction program for future periods, the future debt servicing may cause a severe cash flow issues to the Board which intern would affects the operational activities and going concern of the Board.

1.2 Basis for Qualified Opinion

- I. Contrary to Section 32 of the Sri Lanka Accounting Standard on Presentation of Financial Statements (LKAS 01), a balance of a short-term deposit kept at Road Development Authority relating to Greater Rathnapura Water Supply Project which included under the current assets amounting to Rs.8,254,685 had been transferred to security deposit liability account. And also, depreciation and deferred income amounting to Rs.1,041,284 in respect of Computer Software received as grants had been set off each other without shown them separately in the financial statements of the year under review.
- II. Contrary to the Section 06 of the Sri Lanka Accounting Standard on Statement of Cash flows (LKAS 07), a deposit made in a saving account amounting to Rs.1,311,367 had been categorized under non-current assets.
- III. As per Section 51 of the Sri Lanka Accounting Standard on Property, Plant & Equipment (LKAS 16), the useful lives of the assets had not been reviewed after 2010. Hence fully depreciated assets costing Rs.1,668,151,682 related to 13 categories of fixed assets are continuously being used by the Board without reassessing the useful economic life time of such assets.

- IV. Contrary to the provisions in the Sri Lanka Accounting Standard on Accounting for Government Grants and Disclosure of Government Assistance (LKAS 20), foreign grant balances aggregating to Rs.13,580.74 million relating to 31 Projects which remained unchanged over a period of 8 to 12 years had been brought to the accounts as at 31 December 2018 without being amortized. The impact on non-amortization to the financial statements could not be ascertained in audit as there were no details available relevant to those foreign grants.
- V. Contrary to the provisions in the Sri Lanka Accounting Standard on Investment Property (LKAS 40), the Carrying value of Investment Property amounting to Rs.342,542,802 had been shown as Property Plant & Equipment, instead of been shown as Investment Property as at 31st December 2018. Further as per the Section 75 (f) (i) and 79 of the standard, income from Investment Property had not been disclosed and the Board had not made proper disclosures with regard to methods of depreciation, useful lives or rates of depreciation, the gross carrying amount and the accumulated depreciation at the beginning and end of the period and amount of impairment.
- VI. Economic Service Charges (ESC) paid during the year 2016 amounting to Rs.63,287,387 had been erroneously identified as income tax expense in the statement of comprehensive income and as tax paid in the statement of cash flows of the year under review. However, the actual tax payment for the year under review was Rs.133,867,477. Further, detailed income tax computation had not been done in order to recognize actual income tax expense for the year under review.
- VII. As per the information furnished to audit, it was observed that the lands situated at Hambanthota region related to Kirama Katuwana Water Supply Project had been legally acquired by the Board. However, the advance paid amounting to Rs.6,626,000 on such land had not been capitalized even up to 31 March 2019.
- VIII. As per the financial statements of the year under review, trade debtors as at 31 December 2018 was Rs.4,779,721,487. However, provision for impairment had been made only for debtors amounting to Rs.4,754,467,100 and no provision had been made for the debtors aggregating to Rs.25,254,387.

- IX. As per physical verification reports of Akkerei pattu Regional Office, the fixed assets costing Rs.59,100,869 were not in usable condition and a Chlorinator house costing Rs.2,000,000 and Naturalization Pond of Rs.115,000 had already been abandoned. However, without taking necessary actions to dispose such assets, a depreciation provision of Rs.1,299,871 had been made during the year under review.
- X. As per the physical verification report of Ampara Regional Office, the assets with an aggregate value of Rs.69,659,250 were not available physically. However, a depreciation provision of Rs.1,963,612 had been made during the year under review.
- XI. As per the information received, the cost of fifty-nine (59) completed and commissioned Water Supply and Rehabilitation Projects amounting to Rs.3,780,531,518 had remained in the work-in-progress as at 31 December 2018 without being capitalized.
- XII. It was observed that the Board had been made prior year adjustments in the financial statements of the year 2017 and 2018 pertaining to years 2015, 2016, and 2017. As a result, the retained loss as at the end of year 2017 is distorted by Rs.429.91 million. Hence, the possibility for making adjustments to the profit for the year under review in the forthcoming year had not been ruled out in audit. The details of such prior year adjustments made in the year under review and the previous years are given below.

Year	Amount Debited	Amount Credited	Net effect to the accumulated Profit
-----	Rs.	Rs.	Rs.
-----	-----	-----	-----
2017	5,298,986	4,588,000	710,986
2016	243,896,877	139,680,704	104,216,173
2015	370,743,389	45,758,713	324,984,676

- XIII. In respect of twenty three (23) Projects, the balances aggregating to Rs.166,114,851 shown under the work-in-progress are remained unchanged over a period ranging three to ten years without being investigated in order to make necessary adjustments in the financial statements.

- XIV. As compared the confirmations received from banks with the loans and accrued interest on loans shown in the financial statements in respect of Kelani Right Water Supply Project and Greater Matale Water Supply Project, it was observed an over provision of Rs.6,974,239 had been made with regard to interest. As a result, the profit for the year under review had been understated and current liabilities had been overstated by similar amount. Further, in respect of Katana Water Supply Project, the outstanding loan balance designated in US\$ as at the end of year under review was Rs.1, 914,460,917. However, as per the bank confirmation it was Rs.1,793,311,046. As a result, the foreign loan balance in the financial statements had been overstated by Rs.121,149,871.
- XV. Net value of the Assets, Liabilities and Equity balances of the board amounting to Rs.793,388,346 had been transferred to suspense account during the year 2016, 2017 and 2018 without taking any actions to investigate such balances and the Suspense Account balance as at end of the year under review was Rs.12,780. However, actions had not been taken to clear such balances even up to the end of April 2019.
- XVI. Differences of Rs.172,387,055 in trade debtors and Rs.121,548,823 in new connection debtors were observed between balances shown in the financial statements and the balances shown in the age analysis schedule submitted by the commercial division of the Board.
- XVII. An aggregate differences of Rs.160,649,021 and Rs.4,408,564 had been observed in respect of Special Project Advance of Greater Colombo Water and the Waste Water Management Improvement Programme (I) and Programme (II) balances shown in the financial statements and the corresponding schedules furnished to the audit,
- XVIII. As per the physical verification reports of the Warehouses in Waskaduwa, Wellawatta and North West Region, the inventory balance as at 31 December 2018 was Rs.261,487,780. However, as per the financial statements it was Rs. 248,875,937. As a result, the inventory balance as at the end of year under review had been understated by Rs.12,611,243.
- XIX. As per the audit test check carried out, an aggregate difference of Rs. 49,770,754 observed between the work- in- progress balance shown in the financial statements of

the Board and the corresponding balances shown in the individual financial statements of eight Foreign Funded Projects.

XX. An unidentified debit balances and credit balances amounting Rs.8,173,807 and Rs.43,415,740 respectively shown in the bank reconciliations in respect of three (03) banks accounts had not been cleared.

XXI. The evidences indicated against each item shown below had not been furnished to audit.

Item	Value	Evidences not Made Available
-----	-----	-----
	Rs.	
(a) New Connection Debtors	184,612,724	Detailed Schedules and Age Analysis
(b) Special Bonus	13,309,832	Detailed Schedules
(c) Other Debtors	24,443,502	Detailed Schedules
(d) Non- moving & Slow- moving Stocks	1,127,874,983	Age Analysis
(e) Working Progress	247,666,512,803	Project wise Detailed Schedules of Regional Support Centers
(f) Property, Plant & Equipment	86,631,779,732	Fixed Asset Registers and Verification Reports
(g) Trade Creditors	110,803,940	Detailed Schedules
(h) Other Creditors	89,949,095	Detailed Schedules
(i) Tax expense	63,287,387	Income Tax Computation
(j) Investments – Held to Maturity	208,742	Fixed Deposit Certificates, Bank Confirmations
(k) Local Source Loan	6724,006	Detailed Schedules, Confirmation from Local Loans Development Fund

- XXII. Direct confirmation had been called in respect of randomly selected trade debtors amounting to Rs.178,131,134. The debtors amounting to Rs.1,613,601 are agreed with the confirmations and debtors amounting to Rs.1,173,787 are not agreed with the confirmations. Confirmation had not been received in respect of debtors amounting to Rs.175,343,746 up to 30 April 2019.
- XXIII. All stocks receipts and issues should be recoded in stock records prior to physical verification of stocks. However, a net debit balance aggregating to Rs.445,785,905 and net credit balances aggregating to Rs.306,580,310 in respect of stocks receipts and issues had been adjusted to the stock balance after the verification.
- XXIV. An abnormal credit balance amounting to Rs.35,315,564 are shown as stocks in transit with regard to four cost centers of special monitoring sections.
- XXV. Due to poor debt servicing capacity of the Board, the value of the outstanding loan amounting to Rs.67,153,332,380 which had been obtained for the projects commenced after the year 2014 had been transferred to Government Equity account from the year 2015 to 2018. However, as per the records of the General Treasury an amount equivalent to Rs.54,937,651,218 had been capitalized as loans payable on behalf of the National Water Supply and Drainage Board. Hence, an amount equivalent to Rs.12,218,681,163 payable by the Board as foreign loans had been transferred to Government Equity without any approval.

I conducted my audit in accordance with Sri Lanka Auditing Standards (SLAuSs). My responsibilities, under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified opinion.

1.3 Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with *Sri Lanka Accounting Standards*, and for such internal control as management determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Board's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Board or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Board's financial reporting process.

As per Section 16(1) of the National Audit Act No. 19 of 2018, the Board is required to maintain proper books and records of all its income, expenditure, assets and liabilities, to enable annual and periodic financial statements to be prepared of the Board.

1.4 Auditor's Responsibilities for the Audit of the Financial Statements

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sri Lanka Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Sri Lanka Auditing Standards, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and

obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- Conclude on the appropriateness of the management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Board's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Board to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

2. Report on Other Legal and Regulatory Requirements

National Audit Act, No. 19 of 2018 include specific provisions for following requirements.

- Except for the effect of the matters described in the Basis for Qualified Opinion paragraph, I have obtained all the information and explanation that required for the audit and as far as appears from my examination, proper accounting records have been kept by

the Board as per the requirement of section 12 (a) of the National Audit Act, No. 19 of 2018.

- The financial statements presented is consistent with the preceding year as per the requirement of section 6 (1) (d) (iii) of the National Audit Act, No. 19 of 2018.
- The financial statements presented includes all the recommendations made by me in the previous year as per the requirement of section 6 (1) (d) (iv) of the National Audit Act, No. 19 of 2018.

Based on the procedures performed and evidence obtained which limited to matters that are material, nothing has come to my attention;

- to state that any member of the governing body of the Board has any direct or indirect interest in any contract entered into by the Board which are out of the normal course of business as per the requirement of section 12 (d) of the National Audit Act, No. 19 of 2018.
- to state that the Board has not complied with any applicable written law, general and special directions issued by the governing body of the Board as per the requirement of section 12 (f) of the National Audit Act, No. 19 of 2018 except for;

Reference to laws/Directions	Description
I. General Manager's Circular No. Admin/12/2015 of 12 August 2015	Legal actions had not been taken to recover the outstanding bill value amounting to Rs.520,687,090 in respect of 2049 disconnected consumers which had remained over 3 to 183 months in 30 regions.
II. Management Services Circular No. 30 of 22 September 2006	Approval of the Department of Management Services for the Scheme of Recruitment and Promotion Procedure of the Board had not been obtained.

- III. Section 05 of Part (1) of National Water Supply and Drainage Board Law No.2 of 1974 No Board Member had been appointed from the Ministry of National Policies and Economic Affairs even up to 30th April 2019.
- IV. Management Audit Circular No.1/2017 of 15 February 2017 No Internal Auditors had been appointed on full time or part time basis for the Development Projects funded by foreign financing.
- V. Section 8.3.9 of the Public Enterprises Circular No. PED/12 of 02 June 2003, During the year under review, the Board had paid a sum of Rs.58,583,402 as salaries and allowances of eighty-five (85) employees who had been released to the Line Ministry by 16 October 2018. Accordingly, an amount equivalent to Rs.146,423,663 is to be reimbursed by the Ministry of City Planning and Water Supply for the employees released from the Board from December 2015 to 31 December 2018.
- VI. Financial Regulation of the Democratic Socialist Republic of Sri Lanka.
- (a) Financial Regulation 770 Without taking actions to dispose the obsolete stocks valued at Rs.28,460,008, it had been included in the financial statement of the year 2018.
- (b) Financial Regulation 756 Board of Survey for the year 2018 had not been completed even by 30th April 2019.
- to state that the Board has not performed according to its powers, functions and duties as per the requirement of section 12 (g) of the National Audit Act, No. 19 of 2018.

- to state that the resources of the Board had not been procured and utilized economically, efficiently and effectively within the time frames and in compliance with the applicable laws as per the requirement of section 12 (h) of the National Audit Act, No. 19 of 2018 except for;

- I. As per section 4.2.1 (a) of the Government Procurement Guidelines a Master Procurement Plan including expected procurements for forthcoming three years period had not been prepared by the board.
- II. Contrary to the provisions in section 7.12.2 of Procurement Guideline the Contract for Design, Build and Construction of warehouse to store HDPF Pipes at Aniyakanda, E-kala and Church Hill reservoir site had been awarded at a contract value of Rs.868,123,308 which exceeded the engineer estimate by 37.82 per cent. As a result the board had incurred an additional cost of Rs.23,826,788.
- III. Contractor for Supplying fourteen (14) hiring vehicles to Anuradhapura and Polonnaruwa regions to the contract value of Rs.22,940,600 had been selected based on a advertisement published in one newspaper. Since only one or two bidders had been responded, selection of most responsive bidder had been done without sufficient competition.

3. Other Audit Issues

- I. Trade debtors, sewerage debtors and other debtors aggregating to Rs.1,153 million had remained over two years without being recovered. Out of that 63 per cent represents debtors in Colombo, Kelaniya, Kotte and Dehiwala regions.
- II. Outstanding disconnected debtors as at 31 December 2018 was Rs.1,292,910,373. Out of that debtors amounting to Rs.986,940,330 which equivalent to 76 per cent had remained outstanding over two years without being recovered.
- III. Advances aggregating to Rs.119,138,100 had been paid for the acquisition of lands from year 2009 to 2015. However, no evidence was made available for audit to verify whether the lands had been legally acquired.

- IV. Short term deposits amounting to Rs.7,393,610 kept at other institutions including Road Development Authority, Colombo Municipal Council, Beruwala Municipal council, Provincial Road Development Authority and Municipal Treasurer had remained outstanding over three years without being recovered.
- V. Other creditors amounting to Rs.35,519,035 had remained outstanding over 03 years without being settled. Further, since the Board had not maintained a proper data base of other creditors their value could not be verified in audit.
- VI. Advances received for rechargeable works was amounting to Rs.6,302,459,963. Out of that advances amounting to Rs. 472,643,548 received for 89 Projects had remained unchanged over two years. Further, no evidences were made available for audit to verify whether these projects had been completed or not.
- VII. Contractor's retention and refundable tender deposits amounting to Rs.486,914,669 and Rs.6,953,762 respectively had remained unchanged over three years. Further, no evidences were made available for audit to verify whether the contracts related to those retentions and deposits had been completed.
- VIII. A land purchased by the Board to construct a Wastewater Treatment Plant under Galle Area Wastewater Disposal Project had been valued at Rs. 71.5 million by the Department of Valuation and advance amounting to Rs.21.25 million had been given in April 2014 to the land owner without considering the ownership of the land. However, audit observed that the land occupied by some families and the existing owner had removed soil from the land after obtaining the advance.
- IX. Unsettled creditors amounting to Rs.177,141,105 had remained over two years in 13 regions without been settled even as at 31 December 2018.
- X. A fraud amounting to Rs.1,145,235 committed by a meter reader at Kaluthara region during year 2008 to 2017 had not been recovered from the responsible parties even as at 31st March 2019.
- XI. Cash frauds amounting to Rs.248.44 million and Rs.1,337,135 committed at Trincomalee, Kelaniya and Ampara regions during the year 1999 to 2006 and in

Kurunegala region during the year 2000 to 2001 had not been recovered from responsible parties even as at 31 December 2018.

- XII. Imported stocks in transit as at 31 December 2018 was amounting to Rs.1,345,932,727. Out of that stocks amounting to Rs.740,955,941 had remained as stocks in transit over six months without being investigated.
- XIII. As a solution for drinking water problem caused by mixing of sea water to kalu river, a contract to construct a salinity barrier had been awarded at a contract value of Rs.11,284,500 on 03 February 2016. However, the entire expenditure incurred had become uneconomic, since the contamination of salt in water had not been decreased as expected.
- XIV. Due to delay in clearance of raw material containers from port, an amount equivalent to Rs.625 million had been incurred as demurrages with regard to nine projects implemented during the year under review.
- XV. Water meter spare parts costing Rs.19,106,552 which are not in usable condition had remained idle at main stores of the Board. However, actions had not been taken to return them to suppliers.
- XVI. Twenty three thousand nine hundred twenty two water meters valued at Rs.95,495,710 in three different diameters had remained in the main stores as at 10 October 2018. However, based on average annual consumption of these water meters, audit revealed that these item will have to be hold for another 5 to 10 years by incurring huge cost in terms of holding and interest.
- XVII. Four thousand nine hundred eighty two water meter spare parts in six dimensions amounting to Rs.13,724,670 which are not in usable conditions had remained in Rathmalana workshop over 1 to 6 years as at 31 October 2018. Further, the warranty period had been expired in respect of spare parts amounting to Rs.3,409,612.
- XVIII. Three water tanks and three pump houses relating to three Water Supply Projects and a Sewerage Project of operating and maintenance office (O&M) in Galle had remained idle since year 1982.

- XIX. Non-moving stocks and slow- moving stocks as at 31 December 2018 amounting to Rs.511,522,599 and Rs.616,322,384 respectively. It had represent 6 and 7 per cent respectively of the total stocks of the Board.
- XX. A sum of Rs.166,993,899 had been spent for construction of laboratories for Greater Kandy Water Supply Project. However, the laboratories had been abandoned due to failure in recruiting staff.
- XXI. The Greater Galle Water Supply Project had acquired a land in year 2012 by incurring Rs.16 million for the construction of Hapugala Water Refinery Plant. However, such land had not been utilized for the intended purpose even as at the end of the year under review.
- XXII. The foreign funds allocated during the year under review for the Gampaha, Attanagalla and Minuwangoda Integrated Water Supply Project and Kaluthara, Mathugama, Agalawatta Intergrated Water Supply Project was Rs.7 billion and Rs. 13.6 billion respectively. However, , only Rs.950,942,952 and Rs.2,183,249,626 which equivalent to 14 per cent and 16 per cent respectively had been utilized at the end of the year under review.
- XXIII. Out of total production of 707.3 million cubic meters of treated water, 176.3 million cubic meters or 25 per cent is regarded as non-revenue water of the year under review. Further, the value of non-revenue water had been brought to accounts as normal cost instead of being separately accounted, which makes a significant loss to the Board due to leakage, unlawful connections, free supply and administrative inefficiencies etc.
- XXIV. In order to provide water supply for Jaffna Kilinochchi Region, the construction of plant for removing salt from sea water had been scheduled to be completed in 2022. Accordingly, the construction of 15 water towers at a cost of Rs.1140 million and treated water transmission pipe laying at a cost of Rs.5,536 million had been completed in 31 December 2018. However, all these constructions had remained idle due to non-availability of source of water.
- XXV. A water tower, a pump house, a transmission and a distribution main established at a cost of Rs.253.83 million by the Panama Water Supply Scheme under the Eastern



Province Water Supply Improvement Project had remained idle due to unviability of source of water. Further, pipes and equipment amounting to Rs.116.70 million acquired under this projects had been stored in the premises without any security.

- XXVI. Performance bond obtained from the contractor valued at Rs.1,607.53 million in respect of Rathmalana, Moratuwa, Ja-Ela, Ekala Waste Water Management Project had been encashed during the year under review due to the bankruptcy of the contractor in the year 2013. However, out of that a sum of Rs.1,240.4 million had been utilized for debt service payments in respect of local banks without obtaining the treasury approval.

W.P.C. Wickramaratne

Auditor General



Abbreviations

AAT	- Association of Accounting Technicians	DZUWSP	- Dry Zone Urban Water and Sanitation Project
AC	- Asbestos Cement	EBARA	- Ebara Corporation
ADB	- Asian Development Bank	EIA	- Environmental Impact Assessment
AE	- Area Engineer	EPF	- Employee's Provident Fund
AFD	- Agence Française de Développement	EPZ	- Export Processing Zone
AGM	- Assistant General Manager	ETF	- Employee's Trust Fund
AIT	- Asian Institute of Technology	ERD	- External Resource Department
BMICH	- Bandaranayaka Memorial International Conference Hall	GAMIWSP	- Gampaha Attanagalla Minuwangoda Integrated Water Supply Project
BOQ	- Bill of Quantity	GCS	- Greater Colombo Sewerage
BOI	- Board of Investment	GCWWMIIIP	- Greater Colombo Water and Wastewater Management Improvement Investment Programme
CBO	- Community Based Organization	GCWRP	- Greater Colombo Water Rehabilitation Project
CCC	- Canadian Commercial Corporation	GIS	- Geographic Information System
CCN	- Colombo City North	GKWSSP	- Greater Kurunegala Water Supply & Sewerage Project
CCS	- Colombo City South	GM	- General Manager
CCTV	- Closed Circuit Television	GN	- Grama Niladari
CE (IDU)	- Chief Engineer (Illegal Detection Unit)	GND	- Grama Niladari Division
CEA	- Central Environment Authority	GoSL	- Government of Sri Lanka
CEB	- Ceylon Electricity Board	GPOBA	- Global Partnership on Output-Based Aid
CI	- Cast Iron	GPS	- Global Positioning System
CKDu	- Chronic Kidney Disease of Unknown Etiology	GR	- Ground Reservoir
CMC	- Colombo Municipal Council	HDPE	- High Density Poly Ethelene
CP	- Corporate Planning	HNDE	- Higher National Diploma in Technology
CRIWMP	- Climate Resilient Integrated Water Management Project	HRM	- Human Resource Management
CS	- Control System	ICP - OES	- Inductively Coupled Plasma - Optical Emission Spectrometry
cu.m	- Cubic meter	ICT	- Information and Communication Technology
DEWATS	- Decentralized Wastewater Treatment and Disposal System	IDU	- Illegal Detection Unit
DGM	- Deputy General Manager		
DGM (WC)	- Deputy General Manager (Western Central)		
DI	- Ductile Iron		
DMA	- District Metering Areas		
DNCWS	- Department of National Community Water Supply		
DS	- Divisional Secretariat		
DSC	- Design & Supervision Consultancy		
DSD	- Divisional Secretariat Division		

ICTAD	- Institute for Construction Training and Development	NDT	- National Diploma in Technology
IWA	- International Water Association	NHDA	- National Housing Development Authority
IWSP	- Intergrated Water Supply Project	NPD	- National Planning Department
IEE	- Initial Environmental Examination	NRW	- Non-Revenue Water
IESL	- Institution of Engineers Sri Lanka	NWSDB	- National Water Supply & Drainage Board
IIESL	- Institute of Incorporated Engineers Sri Lanka	O&M	- Operation & Maintenance
IMS	- Inventory Management System	OKP	- Orange Knowledge Programme
NB-IoT	- Nano Bond Internet of Things	PAM	- Polyacrylamides
ISO	- International Organization for Standardization	PE	- Poly Ethelene
IT	- Information Technology	PVC	- Polyvinyl Chloride
JICA	- Japan International Cooperation Agency	OIC	- Officer in Charge
JPY	- Japanese Yen	P&D	- Planning and Design
JKWSSP	- Jaffna Kilinochchi Water Supply and Sanitation Project	PAC	- Project Appraisal Committee
KEITI	-Korea Environmental Industry & Technology Institute	PDMRC	- Planning & Design Manual Review Committee
km	- kilo meter	PMU	- Project Management Unit
KVA	- Kilo Volt Ampare	PRDA	- Provincial Road Development Authority
KRB	- Kelani Right Bank	PWD	- Public Works Department
LBF	- Local Bank Fund	R&D	- Research & Development
LKR	- Sri Lankan Rupee	RDA	- Road Development Authority
M&E	- Mechanical & Electrical	RDB	- Rural Development Bank
MC	- Municipal Council	RFP	- Request for Proposal
MCC	- Metallurgical Corporation of China	RM	- Regional Manager
MCM	- Million Cubic Meters	RO	- Reverse Osmosis
MCPWS&HE	- Ministry of City Planning, Water Supply & Higher Education	RSC	- Regional Support Center
MD&T	- Manpower Development & Training	RSC(WN)	- Regional Support Center (Western North)
MGD	- Million Gallons per Day	RSC(WS)	- Regional Support Center (Western South)
MIS	- Management Information System	RSC(N)	- Regional Support Center (North)
MoU	- Memorandum of Understanding	RSC (NW)	- Regional Support Center (North Western)
MSD	- Management Service Department	RWS	- Rural Water Supply
MSC	- Management Support Consultancy	SCADA	- Supervisory Control and Data Acquisition
NAITA	- National Apprentices & Industrial Training Authority	SCAPC	- Standing Cabinet Appointed Procurement Committee
NBRO	- National Building Research Organization		
NCP	- North Central Province		
NDB	- National Development Bank		

SDG	- Sustainable Development Goals
SHIFT	- Sanitation and Hygiene Initiative for Towns
SIDA	- Swedish International Development Agency
SLSI	- Standard Institution of Sri Lanka
SMS	Short Message Service
TCE	- Total Cost Estimate
ToR	- Terms of References
ToT	- Training of Trainers
UDA	- Urban Development Authority
UPVC	- Unplasticised Polyvinyl Chloride
USD	- United States Dollar
VAT	- Value Added Tax
WASSIP	- Water Supply & Sanitation Improvement Project
WDCE	- Water and Development Congress & Exhibition
WHO	- World Health Organization
WSP	- Water Supply Project/ Water Safety Plan
WSS	- Water Supply Scheme
WTP	- Water Treatment Plant
WWDS	- Wastewater Disposal System
WWTP	- Wastewater Treatment Plant

Corporate Information

Name of the Organization

National Water Supply & Drainage Board (NWSDB)

Legal Form

Government Owned Statutory Board

Date of Establishment

1974.03.01 by Act of Parliament
NWSDB Law, No. 2 of 1974

1992.03.11 the Act was amended
NWSDB (Amendment) Act, No. 13 of 1992

Tax Identification No.

4090 31820

VAT Registration No.

4090 31820 7000

Contact, Head Office

Galle Road, Ratmalana, Sri Lanka
Tel: +94 11 2638999 (hunting),
+94 11 2637194, +94 11 2611589
Fax: +94 11 2636449
Email: gm@waterboard.lk
Web: www.waterboard.lk

Line Ministry

Ministry of City Planning, Water Supply & Higher Education

Call Centre

1939 (24 hours)

Customer Care Unit, Head Office

+94 11 2623623 (During office hours)

Banker

Bank of Ceylon

Auditors

Deputy General Manager (Internal Audit)
Government Audit Unit

Board of Directors

Eng. K. A. Ansar - Chairman, NWSDB (Since 05.02.2015)
Mr. M. Shafeek Rajabdeen - Vice Chairman, NWSDB (Since 10.03.2015 - 24.01.2018)
Mr. M. H. M. Salman - Vice Chairman, NWSDB (Since 24.01.2018)
Mr. P. I. T. Mahilal Silva - Working Director, NWSDB (Since 05.02.2015)
Dr. T. B. Ananda Jayalal - Board Member, NWSDB (Since 20.01.2017)
Mr. J. M. U. P. Jayamaha - Board Member, NWSDB (Since 02.04.2015)
Mr. Shantha Rathnayake - Board Member, NWSDB (Since 12.02.2015)
Mrs. K. A. Subadra Walpola - Board Member, NWSDB (Since 13.02.2015)

Secretary to the Board

Mrs. W. P. Sandamali De Silva

Senior Management

Eng. D. U. Sumanasekara - General Manager
Eng. K. J. V. A. Perera - Addl. GM (Corporate Services)
Eng. J.R.B. Nedurana - Addl. GM (Sewerage)
Eng. R. H. Ruvinis - Addl. GM (Water Supply Projects)
Eng. S. G. J. Rajkumar - Addl. GM (Northern/ Central)
Eng. B.S. Wijemanna - Addl. GM (Western)
Eng. N.H.R. Kulanatha - Addl. GM (Southern/ Eastern)
Eng. T.S. Wijethunga - Addl. GM (Policy and Planning)
Mr. D. Thotawatte - Addl. GM (Finance)
Mr. G.K. Iddamal goda - Addl. GM (Human Resource Management)

Deputy General Managers of Divisions

Eng. U. Ratnapala (Planning & Designs)
Eng. Dhanesh Gunethilake (Sewerage)
Eng. S.S.S. Vipulanandan (Project Coordination)
Eng. (Mrs.) D. M. L. C. Pitawala (Development)
Act. Eng. K. P. R. S. Samarasinghe (Production - Western)
Eng. K. D. P. F. Siriwardana (Corporate Planning)
Eng. S.G.G. Rajkumar (Commercial)
Eng. I. V. W. Ediriweera (RWS)
Eng. Jaliya Lalith Seekkuge (ADB Projects)
Eng. T. M. W. Sunil Bandara (M&E)
Eng. J. Chandradasa (Information Technology)
Mrs. M. M. S. Peiris (Finance)
Mr. A. G. S. Kumara (Costing)
Mr. R. M. A. S. Weerasena (Internal Audit)
Mrs. N. Y. S. Abeygunawardena (Industrial Relations)
Mr. R. M. A. Bandara (Supplies & Material Management)
Mr. W. A. S. Sumunasooriya (Human Resources)

Deputy General Managers of Provinces/ RSCs

Eng. T. W. S. Perera (Western - Central)
Eng. C. C. H. S. Fernando (Western - South)
Eng. S.A. Rasheed (East)
Eng. K. P. R. S. Samarasinghe (Western - North)
Eng. M.K.D.J.H. Meegoda (Central)
Eng. R. S. Liyanage (Uva)
Eng. G. V. Wijerathne (North Central)
Eng. Mrs. I. M. W. K. Illangasinghe (North Western)
Eng. M.M. Uma Lebbe (North)
Eng. S. S. Devaraja (Sabaragamuwa)
Eng. J.K.S. Pathirana (Southern)

Addl. GMS/ Deputy General Managers working as Project Directors

Eng. N. H. R. Kulanatha - Wastewater disposal for Rathmalana Moratuwa & Ja-Ela/ Ekala Area
Eng. B. S. Wijemanna - Greater Colombo Rehabilitation Project
Eng. K. J. V. A. Perera - Gampaha Attanagalla Water Supply Project
Eng. K.P.R.S. Samarasinghe - Labugama Kalatuwawa WSP and Kolonna Balangoda WSP
Eng. S.A. Rasheed - Colombo Water Supply Service Improvement Project
Eng. R.S. Liyanage - Mahiyanganaya WSP and Badulla Haliela WSP
Eng. R. A. A. Ranawaka - SHIFT WSP
Eng. I. V. W. Ediriweera - Ambatale / Orugodawatta Pipe Laying Project
Eng. M. M. Uma Lebbe - Anuradhapura Phase II

