National Water Supply &
Drainage Board

Annual Report 2015

Ministry of City Planning & Water Supply

Mission

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

Vision

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

Goals

- Increase the water supply and sanitation coverage
- Improve business efficiency
- Improve services to customers and promptly attend to public complaints
- Promote Information and communication technology solutions as a catalyst for business growth
- Ensure greater accountability and transparency
- Promote Human Resource Development
- Facilitate safe drinking water supply and sanitation to rural and underserved communities

Contents

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

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

Sudarshini Fernandopulle
Hon. State Minister

Message from the Secretary, Ministry of City Planning & Water Supply

The Ministry of City Planning and Water Supply (MCPWS) continued to work closely with the National Water Supply and Drainage Board (NWSDB) for providing safe drinking water and wastewater disposal facilities to the public throughout the country during the year 2015.

In turn, we are targeting to increase pipe borne water availability to 60% of the population by the year 2020, and piped sewerage increased to 7.0 % by 2020, from the present levels.

The Ministry and NWSDB have adopted a three-pronged strategic approach, namely large scale water supply projects, small and medium scale/local bank financed projects and sewerage projects.

Presently 21 large scale projects, 56 small and medium scale projects, six local bank-funded water supply projects and six sewerage projects are being implemented. Many more projects are in the pipeline or planning stage.

Sewerage projects are currently being implemented in Colombo City, Kandy Municipality area, Kurunegala Municipality area, Ja-Ela/Ekala and Moratuwa/Ratmalana. In addition, plans have been prepared to cover urban centres requiring pipe sewerage, namely; Negombo, Puttalam, Chilaw, Welikada-Rajagiriya, Sri Jayawrdenapura -Kotte and Kaththankudy.

A case in point is the national campaign for the prevention of chronic kidney disease of unknown etiology (CKDu) launched by H.E. the President this year. In this national imperative the Ministry has adopted several strategies. These include the establishment of reverse osmosis plants for water purification, the extension of potable water supply to CKDu affected areas and the launch of awareness creation campaigns. These are important short-term interventions. The continuation of the short- term and medium-term action plans on CKDu were carried out throughout the year. Many sub projects have been implemented by the respective Regional Support Centres of the NWSDB with support from the head office.

As declared in the Budget Speech for 2016, arrangements will be initiated for the water sector to be under independent regulation.

The Ministry is grateful to our many funding partners who supported us in 2015, the principal ones being the Government of Sri Lanka, ADB, DANIDA, JICA, SIDA, UNICEF, World Bank and Governments of Australia, Austria, Belgium, China, France, Hungary, India, the Netherlands, South Korea and Spain.

May I take this opportunity to thank Hon. Rauff Hakeem, Minister of City Planning and Water Supply for his leadership and guidance and Hon. Sudarshani Fernandopulle, State Minister of City Planning and Water Supply for 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 endeavours 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 2016 and beyond.

N.D. Hettiarachchi

Secretary

Ministry of City Planning and Water Supply



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 which was established in 2015 to cover the subject area of water supply, sewerage and city planning separately.

Around 86.0 % of the population have access to the safe drinking water of which 45.9 % is through piped water supply systems including the 35.2 % of the population which is covered by piped water supply systems of the NWSDB.

Notice of the Report

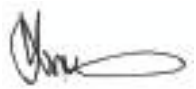
Hon. Minister of City Planning & Water Supply,
Ministry of City Planning & Water Supply,
Lakdiya Medura,
No. 35, Sunil Mawatha,
Pelawatta,
Battaramulla.

Dear Sir,

Annual Report and Financial Statements - 2015
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 2015.

Yours faithfully,



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

Chairman's Statement

"The total drinking water production of the year, through 331 water supply schemes in operation throughout the country, is 600 million cu.m. which is an increase of production by 4.3 % compared to the year 2014."

As in the past years, the National Water Supply and Drainage Board continued its invaluable service to the nation by providing safe drinking water and sewerage facilities to the public throughout the year 2015. During the year, three large scale foreign funded and many other minor scale water supply projects were completed thereby increasing the drinking water production. Accordingly, it was able to provide over hundred thousand new water connections while improving the service level of some existing water supply coverage areas in different parts of the country.

The total drinking water production of the year, through 331 water supply schemes in operation throughout the country, is 600 million cu.m. which is an increase of production by 4.3 % compared to the year 2014. This safe drinking water supply was done through 1,953,721 service connections including 121,723 new connections provided in year 2015.Three large scale water supply projects and five small and medium scale water supply projects were completed during the year, there by supporting to increase the pipe bourne water supply coverage in the country. As result, the NWSDB has been able to provide piped drinking water for 35.2% of the country population by end of the year. This has also contributed to bring the total pipe borne water supply coverage of the country to 45.9 % as at the end of 2015. The target is for reaching the goal of 60% pipe borne water coverage by the year 2020.

Sewerage facilities have also been improved during the year 2015 and the population coverage with piped sewer facilities has been increased up to 2 % by bringing the total number of sewer connections to 17,035 which is an increase of 8 % compared to the year 2014.

A new method of disbursing funds for capital works was practiced in year 2015 and this enabled to carry out Rs. 27.54 billion (including Rs. 24.18 billion of supplementary allocation) worth investments during the year towards the goal on water supply and sanitation coverage. In addition to that, the NWSDB continued to rehabilitate and improve existing water supply and sewerage schemes using Rs. 1,464 million of its own finances in 2015 under new government policy.

The energy management program of the NWSDB has achieved substantial progress with qualitative and quantitative upgrading of its systems. The M&E Services Division of NWSDB is fully equipped with energy measuring equipment to carry out all types of energy audits for energy management works.

The year 2015 is the fourth year under review of the corporate plan 2012-2016. The NWSDB continued working towards the achievement of the goals and objectives set out by the Corporate Plan 2012-2016. This present Corporate Plan was reviewed and the new Corporate Plan 2016-2020 was prepared by a committee appointed by the General Manager and this new Corporate Plan is ready to be implemented from the year 2016.

Considering the recent trends in various government institutions in Sri

Lanka and worldwide, NWSDB has taken various steps to upgrade its ICT status within the organization and introduce various IT enabled solutions and systems with the objective of achieving service excellence.

NWSDB has allocated Rs. 1000 million for Chronic Kidney Disease of unknown etiology (CKDu) relief activities for the year 2015 and this has been utilized on medium term and short term strategies developed to provide safe drinking water to CKDu affected areas.

During the year 2015, NWSDB has continued works on Water safety plans with the advocacy and implementation support from WHO. Six urban water safety plan training programs have been conducted during the year.

We have replaced our existing billing system which was 30 years old with new one which was solely prepared In house. We were able to conduct a successful Research Symposium in March 2015.

We have obtained ISO 9001-2008 Quality Management System certification for Ambatale & Biyagama Water Treatment Plants and Sewerage Section during the year 2015. Also we received the Green Award for Water Treatment Plants at Ambatale & Kandana. We have been able to obtain International Accreditation for our Laboratory at Ambatale. Moreover we have obtained 12 Productivity Awards for Treatment Plants & Regional Offices during the year 2015.

The contribution of employees for the successful operations and the development initiatives of the NWSDB were very significant. This includes, planning, designs, investigations, feasibility studies, construction, operation & maintenance, process control & optimization and energy conservation under careful considerations with a view to achieve economic operations meeting the global and national environmental obligations.

We are thankful for all the support given by the Hon. Minister of City Planning & Water Supply for the accomplishments of the functions of NWSDB during the year. His directions and guidance and support as the Minister in charge of Water and Sewerage facilities were invaluable for us. We also take this opportunity to extend our thanks to the Secretary to the Ministry of City Planning & Water Supply and all the staff at the ministry for 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 should be grateful to multinational donors and bilateral financiers 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 for having participated with NWSDB on development work in the sector.

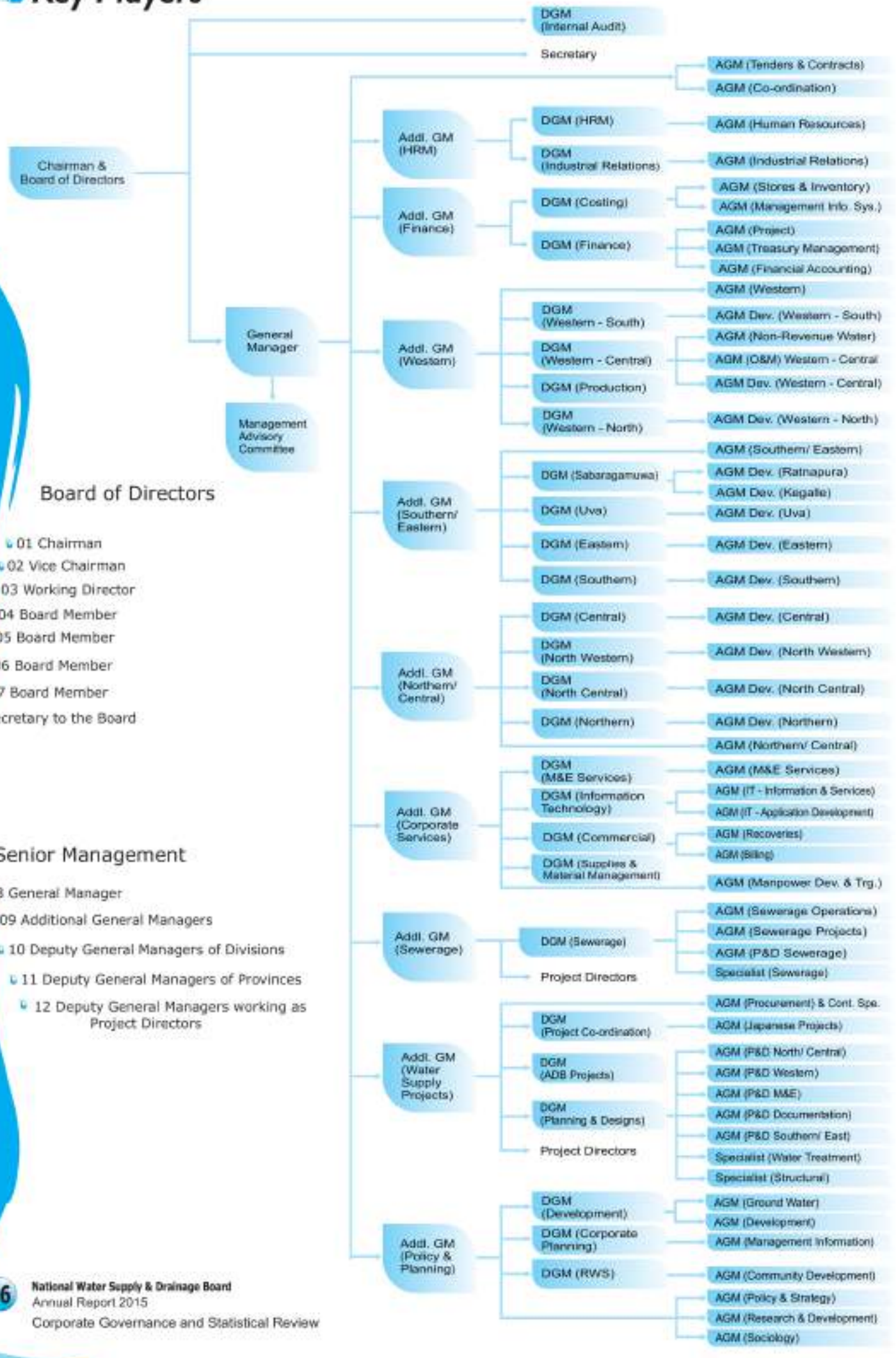
All the progress we have made through the year is a result of the dedications and efforts by the Members of the Board of Directors and the staff of the NWSDB. Without their dedications, hard work and sacrifices, our achievements would be impossible. We expect their endeavor through the years to come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

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

"Water is the lifeblood of our bodies, our economy, our nation and our well-being." - Stephen Johnson

Corporate Governance and Statistical Review

Key Players



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. R. W. R. Pemasiri
B.Sc. Eng. M. Eng. (Cons.), C.Eng. MIE (SL),
LLM (UK)
Chairman, NWSDB (Up to 12.01.2015)

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. K. D. Gamini Gunaratne
Vice Chairman, NWSDB (Up to 21.01.2015)

Mr. M. Shafeek Rajabdeen
Vice Chairman, NWSDB (Since 10.03.2015)

03 Mr. N. P. Thibbutumunuwa
LLB, MA,
Working Director, NWSDB (Up to 21.01.2015)

Mr. P. I. T. Mahilal Silva
BA, MA, M.S.Sc
Working Director, NWSDB (Since 05.02.2015)

04 Dr. P. G. Maheepala
MBBS, M.Sc., MD, MBA, FCMA, DPM, DBS, DED, DMgt.
Director General of Health Services
Ministry of Health
Board Member, NWSDB

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)

The Board met on 09 occasions during the year 2015.

Senior Management

08 General Manager

Eng. B. W. R. Balasuriya
B.Sc. Eng. (Hons), M.Sc. (UK), C.Eng. FIE (SL)

09 Additional General Managers (Addl. G. M.)

Eng. G. A. Kumararathna
(Sewerage)
B.Sc. Eng. (Hons), M.Sc. (UK), C.Eng. FIE (SL),
MICE (Lond.), MIWEM (Lond.)
P.G. Dip. in Industrial Eng.

Eng. D. S. D. Jayasiriwardene
(Southern/ Eastern)
B.Sc. Eng. (Hons), C.Eng. FIE (SL),
M.Phil (Univ. of Hawaii)

Eng. K. R. Devasurendra
(Water Supply Projects)
B.Sc. Eng. (Hons), C.Eng. FIE (SL), P.G. Dip.
(Up to 24/04/2015)

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. N. M. S. Kalinga
(Western)
B.Sc. Eng. (Hons), C.Eng. MIE (SL),
Dip. Sanitary Eng. (Netherlands)
(Up to 15.04.2015)

Eng. D. U. Sumanasekara
(Water Supply Projects)
B.Sc. Eng., C.Eng. FIE (SL), M.Sc. (Struct. E.) UK
(from 24.04.2015)

Eng. R. S. C. George
(Policy and Planning)
B.Sc. Eng. (Hons), C.Eng. MIE (SL),
M.Sc. (Eng.) FRG, MICE (UK)

Eng. W. B. G. Fernando
(Corporate Services)
B.Sc. (Eng.), P.G. Dip. (EWREM), C.Eng. FIE (SL)

Eng. (Mrs.) C. J. D. Perera
(Northern Central)
B.Sc. Eng. (Hons), C.Eng. MIE (SL),
Dip. Sanitary Eng. (Netherlands), Dip. Environmental Eng. (SL)
(Up to 19.05.2015)

Eng. (Mrs.) C. J. D. Perera
(Western)
B.Sc. Eng. (Hons), C.Eng. MIE (SL),
Dip. Sanitary Eng. (Netherlands), Dip. Environmental Eng. (SL)
(from 19.05.2015 up to 26.12.2015)

Eng. J. R. B. Nedurana
(Northern Central)
B.Sc. Eng. (Hons), P.G. Dip. in Environmental
Science & Technology (Delft.)
C.Eng. MIE (SL),
(From 19.05.2015)

Eng. J. R. B. Nedurana
(Western - Acting)
B.Sc. Eng. (Hons), P.G. Dip. in Environmental
Science & Technology (Delft.)
C.Eng. MIE (SL)
(from 27.12.2015)

10. Deputy General Managers (DGM) of Divisions

Eng. (Mrs.) K. T. P. Fernando (Project Co-ordination)
B.Sc. Eng. (Hons), C.Eng. MIE (SL)
M.Sc. in Water & Waste Engineering (UK)

Ms. W. A. C. Sriyani (Human Resources)
(Upto 30/09/2015)
B.A. (Arts) Special Degree (Sociology)
M.Sc. in Disaster Management, Dip. in Personel Mgt.,
Dip. in Training & Development, Member (IMSL)

Mrs. N. Y. S. Abeygunawardena (Industrial Relations)
BA, P.G. Dip. in Management (PIM), Member (IMSL)

Eng. C. R. Perera (Production - Western)
C.Eng. MIE (SL), M.Eng. (Delft)

Eng. W. A. N. Wickramathunge (M&E)
B.Sc. Eng., C.Eng. MIE (SL),
(Up to 17/01/2015)

Eng. M. Abeysekara (M&E) (Acting)
C.Eng. MIE (SL), P. G. Dip(B&F) Administration
P. G. Dip. in Environmental Engineering & Management.
(From 17/01/2015)

Eng. J. Chandradasa (Information Technology) Covering up
B.Sc. Eng., C.Eng. MIE (SL)

Eng. S. G. J. Rajkumar (Development)
C.Eng. FIE (SL), M.Sc. in Sanitary Engineering,
M.Sc. in Environmental Engineering and Management

Eng. S. Sumanaweera (Corporate Planning)
B.Sc. Eng., M Eng. (Env.) AIT, C. Eng., FIE (SL)

Mr. R. M. A. S. Weerasena (Internal Audit)
B.Com (Sp.), PGDBM (Col.), ACA

Mrs. M. M. S. Peiris (Finance)
B.Sc. (Accountancy & Finance Mgt.), ACA (SL)

Mrs. A. P. Sirima De Silva (Costing)
FCA

Mr. R. M. A. Bandara (Supplies)
B.Sc., (Business Administration - Spl.)
Dip. in Purchasing and Materials Mgt.

Eng. R. H. Ruvinis (Planning & Design)
B.Sc. Eng. (Hons) P.G.Dip. (App Hy)
MBA, C. Eng. FIE (SL), MIE (Aus). CP Eng.

Eng. S. G. Jayawardena (Sewerage)
B.Sc., P.G.Dip.in Sanitary Eng. MIE(SL),

Eng. S. G. G. Rajkumar (Commercial)
B.Sc. Eng. (Hons), C.Eng., FIE(SL),
M.Sc.(Denmark), MBA (PIM-USJ),
M.Eng (Moratuwa)
(from 15.05.2015)

Eng. Thilina S. Wijetunga (ADB Projects)
B.Sc. Eng., C.Eng., FIE (SL), MBA, M.Sc. (Planning)
MA (Financial Economics), MIM (SL), Pg.Dip (Finance)- ICA(SL),
Dip (Mgt.) - DK

Eng. Duleep Goonewardene (RWS)
B.Sc. Eng., C.Eng., MIE (SL), FIE (SL),
M. Eng. (IHE-UNESCO)

11. Deputy General Managers of Provinces

Eng. M. K. Hapuarachchi (Western - Central)
C.Eng. MIE (SL), P. G. Dip. in Environmental Engineering & Management. P. G. Dip (L&WD), P. G. Dip (Business Admin)

Eng. T. W. S. Perera (Western South)
B.Sc. Eng., (Spl.),C.Eng. Masters in Dev. Science MIE (SL)

Eng. U. Ratnapala (East) (Acting)
B.Sc. Eng., C. Eng, FIE (SL), P. G. Dip. in Hydraulics Eng. (Moratuwa),
P. G. Dip. in Business & Financial Admin (ICA)

Eng. (Mrs.) M. K. Bandara (Western - North)
(up to 28/02/2015)
B.Sc. Eng. (Hon) MIE (SL),
M.Eng. (Sc.) in Public Health Eng. (NSW), Australia

Eng. K. W. Premasiri (Western - North)
(from 01/03/2015)
B.Sc. Eng. M.Eng. (Hydraulics), M. Eng. (Structural Eng. Designs)
Int. PE. C.Eng. F.I.E. (SL), M.S.S.E. (SL),

Eng. L. L. A. Peiris (Central)
B.Sc. (Eng.) Civil Engineering (University of Moratuwa - SL),
C.Eng. FIE (SL), Int. PE (SL), M. Phil (IWRM), University of
Peradeniya, SL, P.G. Dip. (Water and Wastewater Eng.), AIT,
Bankgkok,

Eng. M. I. A. Lathiff (Uva)
M.Sc. Eng. (Russia), C.Eng. FIE (SL), MIE (India),
PG Dip., BFA (SL)

Eng. C. C. H. S. Fernando (North Central)
B.Sc. Eng., MPM, P.G. Dip. (Oslo University)
MIE (SL), MIM (SL), C. Eng. Chartered Eng.

Eng. N. E. M. S. B. Ekanayaka (North Western)
B.Sc. Eng., C.Eng. MIE (SL), M.Sc. IHE (Delft)

Eng. K. W. Premasiri (North)
(Up to 18.02.2015)
B.Sc. Eng., C. Eng. MIE (SL), M.Eng. IHE (Delft)

Eng. Barathithasan (North) (Acting)
(From 19. 02. 2015)
B. Eng (India), M. Eng. (Moratuwa),
M. Sc. Hydrology and water Resources
UNESCO-IHE-DELFT), PGDM (Rajarata),
C. Eng. (SL), MIE (SL) (Delft)

Eng. R. A. B. S. Mendis (Sabaragamuwa)
B.Sc. Eng., C.Eng. MIE (SL), M.Sc. in Sanitary Eng. (Netherlands)

Eng. J. K. S. Pathirana (Southern)
B.Sc. Eng. (Hons) C.Eng. MIE (SL) M.Sc. (Sanitary) Delft.

12. Addl. GMs/ DGMs working as Project Directors

Eng. (Mrs.) C. J. D. Perera (Kalu Ganga Water Supply Project - Phase I - Stage II)
B.Sc. Eng. (Hons), C.Eng. MIE (SL),
Dip. Sanitary Eng. (Netherlands), Dip. Environmental Eng. (SL)
(Up to 26/12/2016)

Eng. J. R. B. Nadurana (ADB 5th Project)
B.Sc. Eng. (Hons), P.G. Dip. in Environmental
Science & Technology (Delft.)
C.Eng. MIE (SL)
(Up to 18.05.2015)

Eng. R. Kulanatha (Wastewater disposal for Rathmalana Moratuwa & Ja-Ela/ Ekala Area)
B.Sc. Eng., C.Eng. MIE (SL),

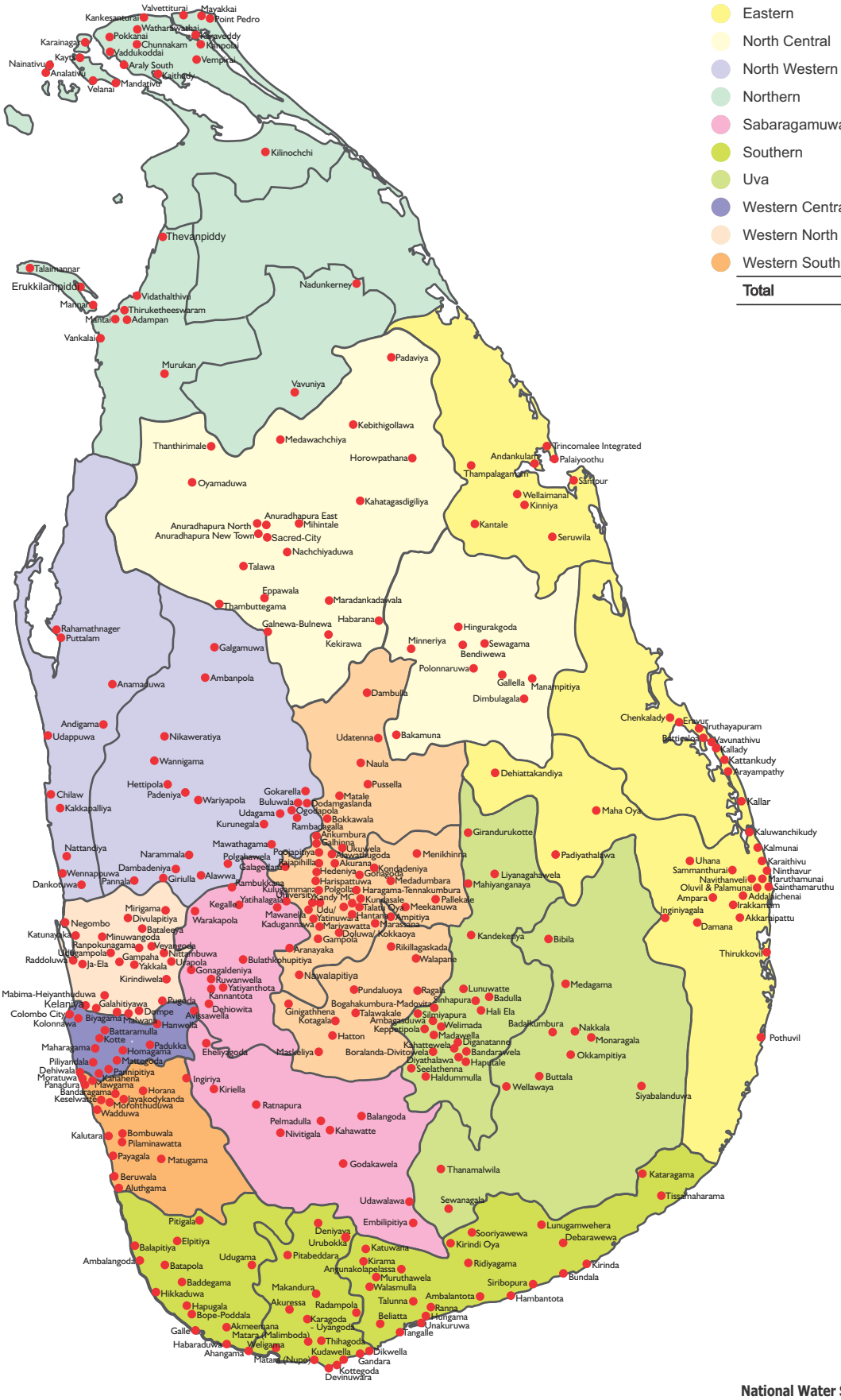
Eng. B. S. Wijemanna (Greater Colombo Rehabilitation Project)
B.Sc. Eng., M.Eng. Hydrology and Water Resources, IHE (Delft),
Dip. in Construction Management
C.Eng. MIE (SL),

Eng. K. J. V. A. Perera (Gampaha Attanagalla Water Supply Project)
B.Sc. Eng. FIE (SL), M.Eng. (Sanitary) IHE (Delft),
P. G. Dip. in Environmental Engineering and Management

Eng. M. K. Hapuarachchi (Colombo City Water Supply Improvement Project)
C.Eng. MIE (SL), P. G. Dip. in Environmental Engineering & Management.

Existing Water Supply Schemes

Province/RSC	Number of WSS
Central	50
Eastern	38
North Central	27
North Western	29
Northern	31
Sabaragamuwa	19
Southern	54
Uva	35
Western Central	11
Western North	21
Western South	16
Total	**331**



Corporate Planning

"The new Corporate Plan 2016-2020 prepared by a committee comprising 13 senior managers of the NWSDB and approved by the board of directors is ready to be implemented from the year 2016."

Corporate Planning section won the first place in the 5S competition held in 2015

Implementation Status of the Corporate Plan 2012 - 2016

The year under review was the fourth year of the Corporate Plan 2012-2016. This Corporate Plan was prepared by a special committee for the 5 year period appointed by the General Manager, comprising of 14 senior managers of the NWSDB.

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.

Quarterly progress on the Corporate Action Plans are presented to the Members of the Board by every manager responsible for a particular goal (there are seven such goals, overseen by a designated Accountable Manager for every goal). Accordingly, 4th quarter of 2014, 1st, 2nd and 3rd quarter of 2015 progress reports on the Corporate Action Plans were presented to the Members of the Board at Board meetings held in 2015.

The Goal included to promote information and communication technology solutions as a catalyst for business growth, enhances the capacity of IT applications within the NWSDB. Services hitherto outsourced are to be carried out in-house and the necessary strategies and activities have been worked out. The payroll system which has been outsourced before is now being carried out inhouse.

As the Corporate Planning (CP) division prepares a large number of reports throughout each year, a contract was awarded in 2014 to stream line the data dissemination system by developing an online data collecting system. The data collection system was developed under the stage I and the II of the contract for developing a report producing system was continued through 2015. Both the stage I & II were carried out with the assistance from UNICEF and Plan International.

Activities towards the goal on water supply and sanitation coverage were being carried out throughout the country. Special efforts taken to reduce NRW and power cost during 2015 are noteworthy. However, customer service improvement was given as a priority.

Promoting Institutional Development is a Corporate Goal. 5S concept was implemented for improving the productivity in every section in the NWSDB head office, Telawala premises and Polwatte premises. Arrangements were made to select the section with the best implementation of 5S programme under "Identify Infrastructure Development Activities" in the NWSDB and the Corporate Planning Division of the head office won the first place in this contest.

On achieving the Goal "Ensure greater accountability and transparency", both the Internal Audit Division and the Government Audit Branch worked on the accountability and transparency issues.

The CKDu affected areas and the rural community without safe water supply facilities were given priority within the available resources.

Water Safety Plan (WSP) implementation in Sri Lanka continued in 2015 under the advocacy and implementation support from the WHO. Six urban WSP training programmes were conducted for Western South, Western Central, Uva, Central, North Central and Greater Colombo Water Production Unit with the support of /Manpower Development Section of the NWSDB.

Corporate Plan 2016-2020

Special committee was appointed by the General Manager for reviewing the present corporate plan and revise as appropriate. As outcome of this assignment, New corporate plan for the period 2016-2020 was prepared and submitted to the Board of Directors for approval. The new Corporate Plan 2016-2020 prepared by a committee comprising 13 senior managers of the NWSDB and approved by the board of directors is ready to be implemented from the year 2016.

Progress Towards Stated Goals

Goal	Key Objectives	Target end 2015	Achievement end 2015
1. Increase the water supply and sanitation coverage	1.1 Total Pipe-borne water supply coverage	50.0%	45.9%
	1.2 Piped sewerage coverage	2.7%	2.00%
	1.3 Access to safe drinking water supply coverage	88.1%	86.0%
	1.4 Total sanitation coverage	86.5%	86.33%
2. Improve business efficiency	2.1 NRW (island-wide)	26.50%	27.30%
	2.2 Total staff for 1,000 connections	5.10	5.24
	2.3 Expenditure on power to total recurrent cost	23.17%	18.62%
	2.4 Maintenance expenses to total recurrent cost	3.96%	5.10%
	2.5 Establishment expenses to total recurrent cost	10.68%	9.84%
	2.6 Estimated bills to total number of bills	1.0%	1.29%
	2.7 Collection efficiency	100.0%	103%
	2.8 Accounts receivable from -		
	(a) domestic and commercial institutions	35 days	35 days
	(b) Government institutions	55 days	21 days
3. Improve services to customers and promptly attend to public complaints	3.1 Public awareness programmes to be carried out all island (schools/other)	100 Nos.	147 Nos.
4. Promote information and communication technology solutions as a catalyst for business growth.	Payroll, HR, Stores modules were implemented by establishing ICT capacity of the NWSDB.		
5. Ensure greater accountability and transparency	Initiatives were taken to develop a whole range of management and business tools on human resource development, management information system and business plan. • 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		
6. Promote Human Resource Development	6.1 In-house training (no. of participants)	3520	8332
	6.2 In-country external training (no. of persons)	160	219
	6.3 Overseas training (no. of persons)	80	199
7. Facilitate safe drinking water supply and sanitation to rural and underserved communities	7.1 RWS Schemes maintained by CBOs, LAs and others under the NWSDB backup support	11.1%	10.7%

Key Performance in Water Supply

> "The ratio of staff per thousand service connections was reduced to 5.24 in the year 2015 from 5.72 in 2014."

By providing 121,723 service connections during the year, the population that was covered with piped drinking water supplies by the NWSDB was brought to 35.20 %.

Service levels to existing consumers were improved by commissioning several major and minor water supply projects in different parts of the country. Projects being implemented in war affected Northern and Eastern areas, rehabilitated and reconstructed water supply and sewerage facilities, thereby improving the livelihood of those affected. Project components are not limited to restoration of damaged utilities but include provision of water supply and sanitation facilities to resettlement areas, improvement of service levels in affected areas and extensions to new development areas in the vicinity.

The ratio of staff per thousand service connections was reduced to 5.24 in the year 2015 from 5.72 in 2014.

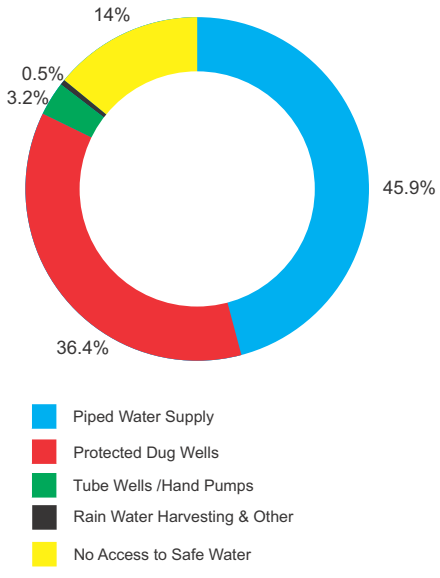
The last water tariff revision was in October 2012 after three years and seven months. The Board had faced many difficulties in managing their cash flow during last four years. Most of the prices of operational expenses were increased. Therefore the debt service commitment could not be fully met by the NWSDB.

Hence to strengthen the Balance Sheet of the Board, a policy decision was taken by the General Treasury in 2014 to convert the total outstanding debt into equity. This exercise was executed in the year 2015.

The NWSDB has recorded Rs. 366,802,512.00, Rs. 1,002,860,406.00, Rs. 1,425,890,828.00 after tax profit for the last consecutive three year since 2012.

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. The NRW reduced to considerable amount for those areas. Accoudingly, the NRW of Western Province & nationwide were brought down to 30.31 % and 27.30% respectively.

Access to Safe Water Coverage



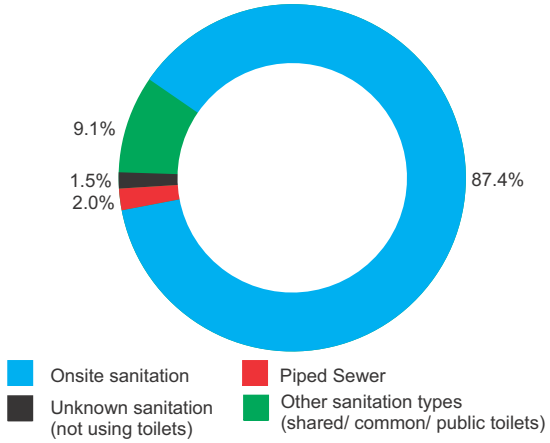
General

There are 331 major, medium and small water supply schemes in operation under the NWSDB's purview. Out of these, 53 schemes cover major cities and 278 schemes cover townships and villages.

3.2 % of the population is covered with hand-pump tube wells. Community management is promoted with regard to rural water supply schemes through community-based organizations. Proper rain water harvesting was considered as an acceptable option for drinking water source.

		2014	**2015**	Variation (%)
KEY STATISTICS: WATER SUPPLY				
No. of Water Supply Systems		329	**331**	0.6
Piped Water Production (million cu.m.)		575	**600**	4.3
Piped Water Consumption (million cu.m.)		411	**436**	6.1
Domestic Connections (Nrs.)				
	(a) Western Province	764,500	**804,082**	5.2
	(b) Other Provinces	928,855	**1027,467**	10.6
Total Domestic Connections		1,693,355	**1,831,549**	8.2
Public Stand Posts (Nrs.)				
	(a) Western Province	518	**503**	(2.9)
	(b) Other Provinces	1,261	**1,182**	(6.3)
Total Public Stand Posts		1,779	**1,685**	(5.3)
Non-Domestic Connections (Nrs.)				
	(a) Western Province	69,148	**74,297**	7.4
	(b) Other Provinces	69,495	**47,875**	(31.1)
Total Non-Domestic Connections		138,643	**122,172**	(11.9)
(Including total public stand posts)				
Total No. of Service Connections		1,831,998	**1,953,721**	6.6
Average Monthly Household Consumption				
(cu.m. per house connection)	(a) Western Province	17.13	**17.29**	0.9
	(b) Other Provinces	12.76	**12.48**	(2.2)
Average Household Bill Value per Month (Rs.)				
	(a) Western Province	735.54	**729.44**	(0.8)
	(b) Other Provinces	435.05	**405.85**	(6.7)
Total Revenue (Rs. million - with VAT)		19,785	**20,472**	3.5
Total Recurrent Expenditure (Rs. million)		19,871	**19,549**	(1.6)
Non-Revenue Water (%)				
	(a) Western Province	32.20	**30.31**	(5.9)
	(b) Other Provinces	23.54	**23.39**	(0.6)
	(c) Island-wide	28.54	**27.30**	(4.3)
O&M Staff/ 1,000 Connections		4.78	**4.41**	(7.7)
Total Staff/ 1,000 Connections		5.72	**5.24**	(8.4)
Average Recurrent Cost of Water Production (Rs./ cu.m.)		29.49	**32.57**	10.4
Average Total Cost/ Unit Sold (Rs./ cu.m.)		47.00	**48.81**	3.9
Average Unit Revenue (Billing/ Consumption) (Rs./ cu.m.)		48.15	**46.92**	(2.6)
Collection Efficiency		1.00	**1.03**	3.0
Deep Wells (Nrs.)	(a) Drilled	315	**179**	(43.2)
	(b) Successful	268	**162**	(39.6)
Development Expenditure (Rs. million)		35,668.26	**27,544.18**	(22.8)

Key Performance in Sewerage



KEY STATISTICS: SEWERAGE

		2014	**2015**	Variation (%)
Domestic Connections				
	Western Province	11,306	**12,380**	9.5
	Other Provinces	886	**886**	0
Non-Domestic Connections				
	Western Province	831	**964**	16
	Other Provinces	166	**181**	9.0
Housing Scheme Connections (Bulk)				
	Western Province	2,579	**2,624**	1.7
	Other Provinces	-	-	-
Total Sewerage Connections	All Island	15,768	**17,035**	8.0
	Western Province	14,716	**15,968**	8.5
	Other Provinces	1,052	**1,067**	1.4

Summary of Operations

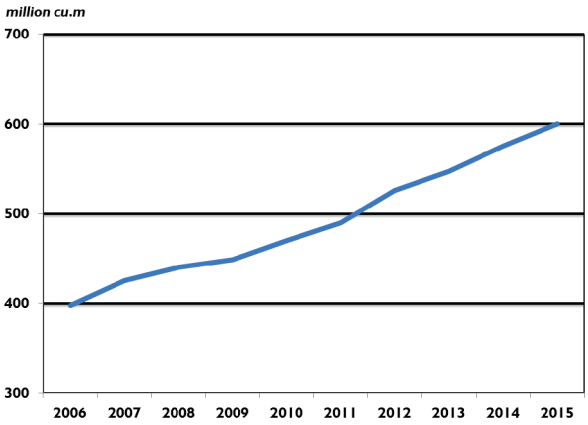
"The Western Province water supply system claims the major share of production through four centres at Ambatale, Labugama, Kalatuwawa and Kandana in Kalutara amounting to 57 % of the total water produced by the NWSDB"

WATER SUPPLY

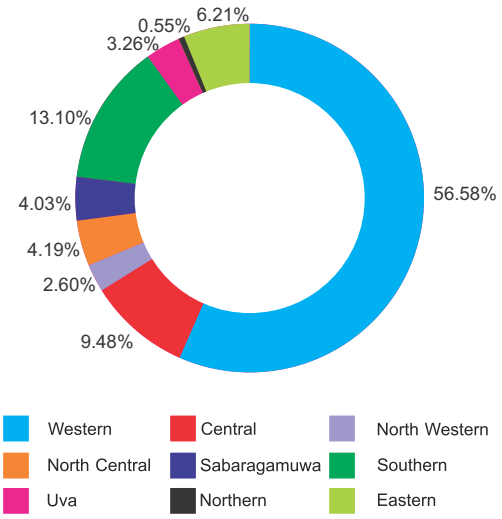
Drinking Water Production

The total quantity of drinking water produced in 2015 was 600 million cu.m. The trend during the last 10 years is given in the chart. The Western Province water supply system claims the major share of production through four centres at Ambatale, Labugama, Kalatuwawa and Kandana in Kalutara amounting to 57% of the total water produced by the NWSDB.

Water Production



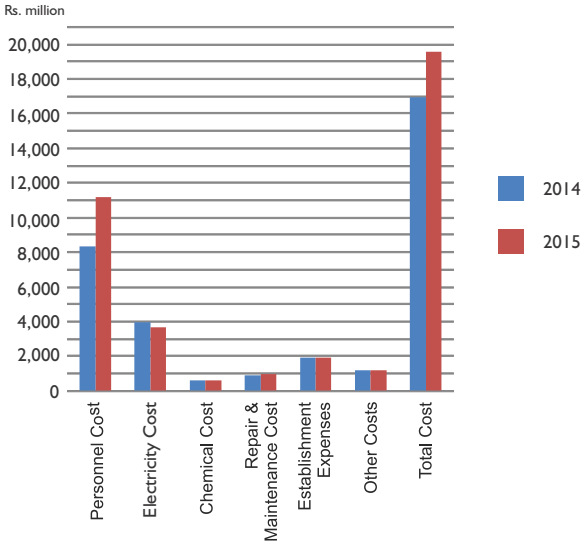
Water Production by Provinces



Cost of Production:

Breakdown of the total production cost (Rs. million) in comparison with 2014 is shown below:

Cost of Production



Cost of Production Rs. /cu.m.

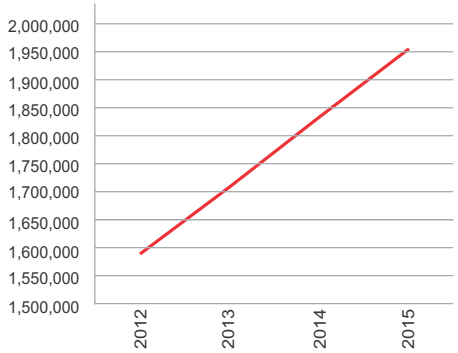
2014	2015
47.00	48.81

Cost of Production = Total Cost / Units Sold
= (Total Recurrent Cost + Interest on commissioned projects + Depreciation) /(Quantity sold)

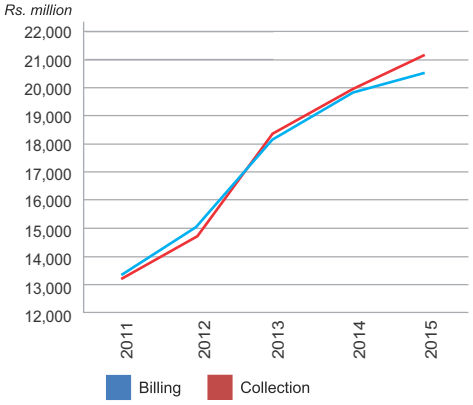
Comparison of Service Connections

Province/ RSC	No. of Connections Province/ RSC-wise			NWSDB Region	No. of Connections NWSDB Region-wise		
	As at end December 2014	**As at end December 2015**	Change %		As at end December 2014	**As at end December 2015**	Change %
Western - Central	404,731	**421,319**	4.1	Priority	2,318	**2,290**	(1.2)
				Colombo City	136,194	**138,100**	1.4
				Kotte	149,144	**154,809**	3.8
				Maharagama	117,075	**126,120**	7.7
Western - North	221,045	**237,261**	7.3	Kelaniya	158,769	**169,717**	6.9
				Gampaha	62,276	**67,544**	8.5
Western - South	207,872	**219,799**	5.7	Dehiwala	100,359	**102,479**	2.1
				Kalutara	56,134	**60,345**	7.5
				Panadura	51,379	**56,975**	10.9
Central	224,217	**236,052**	5.3	Kandy North	83,685	**88,434**	5.7
				Kandy South	71,644	**75,593**	5.5
				Kandy East	68,888	**72,025**	4.6
North Western	64,030	**69,182**	8.0	Kurunegala	64,030	**69,182**	8.0
North Central	91,900	**100,668**	9.5	Anuradhapura	91,900	**100,668**	9.5
Sabaragamuwa	90,267	**94,784**	5.0	Ratnapura	40,422	**43,219**	6.9
				Kegalle	49,845	**51,565**	3.5
Southern	276,334	**293,217**	6.1	Hambantota	91,790	**97,728**	6.5
				Matara	86,439	**91,709**	6.1
				Galle	98,105	**103,780**	5.8
Uva	76,064	**81,307**	6.9	Bandarawela	43,787	**46,213**	5.5
				Monaragala	32,277	**35,094**	8.7
Northern	12,189	**14,834**	21.7	Jaffna			
				Mannar	12,189	**14,834**	21.7
Eastern	163,349	**185,298**	13.4	Vavunia			
				Ampara	32,283	**38,891**	20.5
				Trincomalee	41,824	**47,756**	14.2
				Akkaraipattu	59,651	**63,892**	7.1
				Batticaloa	29,591	**34,759**	17.5
Total	**1,831,998**	**1,953,721**	**6.6**	**Total**	**1,831,998**	**1,953,721**	**6.6**

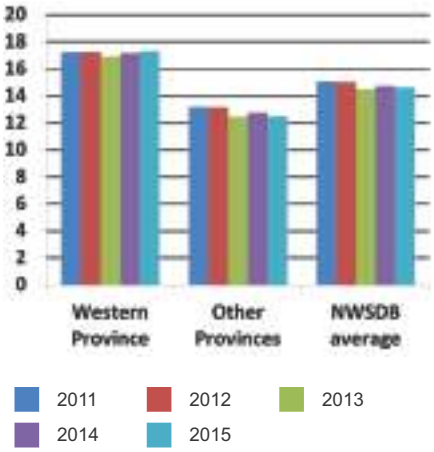
Growth of Connections



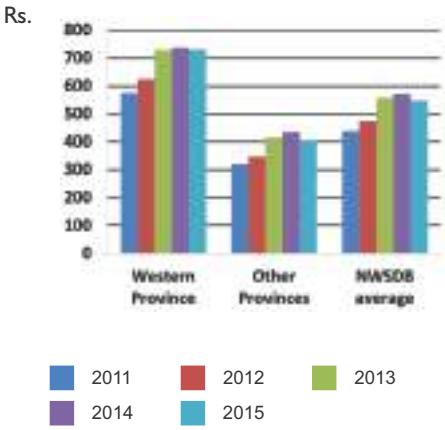
Comparison of Annual Billing and Collection



Average Household Monthly Consumption (cu.m per Connection)



Average Household Monthly Bill



Billing Statistics

Description	2014 (Rs. million)	**2015 (Rs. million)**
Billing Target (with VAT)	19,672	**21,694**
Actual Billing (with VAT)	19,785	**20,472**
Collection Target (with VAT)	19,476	**21,477**
Actual Collection (with VAT)	19,871	**21,157**

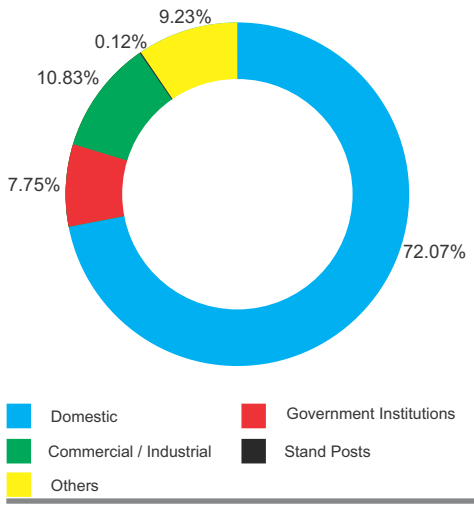
Quantity of Water Sold and Revenue by Consumer Categories (2015)

Consumer Category	Quantity sold cu.m '000s	%	Revenue Rs. million	%
Direct billing #	320,251	72.07	11,954	58.39
Schools	5,229	1.18	118	0.58
Tenement gardens	2,585	0.58	89	0.43
Public stand-post supply	519	0.12	10	0.05
Government institutions, NWSDB premises	34,438	7.75	2,383	11.64
Commercial and industrial	48,121	10.83	4,640	22.66
Tourist hotels	2,667	0.60	242	1.18
Shipping	128	0.03	69	0.34
Board of Investment	8,606	1.94	593	2.90
Religious premises	5,185	1.17	119	0.58
Subtotal	**427,729**	**96.25**	**20,218**	**98.76**
Bulk billing	12,976	2.92	245	1.20
Others*	3,672	0.83	9	0.04
Grand Total	**444,377**	**100.00**	**20,472**	**100.0**

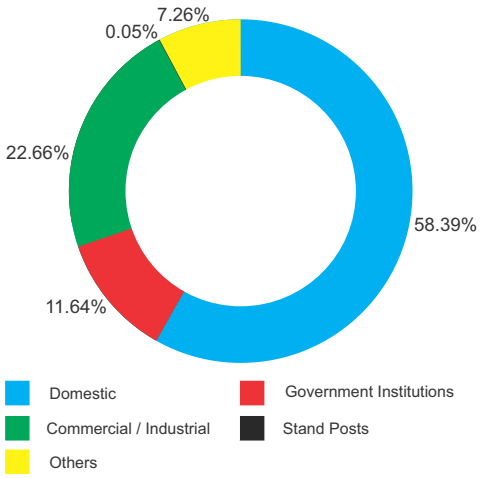
Domestic, NWSDB Quarters, Government Quarters, Condominium, Domestic Non-Vat, Domestic Samurdi & Tenement Samurdi

* All other billing categories have been grouped under 'Others'. Setting-off rebates have also been included in this category.

Percentage Quantity of Water Used by Consumer Categories



Percentage Revenue by Consumer Categories



Summary of Investments

> "The NWSDB was able to make payments for development activities without restrictions in the case of Large Scale Water Supply & Sewerage Projects in 2015."

Financial Sources

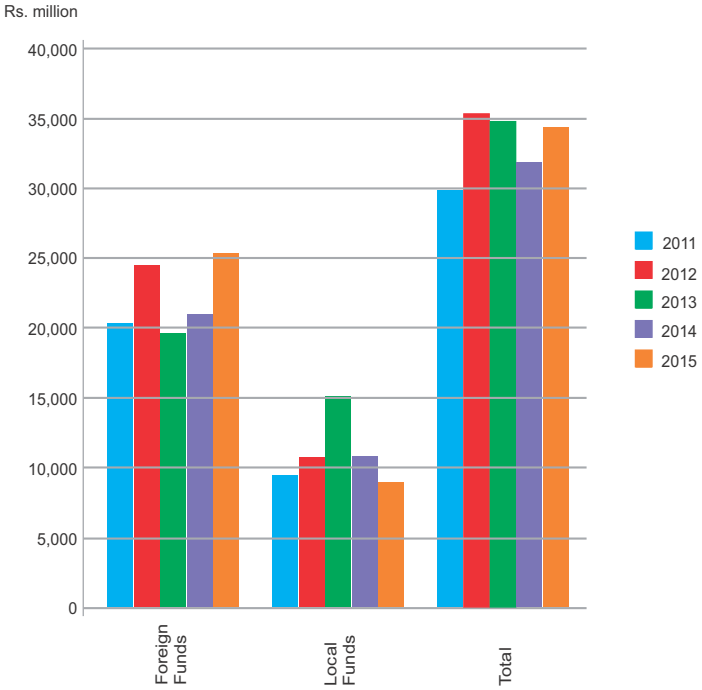
The NWSDB was allocated with local consolidated funds only for Emerging Small Townships (Small & Medium) Water Supply & Sewerage Projects. Foreign Aid Grant and Reimbursible Foreign Aid Grants were allocated for 5 selected Large Scale Water Supply/ Sewerage Projects. Other foreign disbursements were expected to be direct payments from financiers. Local counterpart funds were made available from the bond given to the NWSDB.

The NWSDB was able to make payments for development activities without restrictions in the case of Large Scale Water Supply & Sewerage Projects in 2015.

Meanwhile the NWSDB was able to implement 6 Water Supply Projects by borrowing Rs 9,657 m from Local Banks.

For the purpose of water sector community facilitation, a sum of Rs. 65.00 million in foreign funds and Rs. 1,449.00 million in local counterpart funds were provided.

Capital Budget Allocations

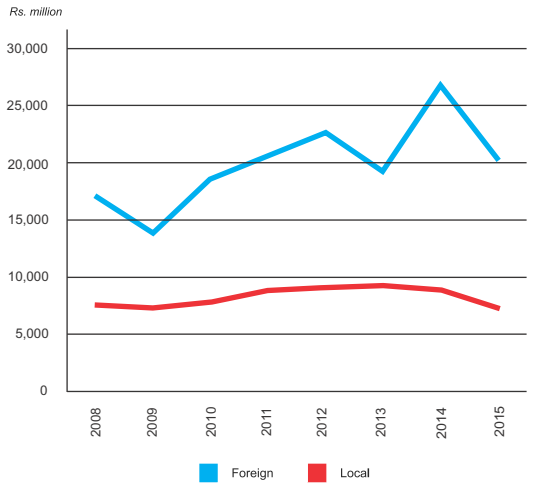


Although the total allocation on water supply and sewerage was gradually increasing from 2011 through 2013, there was a slight drop in allocation for water supply & sewerage in 2014 compared to that of 2013. The total allocation including Rs. 90 million of supplementary allocation was Rs. 31.82 billion while the allocation for 2013 was Rs. 34.76 billion. However, the new method of disbursing funds for capital works practiced in 2015 enabled the NWSDB to carry out Rs. 27.54 billion worth of investments.

Utilization of Capital Funds

Capital fund utilization stood at 80.1 % (after receiving the supplementary allocation of Rs. 24, 182.95 million for large scale water supply and sewerage projects) in 2015. A new budget line for Water Sector Community Facilitation was included in 2012 and for the same, Rs. 1,514.00 million had been allocated in 2015.

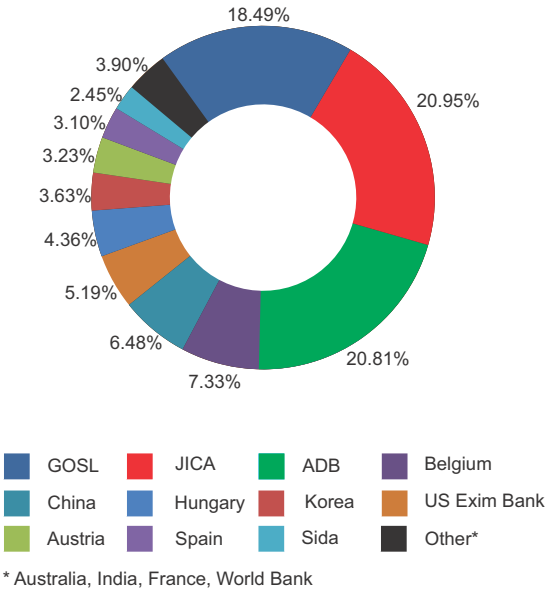
Capital Fund Utilization



Comparison of Capital Fund Utilization 2014/ 2015

Description	2014		2015	
Foreign Component (Rs. million)	26,824	128.0%	**20,247**	**79.8%**
Foreign Aid Related Domestic Component (Rs. million)	6,049	79.0%	**5,507**	**91%**
Consolidated Funds for Local Projects (Rs. million)	2,795	87.0%	**1,791**	**60.35%**
Total	35,668	112.1%	**27,544**	**80.1%**

Foreign Aid Contribution by Donors and Related GOSL Funds



* Australia, India, France, World Bank

Rehabilitation and Improvement of Existing Water Supply and Sewerage Schemes

The NWSDB continued to rehabilitate and improve existing water supply and sewerage schemes using allocation of Rs. 1,464 million of its own finances in 2015. These funds were used to improve the quality and quantity of water supplies and maintain sewerage schemes, maintain NWSDB assets and undertake related support services in operational activities. That means NWSDB spent Rs. 669.21 million for rehabilitation, Rs. 67.78 million for reduction of NRW, Rs. 26.41 million for pipe line extension, Rs. 94.56 million for energy conservation and Rs. 18.41 million for replacement of capital assets. Priority was given to improvements in schemes where there are no donor assistance or major funding.

GOSL Funding through small-scale Infrastructure Rehabilitation and Upgrading Projects

There are locally funded projects planned, designed and expended by the NWSDB. The implementation of the projects are supervised by the respective provincial staff and taken over by the provincial O&M staff when completed.

Under the locally funded Capital Works Programme, 20 new water supply projects and rehabilitation and augmentation of further 24 water supply schemes were continued in 2015.

60 % of the allocation has been utilized during the course of the year.

Almost all the locally funded projects were started 6 to 8 years ago. Owing to small annual budget allocation these projects have been prolonged. As a result, their Total Cost Estimates have increased due to price escalation. Furthermore, funds have not been released on time to settle the contractors' claims for the work done. There was a delay of several months in releasing funds which caused a negative effect on contractors' cash flow.

District-wise Capital Works Programme 2015

District	**Allocation 2015 Rs. million**	No. of Projects with Allocation	Beneficiaries
Ampara	**175.00**	2	30,000
Anuradhapura	**73.97**	2	153,000
Badulla	**39.00**	2	16,000
Colombo	**72.00**	2	7,100
Galle	**270.00**	5	91,600
Gampaha	**46.00**	1	20,000
Kalutara	**126.00**	1	120,000
Kandy	**178.22**	3	152,000
Kegalle	**83.00**	3	33,300
Kurunegala	**248.00**	4	106,185
Matale	**70.00**	1	400,000
Matara	**57.00**	1	10,000
Monaragala	**23.00**	3	38,000
Nuwara Eliya	**50.00**	1	5,000
Polonnaruwa	**62.31**	2	5,700
Jaffna	**61.00**	2	200,000
Ratnapura	**451.500**	7	152,900
Trincomalee	**169.00**	2	55,000
Total	**2,255.44**	44	1,595,785

Details of Projects Completed during the year 2015

RSC	**Project Name**	**Agent**	**TEC Rs. Million**	**Beneficiaries**
Eastern	Transmission main from Kantale to Tampalakamam	GOSL	1,397.84	330,000
North Central	Hingurakgoda Water Supply Project	GOSL	130.00	2,900
Sabaragamuwa	Kolonna/ Balangoda Water Supply Project (Belgium)	Belgium	4,658.00	117,500
	Nivithigala Water Supply Project	GOSL	99.1	14,500
	UdawalawaWater Supply Project	GOSL	973.20	9,400
Central	Matale Water Supply Project	GOSL	525.00	400,000
	Palapathwala Water Supply Project	GOSL	150.00	16,000
Northern	Immediate Arrangements to provide water supply to Kilinochchi	JICA	260.00	250,000
Interprovincial	Secondary Towns Rural Community Based WS & Sanitation (ADB 4th)	ADB	29,680.00	953,200

Employees

"NWSDB's Manpower Development & Training Division continued to provide training opportunities to employees as in the past.

27 Nrs. new Training Programmes have been introduced during the year 2015."

Staff Strength

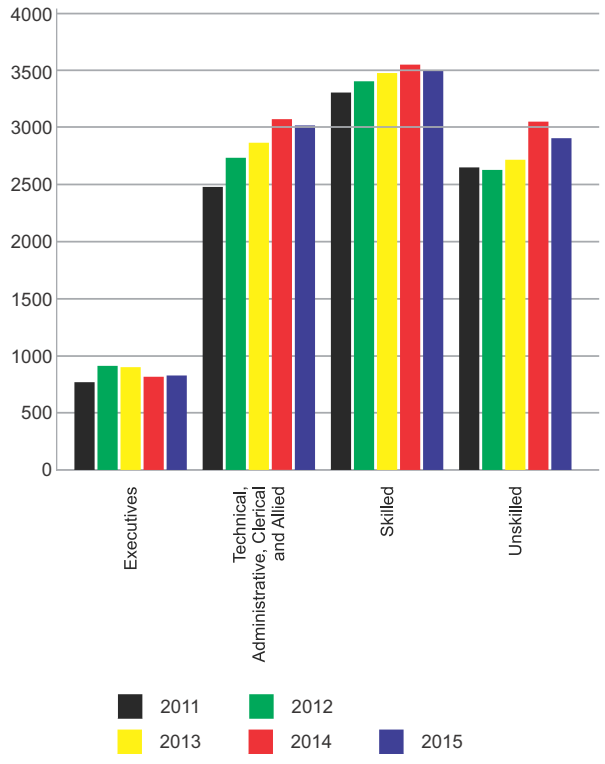
	Staff	2014	2015	Variation (%)
(a)	Permanent*	9,513	**9,439**	(0.8)
(b)	Casual	15	**09**	(40.0)
(c)	Contract	911	**756**	(17.0)
(d)	Plant Technician Apprentice & GT	44	**41**	(6.8)
	Total	10,483	**10,245**	(2.3)

* Staff recruited for foreign funded projects are excluded from the permanent staff figure

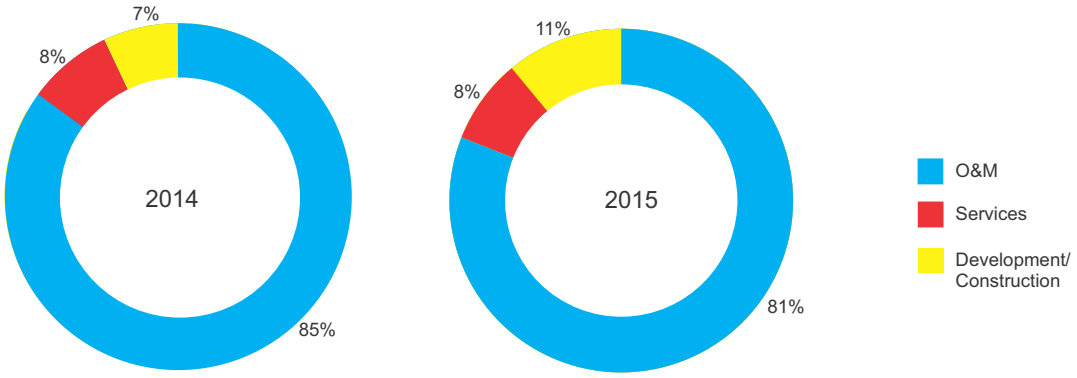
There were 756 contract, 9 casual and 41 plant technician apprentices in addition to a permanent staff of 9,439 at the end of 2015. Most of the contract employees were recruited to work for foreign funded projects.

There were 452 permanent, 3 casual, 118 contract and 12 plant operator technician apprentice recruitments of various staff categories during January to December in 2015. In the same period there were 526 permanent, 9 casual, 273 contract and 15 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 238. The 41 plant operator technician apprentices are likely to be made permanent later.

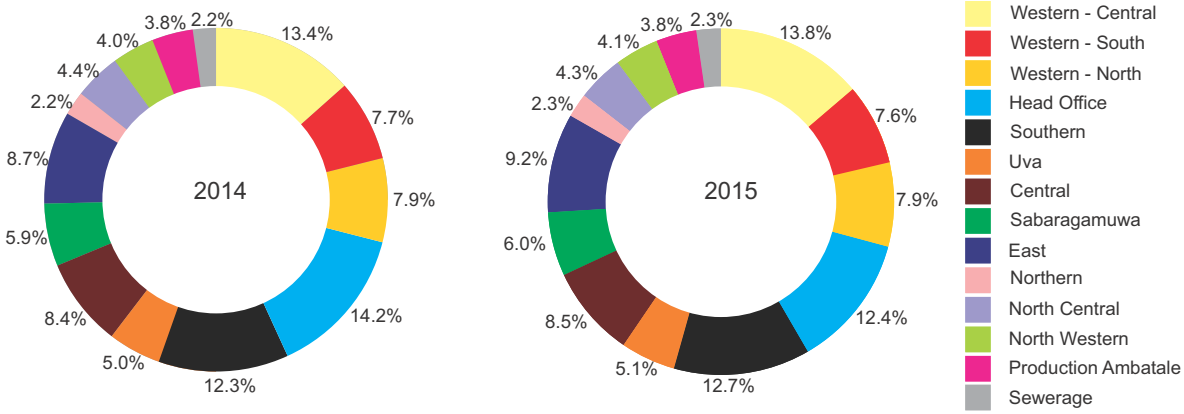
Distribution by Key Job Function



Staff Distribution by Key Job Functions



Staff Distribution by Location



STAFF BENEFITS

- The salary anomalies prevailing since 2003 were corrected with effect from 01.01.2015 resulting in a considerable salary increase to the NWSDB employees.
- An Annual Bonus of Rs. 37,500.00 inclusive of a 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 in the BMICH in March, 2015.
- 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.
- Tea allowance of Rs. 650.00 was granted 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. 10,000.00 was paid to the employees.
- Rs. 59,380,085.00 among 120 employees as 12 month loan and Rs. 432,178,991.00 among employees as 10 month loan have been distributed at a concessionary rate during the year 2015.
- Rs. 77 m (approx.) was incurred for the reimbursement of medical expenses of employees (including family members). In addition, medical expenses incurred for critical illnesses.

STAFF REMUNERATION AND BENEFITS

Comparison of Staff Remuneration in 2014 and 2015

Description	2014 Rs. million	**2015 Rs. million**
Salaries	7,483	**9,925**
Contribution to Employees' Provident Fund	647	**856**
Contribution to Employees' Trust Fund	162	**214**
Total	8,292	**10,995**

MANPOWER DEVELOPMENT & TRAINING

NWSDB's Manpower Development & Training (MD&T) Division continued to provide training opportunities to employees as in the past. 26 Nrs. new training programmes have been introduced during the year 2015. They were Advance bid Evaluations, Preparation of Bill of Quantities, Tube well Construction & Related issues and remedies, Electric Fuel Injection (EFI) system for vehicles, Operation and Maintenance of Wastewater Treatment Plants, Operation and Maintenance of Reverse Osmosis Plants, Planning & Design of Water Treatment Plants, Construction of Transmission and Distribution systems, Algae Toxicity in water intakes, Managing High Risk Situations in water supply schemes, Personal Grooming, Business and Social Etiquette, Green Productivity, Professional Development for Management Assistants, Skill Development Programme for Messengers, Awareness on commercial Billing software, Application of zero based budget, Legal Recovery Procedure, Creating & Manipulating Documents Using Word-Processing Programs, Organizing ,Storing and Manipulating data Using Spreadsheets, SQL Basics using Microsoft SQL Server 2008, Establishment of Online Learning System, Implementation Of MDTD Website, Software Solution and Hardware Maintenance Procedures, Billing Software System, Commercial Billing Software, GIS and Maintenance of Hardware and Software.

Based on the training need priorities identified through the senior Management and line-managers, employees of all categories were provided with the training through the following three approaches.

Formal In-house Training Programmes, Seminars and Workshops

Under this approach, 214 In-house Training Programmes including the above were conducted during the year 2015 and trained 8332 employees of various categories. The number of employees trained in each categories are 747 Managerial staff, 1798 Executive staff, 2062 Supervisory staff, 1817 Clerical & Allied staff and 1908 Operational staff.

Other than the above new programs, Preparation of Estimates for pipe lines & structures, Calculation of Price Fluctuation claims using ICTAD formula, Calculation of Price Fluctuation claims using ICTAD formula, IEE Wiring Regulations, Programmebale Logic Control (PLC) Systems, Automated Systems & SCADA Systems in water Supply schemes, Pneumatic Control systems in water supply schemes, Variable Speed Devices in water supply schemes, Maintenance and Repair of Gas Chlorinator, Design Selection Installation & Testing of water pumps, Operation and Maintenance of water Pumps, Usage of PE pipes and fittings in the transmission and distribution systems, Strategies for NRW Reductions, Water Treatment Processes, Wastewater Treatment processes, Planning and Design of water transmission and distribution systems, Workshop on "Towards Appropriate Water Safety Plans for NWSDB", Traffic laws and Road Safety, Under pressure water main tapping, Work Life Balance, Commercial Procedures, Contract Payments & Supply Payments, Workshop on Building High Performance Teams, Refresher Course on Accounting Procedures, Refresher Course for Cashiers, Effective Warehouse Management, Disciplinary Procedures, Office Aids Development, Report Writing, Introduction to Computers & Windows 7 Operating System, Advanced Features of AutoCAD, Email Management, Use of Sinhala UNICODE with Sinhala Kit Provided by ICTA for Sinhala Computing Needs, Computer Aided Draughting & Design Using AutoCAD 2010, Refresher Course on GIS and Mapping, Water GEMS, MS Projects and Creating Dynamic Adjustment Sheets Using Microsoft Excel are the other programs conducted under this approach during this year.

Training at other Training Institutions within the country

MD&T Division arranged training for 219 employees externally through local training Institutions covering a total of 2109 training days. This includes Masters and Postgraduate programmes conducted by local Universities and Diploma and Certificate courses conducted by various recognized Institutions such as National Institute of Business Management, Institute of Supplies and Marketing Management, Institution of Engineers Sri Lanka, Ceylon German Technical Training Institute, Center for Habitat Planning and Development, Advanced Construction Training Academy, etc. Further employees were nominated for several short courses in areas of Human Resources Management, Supply Chain Management, Construction Management, Mechanical and Electrical fields, Machinery Operations and maintenance, etc.

Officers have been nominated for 23 external training / programmes / workshops during 2015. They were Project Management Professional – [Tech one Global Pvt. Ltd], CEO's Forum & Regulating Conclave on World Trade & Accreditation[Sri Lanka Accreditation Board for Conformity Assessment], Seminar on Sustainable infrastructure Construction in Developing Countries [IESL], National Management Conference – 2015[Institute of Mgt of SL], Workshop on International Environmental law[Kotalawala Defense University], International Conference on electro Mobility and Urban Mass Transportation[IET], Introduction to Water Testing Equipment [S&D Associates], Developing Guidelines for International Disaster Management Plan [Disaster Management Centre], Seminar on Scientific Measurements & Calculations [Institute of Chemistry Ceylon], Workshop on Design Software of Bentley Software system.[Geoinformatics International (Pvt)Ltd], Technical Sessions of IESL, Seminar on

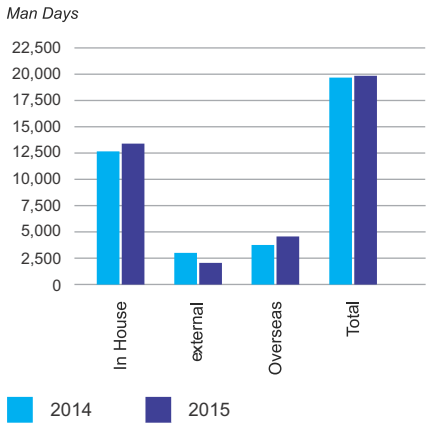
Construction Insurance [CIDA], One day CPD Programme – IIESL, Workshop on Attitudes & Skills Development – UOC, National Eng. Conference- IESL, CSR Workshop on Entrepreurship & Employability[Skills Development Fund Limited], Training Programme on Sustainable Water Management System.[Lanka Rainwater Harvesting Forum], Ero Code 2: Design of Concrete Structure [Holcim Lanka], Seminar on Mitigation Measures for Road side slope failures [soil Tech], Training Programme on VAT & Taxes in Contracts [ICTAD], Design & Construction Aspects of Water Retaining structures & Water Proofing [ICTAD], Introduction of Tender Procedures [IIESL] and Workshop on Transport Management [Skills Development Funds.

Overseas Training and Official Visits

As Short Term Fellowships and Visits, Overseas Trainings were provided for 77 employees of the Board with the financial assistance from ADB and other bi-lateral short term fellowships from NUFFIC, JICA, ITEC, KoIKA, MICP and TFWLP. In addition MD&T Division facilitated official visits for 122 officers in respect of Pre- shipment Inspections, Factory Inspections, Contract negotiations, Twining Programmes, etc. through various projects implemented in year 2015.

Under Long Term Fellowships during 2015, M.Sc. in Environmental Science, specialization Environmental Science & Technology sponsored by the Netherlands Fellowship Programme has been received by the NWSDB Engineers for fulltime study abroad.

In addition to all these programs provided for the internal staff of NWSDB under the above three categories, On-the Job training was provided to Apprentices (Undergraduates, Special Apprentices, NDT/ HNDE Students, Craft Apprentices and students of Technical Colleges, Institute of Charted Accountants, A.A.T. Vocational Training Authority, National Apprentices & Industrial Training Authority {NAITA}, etc).

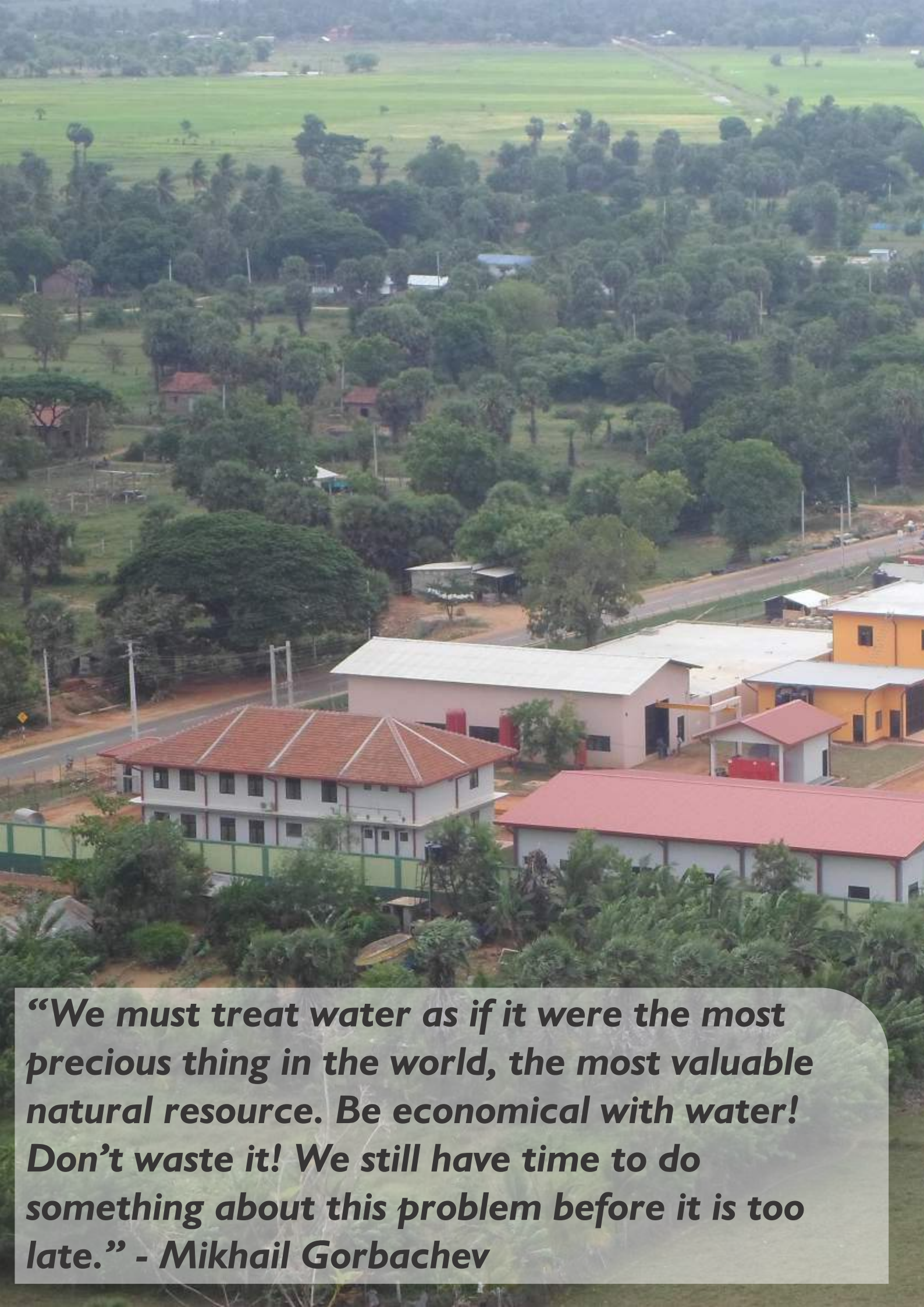


Summary of on the Job Training Provided for Apprentices from External Institutions.

Nr.	Category	Nr. of Trainees	Man days
1	Undergraduates	86	
2	Technical Trainees	66	
3	Accounting Trainees	07	25,520
4	Clerical & Other Trainees	14	
Total		**173**	

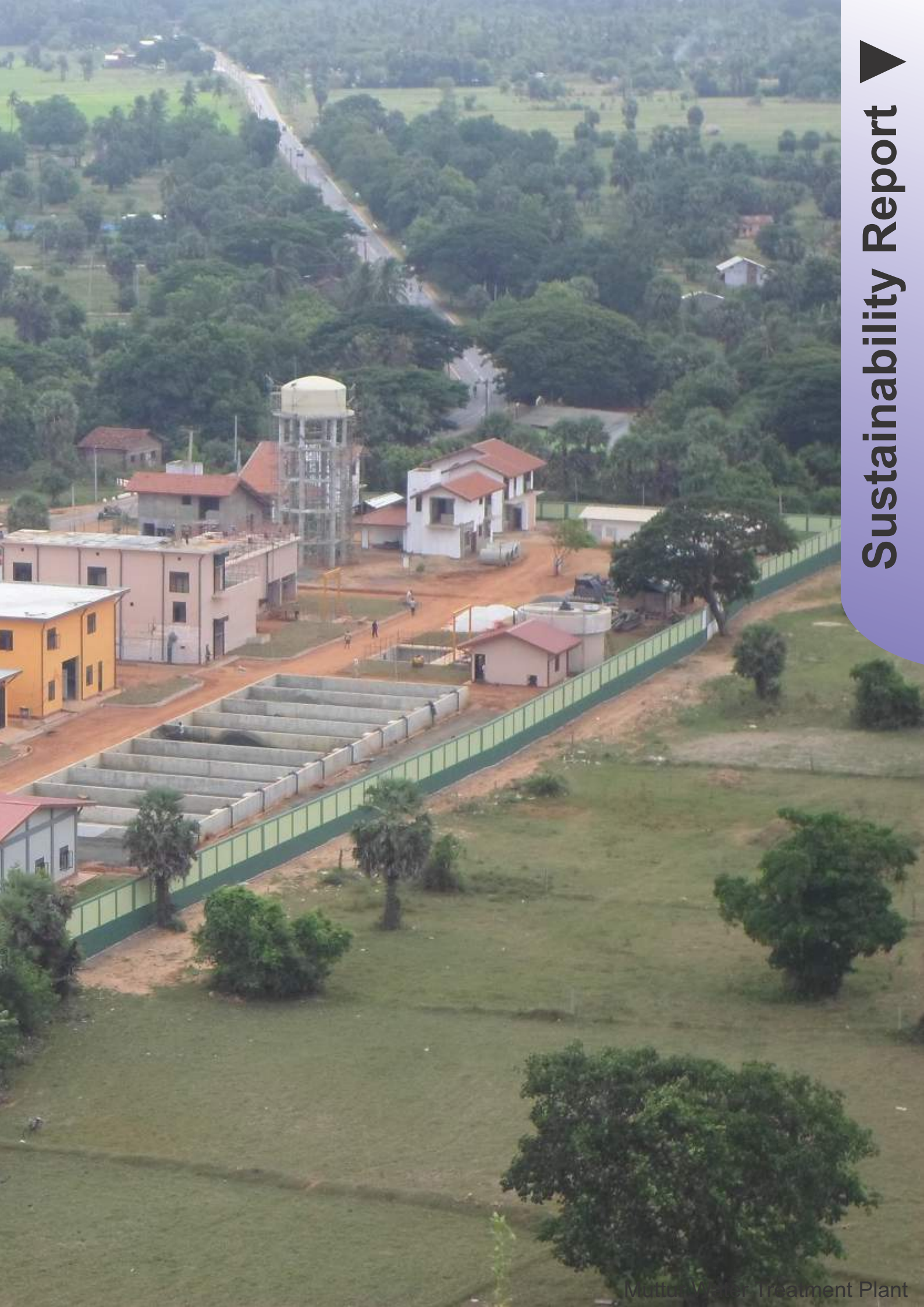
Summary of Training Provided for Internal Staff.

No.	Type of Training	Programmed	Progress	Percentage	Mandays
1.	Formal In-house Training	3,500	8,332	238%	13,372
2.	Overseas Training and Visits	80	199	248%	4,301
3.	In country external Training	160	219	136%	2,109
4.	Workshop/ Presentation Conducted by External Institutions	240	354	147%	354
	Total	**3,980**	**9,104**	**228%**	**20,136**



"We must treat water as if it were the most precious thing in the world, the most valuable natural resource. Be economical with water! Don't waste it! We still have time to do something about this problem before it is too late." - Mikhail Gorbachev

Sustainability Report



Mutto Water Treatment Plant

Customer Convenience through Innovative Technologies

Innovation is the key factor in improving public service. While e-Government concepts are emerging as the driving force in improved government service delivery mechanisms, the technologies such as Geographic Information Systems (GIS), SCADA systems, SMS and mobile based technologies are fast emerging as platforms for innovative solutions in the public utility sector worldwide. Keeping in phase with these new trends, throughout the year, NWSDB has made remarkable attempts to adopt these emerging technologies to enhance the operational efficiency, service quality and customer care services ensuring better customer satisfaction.

Enhancements to Call Center

Call Center- solution facilitating customers to lodge their complaints through customer care hotline 1939 and effective processing of these complaints through the fleet of field staff deployed island wide, has become the centerpiece of the customer care services of the organization. This facility is gaining popularity continuously and more than 200,000 complaints have been accepted and processed during the year through the call center facility alone. One of the main features of the Call Center solution is the use of SMS and email as the primary communication methods to give immediate feedbacks to customers and-inform the details of the complaints to field staff for their immediate attention. Also, this system facilitates the tracking of the progress of the complaint processing while serving as a good management information source for effective decision making on this subject.

During the year, the solution was improved adding various new features such as facilities for sending customer alerts and notifications through SMS, enhanced call queue management, online monitoring of call center operations etc. Regional staffs utilize the solution to send alerts on water supply interruptions, disconnection notices directly to the customers' mobile phones through SMS messages.

Customer Charter

NWSDB has enforced a customer charter which set guidelines on maximum time limits to deliver most important customer support services such as new connections, billing/payment issues etc. displaying its utmost commitment to ensure the best customer satisfaction. On the spot new connection cost estimation in certain regional offices, provision of the connections within 7 days on receipt of the payments, one day service connection provisioning options are some of the remarkable steps taken by the organization to ensure best customer satisfaction.

Official Web Site

The official web site of the NWSDB was updated continuously to reflect the most current image of the organization. While providing most up-to-date information about the organization, certain interactive services have been incorporated to the site to enhance the customer interactions. Application forms, service request forms, leaflets. publications etc. are available for the users to download. Details about the important events, notices, news items are updated regularly.

The tender notices, job opportunities, procurement notices. etc, are some of the most popular sections of the site. Facilities are available to send the customer feedbacks and submit complaints/Grievances. The official web site has been converted to a content management solution using open source web design and development methodologies to facilitate more effective content updating process.

The new web site has facilities to accept payments on water bills online using credit cards.

Online Customer Care Portal

NWSDB initiated the development of an online customer care portal facilitating customers to view the consumption patterns, bills, payment details, outstanding balances. etc. The customers with a valid water services account can register in this portal to receive a host of online services. While providing customers with various details of their water service account, the portal allows the customers to make payments online using credit cards and several other options. This is a self-service online portal which was designed in keeping with the latest industry practices. The system was designed with stringent security controls to safeguard the privacy and information security. The solution has been launched and has been integrated to the new official web site.

Collaborative Services with other Institutions

NWSDB consented the Information and Communication Technology Agency (ICTA) to incorporate certain selected services in to the LankaGate online one-stop government services platform. An online portlet was developed by the ICTA in collaboration with the NWSDB under the re-engineering government initiative. This facility offers citizens with water service accounts to view the details of consumptions, bills, payment details along with a facility for making online payments to the outstanding bills.

In fulfilling its social responsibility, NWSDB has helped to establish a comprehensive grievance management system for all government institutions. NWSDB provided it's expertize in advisory capacity and developed the IT Solution for this purpose. The system is expected to become the primary grievance management solution of the government. At present several institutions are using this system to process public grievances.

Commercial Activities

Installation of water meters to each premises commenced in early 1980's, Billing of consumption was initiated in 1984. Over the years number of customers have increased to nearly two million

Domestic water sale is 68 % and the corresponding revenue is 56 %. Nearly 60 % of domestic customers use water less than 100 liters/ day which is much less than the design projections. 90 % use less than 40 units per month and 53% use less than 20 units per month. There are 136,000 customers whose consumption is Zero. The consumption tariff has been kept low from the time of introduction of metering. The revision of tariff has had little impact on the consumption pattern.

There are 139,000 non domestic customers, they consume 19.6 % of the water and bring in 35% income. Non domestic customers cross subsidies domestic customers.

Less than 30 day proration

The water tariff is for 30 day billing, due to various reasons the 30 day billing gets shifted back and forth. Lately more concentration is being made to achieve higher percentage for billing to 30 days. The practice of beyond 30 day billing proration was in existence. The board approval for less than 30 day proration was obtained 2005. The loss incurred to the board was considerable when less than 30 day billing tariff was not apportioned to reduced number of days of consumption, by introduction of the proration less than 30 day billing, the revenue increased, this approach treated all customers equally according to the approved tariff.

Arrears Recovery

Revenue generation of the board had to be increased to meet the burden imposed due to the regular salary revision. Additional effort was made to collect the long standing arrears from disconnected premises. This years' collection was around Rs. 49.2 million. 3,287 demand letters were sent. 6,553 regional files have been cleared. In the regions more emphasis was initiated towards collection of arrears. This has resulted in 1,824 files being received to take legal process. All the regional offices played a key role in adopting different strategies to collect additional revenue from disconnected customers.

Water bill payment

Water bill payments are collected by the cashiers, banks and agents. The head office cashiers serve 12,500 customers and collect Rs. 55 million for a month. Banks serve 300,000 customers and collect Rs. 400 million, the super markets play a bigger role they serve 200,000 customers and collect 50 % of total collection. Now the customers are in a position to settle their monthly bills from any payment collection centers.

Two more supermarket chains, postal department, and banks have showed interest to receive water bill payments. Other than the cashiers all other places of collection charge a convenience fee from the customers. It is visible customers are looking for convenience of payment.

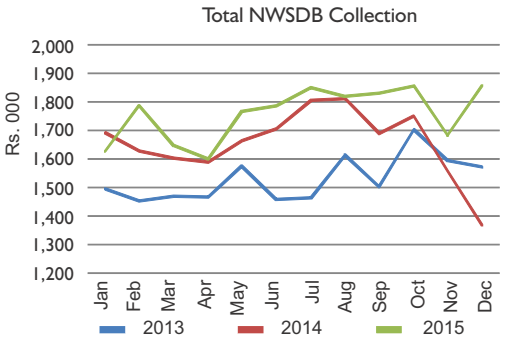
To enable customers to settle the payment through the credit card at the cashier is being initiated.

Tariff Revision

Once in three years a tariff revision is proposed. Deep analysis is made into historical consumption pattern and revenue pattern to arrive at a tariff proposal which will humanize the existing discrepancy in cross subsidy. For the first time a tariff proposal has been prepared solely by the commercial division under the review and guidance from a GM appointed committee.

Revenue Collection Pattern

Revenue collection followed a pattern similar to previous years, but was higher than last years, after August revenue was much higher in response to the request made by the management.



Customer Care

On average there were 1,700 customers visiting the customer care desk, the areas where more clarification were sought are with billing issues, clarification on tariff applied, issues with new connections and sewerage charges.

Customer complaints on payment are around 200/ month and clarification /alternate suggestion for payment queries is around 100/ month.

Reconciliation Report

There are two reconciliation reports, billing reconciliation and collection reconciliation. These two reports are prepared to match the finance division figures any discrepancy needs to be resolved. These reports are prepared in addition to the bank reconciliation report. Region wise collection reports are also prepared.

Management information reports

Monthly billing operation meeting is conducted by the General Manager. Management Information System

(MIS) report are submitted to review the progress on predetermined targets. The monitoring methodology was revised to suit the current requirement. Emphasis was made on billing being done on 30 days, significant improvement was observed where improvement was made from 34 % to 59 % in some regions, this contributed to increase in income plus reduced NRW (administrative losses). New connection monitoring resulted in higher percentage of connections being provided. The Billing and collection performance report reviews the set targets monthly. Mid year revision of targets to meet the additional requirement of funds to meet the salary revision was successful this resulted in debt age being reduced from 0.9 to 0.65.

Addl GM (sewerage) conducts sewerage operations meeting monthly, necessary reports are prepared to show the revenue generated and the connections given.

Journal Vouchers Preparation

Physical cash is received by the cashiers at head office and other regions. Money deposited by other banks to BOC on account of water bill payment information is received. Journal Vouchers are prepared to inform the finance division with the other billing and collection figures after bill processing.

New Billing System

Introduction of new billing system was planned for implementation in January 2016, test run was successfully done in Dehiwela O&M office. The IT division played the key role for development and implementation. DGM (RSC W/S) extended his fullest corporation to run the test run and develop the software to implementation level. Development of software required close corporation with Commercial staff to deliver the expected output.

The present system of logging into 23 servers to generate the MIS reports is time consuming, with the introduction of this new billing software process will be centralized. It is anticipated the quality of the reports will improve. Present system of reporting monthly performance after one and half months will get reduced.

Improvement to Office Working Environment

The divisions partitioning was done many years ago and over the years many development took place. To meet the latest requirement, refurbishment is in progress. The cashier room refurbishment is planned, tenders had been called for implementation.

All the vehicles were brought back to good appearance by painting and interior upkeep reflecting the division's expectation.

Staff Network

The annual recreational family event of the staff was held in this year too with a great success colored with staff talents, skills etc.

Public Awareness Programme

Public Relation Unit conduced various education and awareness progarammes targeting customer groups, school children and consumer societies. Major focus is given on water conservation, environment aspects and protection of water bodies etc. A news magazine named "Jalaya" is published periodically to educate the target groups on many different aspects related to water service.

Various events were organized by the NWSDB under the guidance of the Ministry of City Planning & Water Supply and various other interested parties to raise awareness among the public. Some of such event are World Water Day Ceremony, community water conference and SACOSAN 2015 conference

Competition of Art

Rural Water and Sanitation

Performance and Major Activities in Rural Water and Sanitation Section

Word water day 2015

- The world water day 2015 was held at the BMICH on 22nd March. The theme was "Water and Sustainable Development."
- Parallel to the main event, selection of the best medium scale community based organization (CBO) was planned and carried out by the RWS section by visiting 14 districts, 1st, 2nd-2Nrs., 3rd places and district based CBOs selected. Certificates were given on world water day.

Following events were also conducted parallel to the event in which the RWS Section played a major supportive role.

- Research and Development Study Symposium
- Competition among school children (Posters/ Art/ Essay)
- Launching of 5 books (including 2 magazines) at the main event

South Asian Student Conferences on WASH

- A two day student conference was held on 16th and 17th June at Ape Gama premises as part of the proposed activities for the (SACOSAN 6) conference. The conference was aimed to promote Water, Sanitation and Hygiene (WASH) concepts in society and also get the active participation of school children.
- The 4th WinSILE (Water, Sanitation, Hygiene in schools International learning and exchange) was held in Colombo from 12th to 16th October. The Ministry of Education organized the event with the collaboration of the National Water Supply and Drainage Board. .

RWS Master Database

Actions were taken to collect the technical details of RWS schemes through the District Workshops held with CBO members. In addition coordination with other government and non- governmental organizations enabled to improve the completeness of data. The piped Rural water coverage by CBO's is 12.7 % as per data compiled at end of 2015.

Awareness programmes and field visits

Following awareness programs and field visits were carried out in 2015.

- The RWS unit's activation workshop for all districts units was held on 5th and 6th October 2015 at NICD Pollgalla Kandy.
- Activation workshop in RWS unit Jaffna was held in Northern RSC auditorium.
- Visit was made to Nuwara Eliya with World Vision for inspection of projects within Estates. The visit included observing the structures (intake, water, storage, hand washing etc).
- Nearly 27 CBOs were visited in 2015.

World Bank preparatory Work

Major supportive role was given to World Bank project in 7 districts.

Following key activities are completed.

- Preparation and finalization of Prioritization criteria for new/ rehabilitation of CBO schemes.
- Criteria for prioritization of Pradeshiya sabha area.
- Per house hold ceiling for water supply and sanitation facility.
- Project cycle for rural water supply and sanitation activities.
- Project operation manual (POM) was prepared for rural water supply / estate water supply/ sanitation.
- Leaflets were developed in Sinhala language and printed to aware the officials and community leaders in 7 project districts.
- Pipe borne water supply (NWS&DB/CBO/LA) coverage map was developed in 7 project districts on the basis of GNDs
- Five social screening reports were prepared in five small town water supply schemes - Galligamuwa, Haldummulla, Pambahinna, Mullativu and Killinochchi.

Other activities

- Three posters on water safety plan were developed to raise awareness on drinking water quality. These were translated into Sinhala and edited
- Five air powered water pumps were purchased and are available for field testing.
- Educational videos were translated and subtitled in Sinhala in order to use in awareness programs and workshops
- Circular of 'Responsibilities and duties of the district rural water and sanitation section units' was prepared and distributed in English, Sinhala and Tamil languages.

SACOSAN 2015

Nearly 300 household sanitation facilities in Puttalam, Batticaloa, Ampara, Kandy and Nuwera Eliya districts, in PS areas, such as Wanathavilluwa, Manmunai West, Padiyathalawa, Pasbage Koralle and Ambagamuwa were provided. A first installment was received from the Ministry of City Planning and Water Supply. Initially, Rs.10,000.00 for each beneficiary family was dispersed.

- Funds were received in 2014 from National Community Water Trust (now DNCWS) for replacing pumps for CBO schemes in 2015. 25 pumps for 17 CBOs were installed in Anuradapura, Polonnaruwa, Matale, Gampaha, Kegalle, Ratnapura, Matara, Hambantota and Colombo districts.

Ground Water

Groundwater section is functioning with nine provincially distributed regional groundwater units with centralized investigation section.

During the year 2015 the works related to Ground Water activities were hydrogeological investigations, construction of deep and shallow boreholes, assessment of aquifer and wells, Flushing & Development of shallow and deep borehole wells, Installation of hand pumps and iron removal plants, Repair and rehabilitation of hand pump tube wells, Implementation 3 Tier system for maintenance of hand pump tube well, Bed rock profiling & Stream gauging, Groundwater studies & monitoring. During the year 2015, several groundwater development programs have been completed.

The progress of the activities was the completion of number of activities in each category of the above activities. 687 Hydrogeological Investigations, 181 Drilling (construction of deep & shallow boreholes), 48 Hand Pump Installations, 338 Hand Pump Repairs & Rehabilitations, 359 Flushing & well development, 123 Pumping tests and 2 Jetting activities were carried out during the year 2015.

General Issues/ Special Events that Taken Place During the Year

The following special activities took place during the year 2015.

- Development of 101 Nrs. Solar Powered Pumping Wells in the NC Province using Provincial Council funds.
- Hydrogeological investigations for locating 80 numbers dug well sites in the NW province using DMC funds.

New / Future focuses

Development of groundwater sources for Mulative and Mulankavil proposed WSS in northern region are in progress.

Any other Important/ Relevant Matters

NW regional groundwater office at Wariapola received National Productivity Award for "Production & Services Small Category" for the year 2014 and 3rd place in the best offices within the NWSDB for the year 2015.

Energy Management

NWSDB annually spends Rs. 3.3 billion for its electricity mainly for water treatment & pumping processes and NWSDB is the largest customer for Ceylon Electricity Board.

The energy management programme of the NWSDB achieved substantial progress and activities upgraded to a higher level qualitatively and quantitatively for last couple of years. M&E Services Division is fully equipped with energy measuring equipments to carry out all types of energy audits for energy management works at NWSDB.

The savings due to the tariff category rectifications, mechanical and electrical capital works and other energy saving projects, which were completed in previous years, were continued during the 2015 and it resulted a higher accumulated energy & cost savings. It is recorded that the continuing annual savings due to energy conservation projects implemented from 2004 to 2015 is LKR 472.2 million after deleting the implemented projects older than 5 years.

Energy audits carried out for 33 water supply schemes in 2015 will result in estimated annual energy saving of LKR 23.6 million according to their energy audit recommendations for a estimated investment of LKR 50.9 million.

It is a great achievement by the Energy Conservation Programme at NWSDB, as out of the Energy Conservation budget of LKR 100.0 million allocated for the energy conservation activities in year 2015, Rs. 94.8 million worth of project investments completed during 2015.

Twenty (20) energy efficiency improvement projects have been completed during 2015 with total investment of LKR 149.1 million resulting in LKR 40.8 million annual savings. This includes both energy efficiency initiatives of M&E Services Division & M&E section at Regions.

Another 7 projects are at implementation stage worth of LKR 29.3 million which will result in annual saving of LKR 10.1 million in addition to above annual savings. These 7 projects are expected to complete by 1st quarter of year 2016.

The projects continuing from 2015 and new projects planned for 2016, a total of 33 projects have been scheduled for 2016 which leads to total investment of Rs. 183.8 million with annual expected annual saving of Rs. 36.7 million.

M&E Services Division already initiated to extend the energy improvement activities by introducing energy benchmarking programme, energy compliance programme for new proposals which is at planning stage and energy awareness & training programmes for NWSDB staff as well.

Sociological Activities

The Sociology Section undertook the following sociological activities in the year 2015.

Conducting Socio-Economic Feasibility Studies, Social Impact Assessment (SIA) studies etc

- SIA and Feasibility and Pre-Feasibility Studies and Impact Assessment studies on small-scale water supply and sanitation projects in 7 RSCs
- Conducted Impact Assessment Studies on the use of RO Plants in CKDu areas and operation of Rain Water Harvesting System in Anuradhapura District
- Socio-economic surveys conducted in urban water schemes in 5 RSCs

Public consultation / stakeholder consultation on water and sanitation matters

Agreed upon the participatory management models through consultations to share responsibilities with the NWSDB/ Local authority staff and the community beneficiaries held in Ampara region

Preparation of Project reports, Policy Manuals on water and sanitation

- A Manual on Public Consultation Process, Project reports on 'the Assessment of RO Plants', 'Sustainable Water Resource Management', 'Sociological Strategic Framework for Projects in Water and Sanitation for the Ten Year Development Plan' were prepared

Project appraisal for community managed water supply schemes

- Conducted programmes on social infrastructure, gender issues, and capacity building at regional level with the assistance of regional sociologists
- Developed strategies to get community participation in community mapping and pilot level programmes with help of regional sociologist at Kitulgala CBO scheme.
- Set up a network of CBO managed schemes and site visits to some schemes

Planning and implementation of Water Quality Surveillance (WQS) and Water Safety Plans (WSP)

Water Safety Planning (WSP) is a comprehensive risk assessment and management approach that encompasses all stages of water supply from catchment to consumer. The Sociology Section took part in coordinating several programmes and workshops on WQS and WSP. Some of the activities are listed below.

- Coordination with relevant stakeholders in organizing WSP programmes and workshops and active participation in WSP training programmes and Impact Assessment Studies
- Took part in district & divisional level Water Quality Surveillance Committee meetings
- Participated in National Advocacy Meeting on Rural Water Safety Planning
- Conducted Household Survey and Impact Assessment (IA) Study on WSP
- Attended in WQS meetings and preparation of Meeting Minutes
- Assisted in preparing and implementing Water Safety Plans
- Conducted community programmes on Water Safety Plan

Enhancing community mobilization process

- Prepared a community mobilization project cycle for urban, rural water supply schemes as a guild line
- Discussion with the community on institutional, constitutional issues related to water and sanitation projects at RSC level
- Encouraged people's participation esp., women's participation to influence decision-making and form district level CBO Forums with their representation together with regional sociologist
- Established mechanisms at regional level with the assistance of regional sociologists and strengthening of network of CBO managed schemes under RWS Section
- Conducted WSP programmes in CBO schemes for activities related to catchment protection with active participation of members of such organizations
- Developed community mobilization process for World Bank funded Rural Water and Sanitation Projects with the help of Project Sociologists

Capacity Building and Development

- Capacity development programmes were conducted at regional level with the help of Sociologists at RSCs

Stakeholder Consultation

- Partnership with local government and other stakeholders to get their contribution in planning and implementation of water supply and sanitation projects
- Organized awareness programmes for the community and school population on hygiene awareness, water conservation and catchment management at Regional level

Non Revenue Water Reduction

Water will become the most valuable source of the world day by day with the demand increase. Hence it is a global requirement to save the water resources and minimize water losses through continuous management practices. The truth is that amount of water produce is not gone for revenue generated due to pipe breakdown, low quality of pipe repair work, poor materials, poor installation and workmanship, poor construction practices, unauthorized consumption and presence of common outlets etc are the causes of higher percentage of non-revenue water in Sri Lanka. The responsibilities are loaded to Non-Revenue Water section which plays big role to save water which don't contribute to revenue generated. NRW section function in the area of DGM (W-C) focusing to reduce losses occurring from unbilled authorised consumption and unauthorized consumption of water to maintain Non-Revenue Water low level and also providing smooth and reliable drinking water facilities to inhabitance of western central area and save our resources.

1.0 Introduction

Non-revenue water section is administered under DGM (W-C) aimed to increase water revenue by reducing the unnecessary losses made through free water outlets, minimizing the unauthorized consumption and to formulate policies to create reliable water supply to communities having efficient and sustainable improved service.

The Water Loss Management Section is focused on NRW reduction by various methods resulting in operational practices for managing and controlling non-revenue water (NRW).In the Colombo city some of old pipe networks have poor carrying capacity because of aging, forming a large number of leaks making the system fail with higher NRW level. As a result of that pressure drop happen then top management has taken the decision to build up additional pressure increment to address this issue making system with higher NRW level.

It is essential to managers to break down and identify the key components of NRW. Ensuring the accuracy of data used to calculate the level of NRW is also essential in understanding the full problem.

Collecting accurate data from production meters and customer meters helps to measure the true NRW level and active leakage control activities.

During the period 2008 to 2015 NRW has been reduced from 53.68 % to 45.98 %, this resulted in 16.4% increase in sale of water, while the same amount of water was supplied to the city of Colombo. This process was increased income during this period is over Rs. 1,720 million.

2.0 Underserved Settlement Water Supply (USS)

2.1 Randiya Programme

Disconnection of common outlets and provision of individual connections to underserved on community concessionary terms is called Randiya Programme. Provision of concessionary individual connections through the disconnection of stand post was initiated in 1990. Due to various reasons, all couldn't obtain individual connections which resulted in common outlets remaining.

There are 1,571 underserved settlements in Colombo City thus latest plan by the Government is to relocate them outside the Colombo City. The benefits of having individual connections improve hygienic condition and improve quality of life. Common outlets are metered by forming small community units and revenue is collected. New connections for individual premises can be obtained by filling the application and making the required payment. During this year 110 nrs. of connections were provided after disconnection of 31 nrs. common outlets .

2.2 Customer Society (reduction of unbilled authorised consumption - Free Water)

In 2011 innovative program was initiated to measure the consumption from this common outlets by installing waters meters and forming societies who will identify the users and maintain the outlets. Nominal charge was introduced for the water usage.

Already 1,756 societies have been formed and their monthly consumption was 147,923 cu.m/ month, representing 5 % of the water consumed by Colombo city. Table 1 shows the formation of Societies and Consumption by Colombo city. To sustain the program regular visits are made to the societies who have arrears over Rs 2,000/=. Special program mobilising sociologist was carried out to encourage customers who are having over Rs 2,000/= arrears, the outcome was successful.

Table 1: Formation of Societies and Consumption

	2012	2013	2014	2015
Societies Billed	749	1,578	1,735	1,756
Billed Consumption (m3)/month	91,844	166,103	159,445	147,923
Revenue (Rs.)	312,732	576,609	624,438	584,933

3. Reduction of Unauthorized Consumption

Identification on unauthorized consumption is carried out by responding to information received from the general public, programmed search in area for unauthorized consumption in commercial premises, checks in all premises of identified area in a planned manner with intention to cover the whole Colombo City.

During this year alone 1,196 detections have been made and Rs. 42.19 mn has been levied. Table 2 shows the changing pattern of Unauthorized Consumption Detection. It is noteworthy that the number of detections of unauthorized consumption detection has reduced, it is due to the awareness creation, metered water being available in the low income settlements etc.

Table 2: Unauthorized Consumption Detection

	2012	2013	2014	2015
Premises Checked (Nr.)	13,619	13,343	12,812	12,250
Detection made (Nr.)	1,166	1661	1,521	1,196
Amount Levied (Rs. m)	43.23	69.64	54.77	42.19

4. NRW Management

Within Colombo city, critical areas were selected and area inflow measurements were measured after establishment of closed boundary. Night survey, culvert survey and house to house survey were carried out to identify visible leaks. The NRW reduced to considerable amount for those areas. Also following activities are involved in above process.

- Identification of Leaks
- Flow and Pressure Measurement
- Area engineer wise NRW monitoring every 6 months
- Location of underground information

  I) Valve location identification.

  ii) Identification of underground water pipes
- Leaks survey a different approach

5. Implementation of Foreign Funded Projects

Under the Capacity development project for NRW reduction in Colombo City to 18 %, Greater Colombo water and wastewater implementation project (GCWWIP) and Master plan projects were implemented which are financed by ADB. Many data were shared with the project and active participation were made for better formulation of project for long term sustainability of the investment in water loss reduction.

Under these projects new pipelines are laid and capacity development of existing production units, providence of new connections, Connection transfers to new lines will be done to achieve a final NRW level of 18%.

6. Managing Water Loss by Understanding the Reticulation

The wealth of knowledge gained over the years was documented in the form of "Managing Water Loss by Understanding the Reticulation" withthe intention it will be more appropriate for the Sri Lankan situation. The book was released in March 2015 on the "World water day".

7. Achievements

- Establishment of two DMAs Kolonnawa region and continuous monitoring of NRW level in each DMAs.
- In the World water day certificates were distributed to staff of Randya project office for successful completion of metering all the free water outlets within a short period of time.
- Publishing of Managing Water Loss by Understanding the Reticulation book by AGM (NRW).
- Installation of Lockable valves to all customer society water outlets.

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.

We had been very successful in Supplying necessary chemicals throughout the year without any interruption. The related staff of supplies and material management helped to provide all the new connections during the year and it maintains a buffer stock too to face any critical situation.

We had a high standard of clearing of shipments for more than 300 shipments coordinating within the following institutions such as the Ministry of City Planning and Water Supply, the Treasury, Customs, Banks, Sri Lanka Ports Authority, Shipping Lines, Insurance Companies and clearing agent formalities, relevant project and O&M cargo ensuring efficiency to avoid paying demurrages.

During this year, we were able to save more than Rs. 100 million by redistributing excess materials from RSCs island wide without purchasing new materials.

We also made arrangements to produce and circulate a CD and a booklet for non-moving items available in the stores Island wide for easy reference and to use when the requirement arises. In this year too, arrangements were made to collect redundant and unproductive items from all 328 stores two times in 2015 and tendering for sale to be done in January 2016. We have managed to achieve expected objectives within the budget allocations and overall performance of Supplies & Material Management was up to the expectations.

Research and Development

Research on ground water dynamics of the Murunkan basin: An environmental isotopic study for effective management of Murunkan well field

Murunkan groundwater basin is a very important area for supplying water for North East region. Focus of this research is to understand the relationship between groundwater and surface water bodies, contribution of Giant tank and Malwatu oya to ground water recharge and the potential of sea water intrusion during ground water extraction. The total estimated cost for the research is Rs.1.3 m. Analysis of chemical parameters and environmental isotopes of water samples (Rain water, sea water, groundwater and surface water) are done seasonally for two years. Collection of water samples and testing are being continued.

Risk assessment on pumping wells and ground water vulnerability of aquifers in Buttala divisional secretariat area of Monaragala district

The groundwater sources are at a risk due to unplanned pumping. The aim of this research is to find the risk of unplanned pumping and to develop measures to minimize the risk and to maintain the water quality and quantity of the pumping wells in sustainable levels. Total cost estimate for the research is Rs.3.9 m. Groundwater samples are tested seasonally for two years. Collection of water samples and testing are being continued.

Research for historical evidences on chronic kidney disease (CKDu) based on life pattern with respect to environmental and social factors

The increasing kidney patients in the Wilgamuwa divisional secretariat area is the base for this research.

It is planned to study the relationship between drinking water causes for Chronic Kidney Disease (CKDu) and to study impact of life style due to pollution of groundwater. Total cost estimate for the research is Rs. 2.1 m. Groundwater samples are tested seasonally in two years. Water sampling and testing are being continued.

Research on evaluation of adequacy and effectiveness of CBO tariff system for sustainability and diversification

At present CBOs are playing a significant role in providing drinking water supply facilities for country's population and presently, CBO managed, island-wide water supply coverage is around 09 - 11 %. Focus of this research is to assess the financial capacities of the existing CBOs who manage community water supply schemes, for better functioning of them. Questionary surveys will be carried out in selected CBOs for data collection. The total cost estimate is Rs.1.27 m. Data collection and analyzing are being continued.

Analysis of Organochlorine and Organophosphate pesticide residues in drinking water sources in Nuwara Eliya, Welimada and Bandarawella areas

Indiscriminate use of pesticides is a major environmental threat to water bodies. Intensive vegetable cultivation and tea plantation on the steep slopes of up-country hills, require extremely high levels of pesticides to maintain high yields and profitability. Water samples were collected from most suitable locations. From water sample testing; it is decided to determine pesticide residues in water to aware on the extent of source water pollution due to pesticide and to recommend control measures. The total cost estimate is Rs.2.30 m. The water sampling and analyzing are being continued.

Reverse Osmosis (RO) Water Treatment Plants as a solution to the Chronic Kidney Disease of unknown etiology (CKDu)

RO Plants are being used to provide good quality water for CKDu affected areas. The NWSDB has installed 51 RO Plants already in Anradhapura and Polonnaruwa districts. Out of those, water quality in 32 RO plants are being continuously monitored by the R&D Section, and provided instructions for improvements as well as for remedial measures for prevailing issues. RO plants were located at Thambalagollawa, Parakramapura, Bogahawewa, Sangilikanadarawa, Wahamalgollewa, Iyathigewewa, Yudaganawa, Abhayapura, Kidagalegama, Mahabellankadawala, Mahakanadarawa and Balahondawewa in Anradhapura district and Ambagaswewa, Kusumpouna, Wijayabapura, Ellewewa, Ihalawewa, Aluthwewa, Ihala ellewewa, Meegaswewa, Etambeoya, Vijayapura, Kumudupura, Patunagama, Thambala, Rathmalthenna, Nidanwala, Kadandegama, Gal Eliya, Weeralanda, Sandagalathenna and Kalukele in Polonnaruwa district.

Study on defective water meters to find out causes and precautions for being defective

This study has been started with the objectives to find out reasons for water meters being defective, ways of reducing and solutions for improvement. Under this study 215 defective water meters from Maharagama, Homagama and Kotte OIC areas have been collected, dismantled at Polwatta workshop and recorded reasons for being defective, looking at the inside. Investigation of possible causes and preventive practical measures are being carried out.

Package Water Treatment Plants

Seethawaka Industrial park , Sacred City and Thambuththegama plants are in operation. Sithulpawwa plant construction is completed. Yatiyantota and Muthukandiya plants are under fabrication in Central work shop. Final drawings of Ulhitiya plant are completed.

Operation and Maintenance (O&M) Manual of Package Water Treatment Plants (PWTP)

PWTPs are designed by the R&D section according to requests from RSCs. The construction and maintenance are carried out by the relevant region. Therefore, those who directly involved to the O&M of PWTPs must have good knowledge about the functioning process. The O&M manual of PWTPs contains the documents needed in a plant site, priority actions need to be taken before running the plant, water quality checks, details of the units in the PWTP, safety requirements etc. The manual was distributed to the Managers in the PWTP located regions and it is available in the NWSDB library too.

Research and Development Study symposium 2015 of the NWSDB

This was held on 19th March 2015 at Mt. Lavinia Hotel, with participation of over 400 experts and professionals from the NWSDB as well as outside organizations. This event brought 32 technical papers on eight themes; Water Safety Plans, Water Quality Surveillance, Water and Wastewater Treatment, Organizational Improvements, Resource Optimization, Water Resource Management, Social Impact/ Risk Management and Operational Efficiency Improvements, to discuss and share the experience gained on water and wastewater sector. Initial symposium was held in this year and the NWSDB expects to continue having this symposium annually in parallel with the World Water Day celebrations, aiming to provide a platform for scholars and researchers to present their findings to the NWSDB staff, which will in turn benefit the organization as well as the country. Further, this conference emphasizes on the need to promote Research and Development Culture within the NWSDB.

Panel discussion at R&D Simposium 2015

Information Technology as a Tool for Achieving Service Excellence

For the last few decades, there is a continuous increase in usage of Information Technology Systems and solutions for improvement of operational efficiency and enhancement of service levels of government institutions. eGovernment concepts are fast emerging and this concept is being adopted by various government institutions during the recent past. It is also seen that there are many success stories in the recent past in some of the most important government institutions regarding the remarkable improvement of service levels by appropriate use of Information Technology Solutions.

In realizing the above fact, and also considering the recent trends in government institutions in Sri Lanka and worldwide, NSWDB has taken various steps to upgrade the ICT status within the organization and introduce IT enabled solutions and systems with the objective of achieving service excellence.

During the recent past, NWSDB has made significant investment to enhance the IT Infrastructure and taken various efforts to introduce new IT Solutions and Systems to improve the operational efficiency and the service quality.

IT Infrastructure:

NWS&DB has a State of the art data center located in Head Office at Ratmalana. The data center hosts over 30 middle size servers with all associated equipment and accessories. The Local Area Network of the Head Office consists of equipment of well-known brands. eg. CISCO. In addition to the structured cabling system covering the entire head office complex, a modern Wi-Fi network has been established covering most important areas of the building to support mobile devices and laptops. A centralized 8 mbps lease line and number of ADSL lines facilitate broadband internet connectivity for the official purposes.

The IP VPN now covers all the major offices from Head Office to Area Engineer level and being expanded upto the OIC level. All the major offices are now interconnected and the users at regional level have direct access to the solutions and systems maintained at Head Office or in any of the connected offices. The IT staff located at Head Office and regional offices maintain the IT hardware and infrastructure to facilitate the trouble free operation of the IT Solutions.

At present, NWSDB utilize large number of software Solutions for its daily operations. Most eminent Solutions are the Billing System and General Ledger System. One

of the major steps taken by the NWSDB during the year is to initiate a inhouse project to upgrade the Commercial Billing System and upgrade the infrastructure to suit the new solution. The solution development continued throughout the year and by the end of the year major part of the solution has been completed. The solution deployment was commenced after a successful pilot testing. The solution is a comprehensive solution in line with the latest technologies and industry trends with online service offerings to customers as eServices and powerful MIS portal.

In addition to these two most important Solutions, NWSDB has acquired a complete Enterprise Resources Planning Solution through a major IT enablement project under a loan scheme provided by the Indian Government. The entire Solution Consists of 11 major software modules covering most important business functions. The solution developed by an Indian Software Solution Provider (Cooptions Technologies Ltd.,) was handed over to NWS&DB in 2010. NWS&DB IT Staff has already implemented several modules including Inventory Management System (IMS) , Human Resource Management (HRM), Payroll System (PAY) etc. The implementation efforts of other modules are now in progress.

In addition, there are many other small scale software systems now in use in the NWSDB to automate and improve day to day functions.

In keeping with the latest trends in e-Government concepts, NWS&DB has launched a comprehensive Web Site facilitating various online services.

Future Expectations:

Information Technology Section of NWSDB has taken various steps to enhance the ICT status of the organization. A modernized data center utilizing virtualization Concepts has been planned and a contract was awarded to a company to improve the data center at Head Office. This data center will consist of modern facilities and virtualized server setup. The construction works are in progress.

The implementation of the remaining modules of the ERP Solution is one of the major tasks ahead for the IT Division. Promoting e-Government concepts, through continuous improvement of the official web site to the level of an e-Government portal is one of the expectations of the IT improvements.

Policy Formulation

Formulation of sanitation policy was under discussion during the year.

Climate Change Adaptation & Disaster Risk Reduction

Catchment protection activities and Disaster Preparedness activities were conducted under implementation of Water Safety Plans.

CKDu Programme

Introduction

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, Eastern and Central provinces. Many of the victims are male farmers and agricultural labourers. Growing numbers of cases, however, are being reported among women and children. According to the World Health Organization (WHO), more than 15 percent of the population aged 15–70 years in the North Central and Uva provinces are affected with CKDu. Over 22,000 deaths from the disease have been recorded in the Anuradhapura district in the North Central Province since CKDu was first identified in 1991.

Proposed strategy

Accordingly, the National Water Supply and Drainage Board (NWSDB) developed a strategy and work plans to provide safe drinking water to CKDu affected areas as per recommendations by WHO and medical professionals. This includes short term, medium term and long term strategies.

These work plans have been endorsed by the Parliamentary Sub Committee on CKDu and have been implemented since 2013. The program covers the CKDu affected areas in all affected provinces.

Long term solution

- Covers the affected areas by new water supply projects.

Medium term solution

- Providing water supply extensions from existing water supply schemes to the CKDu affected areas.

Short term solution

- Providing bowser supplies for CKDu affected areas
- Establishing small Reverse Osmosis (RO) treatment plants to purify groundwater and supply the communities only for drinking and cooking purposes.
- Rainwater harvesting

Current Progress

Rs. 1000 million has been allocated for the year 2015 for CKDu relief related activities and this budget has been used for providing medium term and short term solutions for CKDu affected areas.

In addition 17 RO units have been installed within 2015 with the support of private sector.

The Chinese Academy of Sciences have initiated a project with National Water Supply and Drainage Board to investigate root causes CKDu and Identifying sustainable water treatment technologies for CKDu affected areas in Sri Lanka.

Water Safety Plans (WSPs)

Water Safety Plan (WSP) implementation in Sri Lanka continued in 2015 under the advocacy and implementation support from the WHO. Five Urban WSP training programs were conducted for Western South, Western Central, Uva, Central, North Central and Production areas under the Manpower Development Section of the NWSDB. Special events took place in the year were, WSP advocacy session by WHO expert on assessment, auditing of WSPSs and initiation of rural WSPs in Sri Lanka. Also the WHO bi-regional meeting in Bangkok in October 2015 was represented by Sri Lanka. In November, WSP impact assessment training was conducted by a WHO expert. Special Session on WSP under the 6th International conference on Structural Engineering and Construction Management (ICSECM) under WHO collaboration was held in December. With the commitment from top to bottom of the organization, 60 urban WSPs could be implemented which is about 18% of the total water supply schemes maintained by NWSDB.

Water Links initiated Global Water Operators Partnership was a special event occurred in the year which lead to water operator partnership with Yarra Valley Water of Melbourne. Emergency Response Plan development for NWSDB under disaster management framework advisory on Climate Change Adaptation, adaptation of water meter policy to minimize NRW and introduction of management technique were the main outcomes.

WSP RWS Advocacy programme in Kandy, October 2015

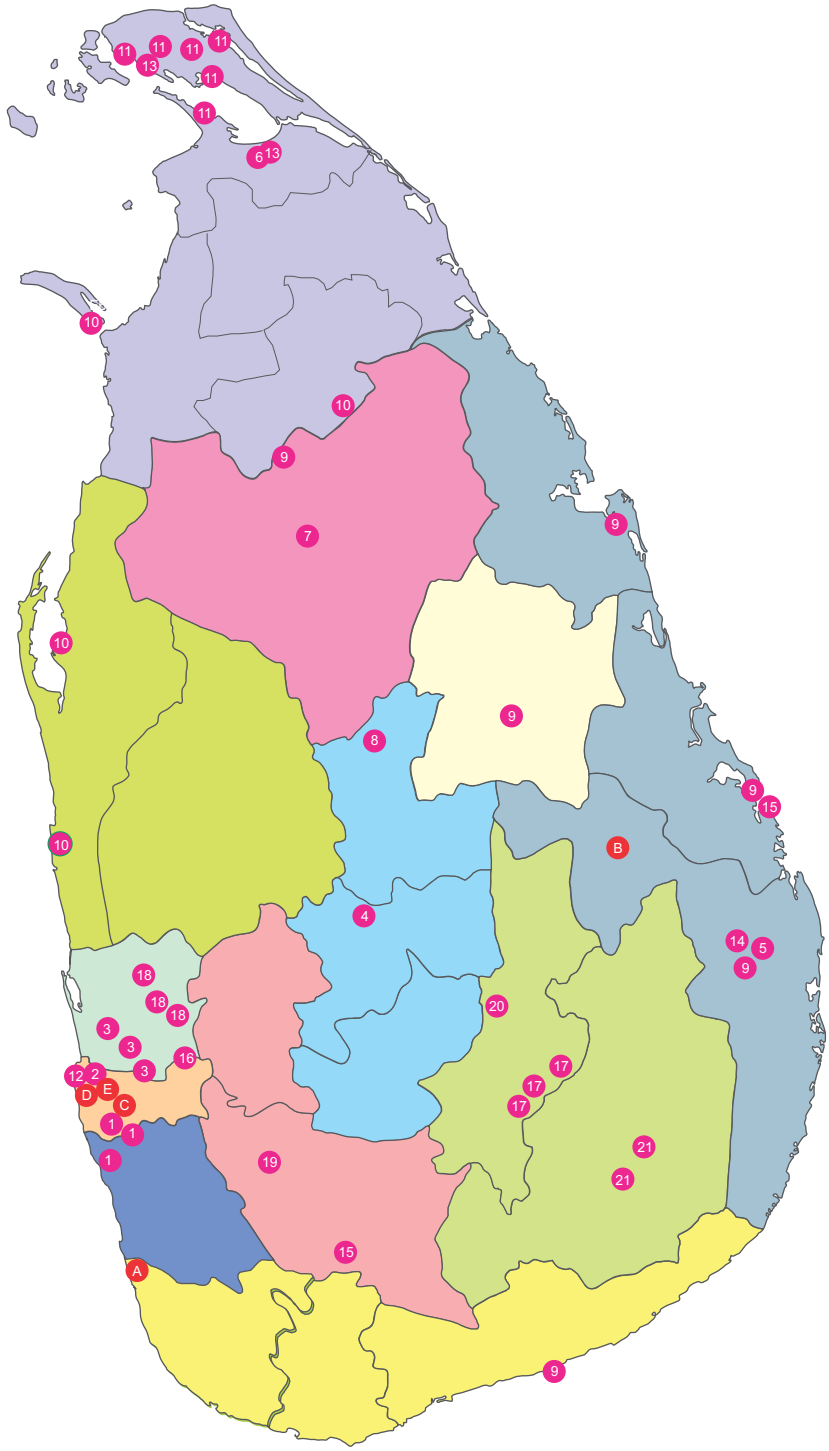
"Water is the most basic of all resources. Civilizations grew or withered depending on its availability." – Dr. Nathan W. Snyder

Infrastructure Development

Ongoing Foreign/ Local Bank Funded Water Supply Projects

Accomplishments of Major Water Supply Projects under the Ministry of City Planning & Water Supply,

Location Map of Foreign-funded/ Local Bank Funded Projects under Construction/ Augmentation during 2015



Foreign Funded Projects

	Project Name	Funding Agency
1	Kalu Ganga WSP - Phase I, Stage II	JICA
2	Greater Colombo Water Rehabilitation	JICA
3	Towns North of Colombo WS - Stage II	JICA
4	Greater Kandy WSP - Phase I, Stage II	JICA
5	Eastern Province Water Supply Development	JICA
6	Rehabilitation of Kilinochchi WS	JICA
7	Anuradhapura North WS	JICA
8	Greater Dambulla WS - Stage I	India
9	Secondary Towns Rural Community Based WS & Sanitation	ADB
10	Dry Zone Urban Water & Sanitation	ADB
11	Jaffna - Kilinochchi WS & Sanitation	ADB
12	Greater Colombo Water & Wastewater Management Improvement Investment	ADB
13	Improving Community Based RWS & S in post conflict areas of Jaffna & Kilinochchi	ADB
14	Integrated WSS for the Unserved area of Ampara District Phase III	ADB
15	Kolonna /Balangoda WSP	Belgium
16	Labugama Kalatuwawa WTP	Hungary
17	Badulla, Haliela & Ella WS	US Exim Bank
18	Gampaha, Attanagalla & Minuwngoda WS	China
19	Greater Ratnapura WS	Spain
20	Augmentation of Mahiyanganaya WSP	Austria
21	Monaragala Buttala Intergrated WSP	KBC Belgium

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

FOREIGN FUNDED WATER SUPPLY PROJECTS

Projects undertaken with JICA Assistance

1. ***Kalu Ganga Water Supply Project Phase I Stage II and Non-Revenue Water Reduction in Greater Colombo Area***

Completed sedimentation tanks and collecting channels

The objective of this project is to provide safe drinking water in the Southern part of the Greater Colombo area. A total of 300,000 people (60,000 families) living in Kesbewa, Piliyandala, Boralesgamuwa, Madapatha, Polgasowita, Kindelpitiya, Kahathuduwa, Kiriwaththuduwa, gonapola, Kumbuka, Panadura, Kiriberiya, Niwdawa, Hirana and surrounding areas will benefit from this project and Improve the living environment in CB1 area of Greater Colombo namely Pettah, Hultsdorf, Kotahena, Maradana and Slave Island area by reducing non-revenue water in CB1 area in Colombo city.

The project is implemented with the assistance of ODA loan provided by JICA amounting JPY 8388.0 million and GOSL component amounting LKR 2458.0 million. The water source is Kalu Ganga River. The construction works commenced in September 2009 and scheduled to complete original scope of work in November 2015.

The original scope of work included construction of water treatment plant extension at Kandana (Horana) having capacity 60,000 cu.m/day, 1000/ 800 mm dia. 14.7 km long DI Transmission Main from Bandaragama to Piliyandala and 450/400 mm dia. 67 km long secondary mains to Kesbewa, Jamburaliya and Kumbuka water towers, construction of three elevated water towers at Kesbewa (1500 cu.m capacity), Jamburaliya and Kumbuka (1000 cu.m capacity each), 245 km long new distribution pipe lines from Panadura, Kiriberiya, Kesbewa East/West area and reduction of non-revenue water in Colombo CB1 area by replacing existing CI distribution pipe lines to a total length of about 48.7 km.

In addition to the original works, the following constructions and supplies are implemented under the available savings of the JICA ODA loan. Rehabilitation and implementation of secondary distribution system in Slave Island area in Colombo (about 25 km length), construction of 1000 cu.m capacity elevated water tower at Welmilla, laying of 214 km long distribution mains in extended and uncovered area under original scope of work, Construction of four storeyed office building for RSC (Western South), construction of office building for Area Engineer (Piliyandala), OIC's office and Quarters in Kumbuka and Supply of tools, machinery, equipment and computers for the operation and maintenance works.

Water Treatment Plant has already been commissioned. Most of the distribution pipe lines were handed over to the O&M Divisions. Four water towers at Kesbewa, Jamburaliya, Kumbuka and Welmilla were commissioned and handed over to the O&M division for use. Construction of office buildings are completed and handed over to the relevant RSC. Few balance work in distribution pipe lines and NRW works in Colombo CB1 area are in progress and planned to complete by end of March 2016.

The overall physical and financial progress as at end of December 2015 are 99.6 % and 99.63% respectively.

2. ***Greater Colombo Water Rehabilitation Project***

Ellie House Cell 1, Cell 2 and Cell 3

This rehabilitation project is intended to upgrade the service level of safe drinking water supply in Colombo area. This is one of the major projects planned with a view for achieving the Millennium Development Goals among many such capital projects. This project is a step forward to the NWSDB's long term strategy for the Non Revenue Water Reduction Programme in Greater Colombo area. Total cost estimate is Rs. 4,785 million. It is planned to rehabilitate and enhance the water supply systems of CMC and Kotikawatta – Mulleriyawa area.

The project comprises of,

I) Maligakanda Reservoir - To improve the water system in Colombo Central area increasing the storage capacity for future and contingency situations.

ii) Elie House Reservoir - To improve the water system in Colombo North area Increasing the storage capacity for future and contingency situations.

iii) Gotatuwa Water Tower - To improve the water system in Kotikawatta Mulleriyawa area.

iv) Increase the transmission capacity from Ambatale to Gothatuwa (IDH).

v) Reduce Non-Revenue Water, minimize illegal water connections, and improve hygienic and living standards of Low Income population in Dematagoda area.

vi) To improve Office facilities to CMC sewerage staff/ NWSDB water works staff.

At the end of 2015, the project has achieved Physical and Financial progress of 95.50% and 97.95% respectively.

3. Towns North of Colombo Water Supply Project Stage II

Regional Support Center Building at Kadawatha

Towns North of Colombo Water Supply Project is intended to serve the population of 600,000 in the year 2020 with safe drinking water and the water demand projection is about 180,000 cu.m. per day. Project implemented with assistance of on the ODA loan provided by JBIC (SL-P90) and estimated cost was Rs. 6,500 million. Original Scope was completed in year 2012 and additional works had been scheduled.

Stage II of the project was included distribution systems covering areas of Mahara, Biyagama, Ganemulla, Ragama, Welisara, Muthurajawela, Pamunugama, Kandana, Ja-Ela and Ekala including two ground reservoirs at Ekala and Kandana, an elevated balancing reservoir at Delgoda and office building for Regional Support Centre at Kadawatha. Construction of several office buildings to accommodate consumer service units of the NWSDB have also implemented.

Civil works under original scope was completed and handed over to O & M division for providing new connections. Additional resources and pipes also were supplied to O&M for infilling lines. Supply & installation of mechanical & electrical works & commissioning were completed & handed over to O&M. Supply & Laying PVC pipes for AC Pipe Lines in Kelaniya & Wattala areas are also completed and handed over to O & M division.

Under additional works utilizing savings, supply & replacement of defective valves /installation of new valves in project area, construction of Area Engineer's office at Kelaniya, valve supply and laying of DI & PVC Pipes in Kotugoda area and supply of PVC pipes for Rathupaswela are in progress. Construction of 1000 cu.m. capacity reservoir & pump house augmentation of water supply systems of Bandaranayake International Air port and BOI Katunayake using additional funds were commenced in May 2015 and 75 % of the work is completed. There is some delay in the work due to getting approval from RDA.

IT equipment, machinery, vehicles, on line training software, additional resources and materials were provided to O&M division under productivity improvement activities.

4. Greater Kandy Water Supply Project Phase I Stage II

World Water Day Programme 2015

Greater Kandy Water Supply Project has been formulated in 1997. Preparation of Master Plan, detailed design as well as project implementation under Phase I Stage I, Phase I Stage II and balance work of Stage II have been carried out with JICA funding assistance. Accordingly, Phase I Stage I was commenced in 2003 and completed in October, 2007. In Phase I Stage I, Intake, Water Treatment Plant, 4 Service Reservoirs, 3 Pump Houses, 25km long Transmission lines and 15km long Distribution Lines were constructed and it was benefitted to population of 281,000 in and around Kandy City. Cost of this Phase I Stage I works was Yen 3,679 million plus Rs. 1,086 million.

In 2007, second stage of Phase I was implemented as eight packages under JICA funds. This scope included construction of 8 service reservoirs, 3 pump houses, 19km long Transmission Lines, 78 km long Distribution Lines, Backwash recovery facility, 12 Staff quarters and Construction of Water Fitting Testing Laboratory etc. This was benefitted for people in Akurana, Pujapitiya, Harispattuwa and Thumpane and GangawataKorale Pradeshiya Saba areas. In the year 2011 ,2012, 2013 & 2014, some additional contract packages were implemented under savings of same JICA loan and accordingly, NWSDB was able to improve the water supply facilities in Medawela, Rajapihilla and Kopiwatta areas and non revenue water prevention activities as well. Total revised contract sum of this Phase I Stage II works is Japanese Yen 4,634 million plus Rs. 1,122 million and benefitted population is 269,300.

With JICA Concurrence balance funds of Rs. 399 million was transferred to the relevant contractor's bank accounts as advance payments by obtaining unconditional bank guarantee to implement balance incomplete works. An "ESCROW" account system was applied to some of the above contractors to ensure the given advance payments are used only for the particular project. By using above advance payments minor contracts specially for institutional development activities are implemented under provisional sum item of the main contracts. The physical Progress of work is 99.99% & Financial Progress is 95.22%.

5. *Eastern Province Water Supply Development Project*

This project is to serve about 209,270 people in Ampara District. The project area will be served from the existing production from Treatment Plants at Dehiattakandiya and Kondawatuwana where the respective raw water sources are Mahawali river and Konduwattuwana Reservoir. The new Maha Oya WSS has Rambaken Oya reservoir as its raw water source. The total cost of the project is Rs. 6,526 million. The Project components according to priority order are Transmission main from Kondawattuwana to Kalmunai, the distribution systems of Pothuvil, Sammanthurai, Irrakkamam, Deegawapiya, Uhana, Damana and Hingurana, Maha Oya WSS with 6,500 cu.m capacity WTP, water towers, ground sumps, Pump Houses and augmentation of Dehiyathakandiya WTP.

The Physical Progress of the project is 98% while the Financial Progress is 80 %. Further, two new work packages are implemented to cover Panama area and Konespuram area with the concurrence of JICA by using the savings identified in the project in order to contribute for the project objective by increasing water supply coverage over and above the original scope.

Under the above project office buildings and quarters were also constructed and handed over to O&M for use. The major portions of the Pottuvil (48 km), Hingurana (93 km), Uhana (68 km), Damana (41 km), Sammanthurai (65 km), Mahaoya (57 km) and Irakkamam/ Deegawapiya (109 km), Konespuram (21 km) and Pragahakele (24 km) distribution systems were also handed over to O&M and over 9,300 connections have been provided already.

6. *Rehabilitation of Kilinochchi Water Supply Project*

Rehabilitation of the 30 years old abandoned Kilinochchi Water Supply scheme was carried out with JICA Grant and GOSL funds for a total of Rs. 1,940.0 million. Capacity of the treatment plant is 3,800 cu.m and target population served is 40,000 in Kilinochchi and Paranthan area.

The components of the project are new intake structure, roughing filters, rehabilitation of aerator, slow sand filters and high lift pump house, 1000 cu.m and 450 cu.m capacity new elevated towers at Kilinochchi and Paranthan, 9.8 km HDPE transmission main, 42 km distribution main, M&E works of raw water intake and treated water pumps and chlorinators.

Overall status of the Stage 1- project completion is 90 %.

The overall financial progress of the project as at the end of December 2015 is 29.6 %.

Under stage 2 of the project, additional length of 35 km pipe laying bid document is at tender calling stage.

Intake Pit of Kilinochchi WSP

7. *Anuradhapura North Water Supply Project (Phase I)*

The scope of this project is to provide safe drinking water a population of around 113,900 (in 2034) by constructing a water supply system in Medawachchiya and Rambewa Divisional Secretary Divisions in Anuradhapura District covering 75 GNDs (In addition to this 02 GNDs in Mihinthale DSD also covered by the project) where the people depend on unsafe ground water which causes dental and skeletal fluorosis and highly tend to have chronic kidney diseases of unknown etiology (CKDu).

The donor agency of the project is JICA and the initial project cost is JPY 5,166 million and Rs. 2,786 million. The loan is effective from 5th July 2013 and the consultancy contact was commenced on 15th July 2014.

The project components are 19,800 cu.m/ day capacity intake at Mahakanadurawa Tank, treatment plant of capacity 9,400 cu.m/ day, 89 km HDPE Transmission mains, 163 km HDPE Distribution mains, 330 km of PVC Distribution system, 4 Elevated Tanks and 3 Ground Sumps and M&E works.

Detailed designs and preparation of contract documents for all contract packages are completed except contract document for Lot D-1 (Purchasing of O&M equipment) contract package.

Bidding documents for Lot A contract package (construction of intake facility, Water Treatment Plant, Water Storage Structures, mechanical, electrical and

building works) is under evaluation.

JICA concurrence (Conditional approval) for the Lot B contract package (Supply & Laying of Transmission, Transmission sub mains & distribution mains) was received and Bids were called for the Lot B Contract package from pre-qualified contractors and it is scheduled to be closed on 08th February 2016.

The MPC approval is waiting for the Lot C-1 bidding document (Procurement and installation of distribution system in Issinbessagala Distribution Zone).

Bids were called for Lot C-2 contract package and closed on 12th November 2015. Bid evaluation Report (TEC Report) has been submitted to the Tenders & Contract Branch and waiting for DPC approval.

The Lot C-3 Contract Package (Procurement and installation of Distribution system in East Rambewa, Ethakada and Rambewa Distribution Zones) is under document evaluation.

The Lot D-2 Contract Package (Purchasing of Browsers, Cabs, Mini Backhoe, Motor Cycles) was completed on 28th March 2014.

Cost overrun due to variation of exchange rate and price escalation of materials specially HDPE pipes is the main issue.

Overall physical and financial progress of the project as at the end of 2015 was 21.59 % and 4.54 % respectively.

Projects undertaken with Indian assistance

8. Greater Dambulla Water Supply Project - Stage I

Intake and Raw Water Main of Greater Dambulla WSS

The Greater Dambulla WSP– Stage I is a design and build contract and was commenced in March, 2012. It is 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 1350 cu.m and other 5 Ground reservoirs and 2 Elevated towers for a total capacity of 5500 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 building, 01maintenance office, staff quarter and 03 operator quarters).

The construction of raw water intake & pumping station, water treatment plant, towers and reservoirs, transmission network and distribution network are in progress.

Overall physical and financial progress of the project as at the end of 2015 was 76 % and 80 % respectively.

Projects undertaken with Asian Development Bank Assistance

9. Secondary Towns and Rural Community-Based Water Supply and Sanitation Project (ADB 4th Project)

Plate Settlers of Muttur Water Treatment Plant

Overall goal of the project is to contribute to the poverty reduction efforts of the government of Sri Lanka and to promote the human development by improving access to safe water and sanitation for poor population, thereby decreasing water borne diseases and reducing the amount of resources spent in these activities. The project aims to provide safe water to 832,500 people and sanitation to 171,500 in four urban centers (Batticaloa, Hambantota, Muttur and Polonnaruwa) and in the rural areas of North Central Province and Eastern province and to increase the capacity of Government of Sri Lanka to provide safe water by strengthening the water sector institutions.

The project cost estimate was revised from USD 175.2 million to USD 263.26 million to meet the actual cost. ADB share of project cost is USD 149.1 million which provided through original loan 2 supplementary loan & additional loans. The project completion will be on September 2014 according to the original schedule. The project details and statuses at different places and components are briefed below.

i) Urban Water Supply and Sanitation Component

Hambantota District:

In Hambantota District the project will provide a water

treatment plant of 15,000 cu.m/day by constructing an intake of 120,000 cu.m/ day to provide 15,000 cu.m/day of treated water to 133,000 people. The major elements will consist of 5 new water towers at Ekkassa, Bolana, Bellagaswewa, Mirijjawila and Keliyapura, clear water tanks of capacity 3,500 cu.m and 1,250 cu.m, salinity barrier across the Walaweriver at Ambalantota and 158 km of distribution pipelines. There is a sanitation compoment to provide 1,098 household toilets in Hambantota district to 5,490 beneficiaries. Total estimated cost of the work in Hambantota district is Rs. 6,066 million.

All the works were completed in Hambantota district and the scheme is in operation now. Taking over of salinity barrier at Hambantota by the O&M was completed on October 2013.

Batticaloa District:

In Batticaloa District the project will provide a water treatment plant of capacity 40,000 cu.m/day by constructing an intake of capacity 100,000 cu.m/day to provide 40,000 cu.m/day of treated water to a design population of 246,000 people. The major elements will consist of 07 new water towers at Chenkalady, Eravur, Iruthayapuram, Air Force premises, Kallady, Kattankudy and Arayampathy, Clear water tanks of capacity 7,000 cu.m and 2,500 cu.m, 55 km of transmission main and 275 km of distribution pipelines.

A sanitation component is also there to provide sewerage treatment plants of 460 cu.m/ day capacity to the Prison and Hospital in the Batticaloa District. 1,387 household toilets are a part of the sanitation components. The total estimated cost of the works in Batticaloa District is Rs. 12,398 million.

The project in Batticaloa district was completed and the scheme is in operation now. The storm water drainage system is also completed.

Polonnaruwa District:

In Polonnaruwa District the project will provide a water treatment plant of capacity 13,500 cu.m/day by constructing an intake of capacity 40,000 cu.m/day to provide treated water to a design population of 85,000 people. The major elements will consist of 3 new water towers at Gallalle, Bandiwewa and Sewagama, clear water tank with the capacity of 1,700 cu.m, 33 km of transmission pipeline and 139 km of distribution pipeline. Under the sanitation component construction of 393 Household latrines were constructed for 1,965 beneficiaries.

The total estimated cost of the work in Polonnaruwa District is Rs. 5,455 million. All the works were completed and the scheme is in operation now.

Trincomalee District (Muttur WSS):

A water treatment plant with the capacity of 8,500 cu.m/day will be provided to the Muttur WSS. A design population of 52,000 people will get water by constructing and intake with the capacity of 40,000 cu.m/day. The major elements will consist of 3 new water towers, a clear water tank with the capacity of 3,000 cu.m, a ground reservoir with the capacity of 60cu.m, 20 km of transmission mains and 127 km of distribution pipelines. There is a sanitation component to provide 1,334 household toilets in Trincomalee district for 6,670 beneficiaries. The total estimated cost of the work is Rs. 3,485 million.

The storm water drainage system was already completed in Muttur. The head works and treatment plant works of Mutur water supply scheme has been completed.

(ii)*Rural Water Supply and Sanitation Component*

Anuradapura District:

In Anuradhapura the project will provide 84 piped schemes for 166,372 beneficiaries, 1,456 common and private dug wells for 9,591 beneficiaries, 1,778 rain water tanks for 10,047 beneficiaries and 55 tube wells for 4,037 beneficiaries and under the sanitation component 8,987 household toilets will be constructed for 48,377 beneficiaries. The total estimated cost of the work in Anuradhapura is Rs. 999 million.

All the works were completed and augmentation works are being carried out in Anuradhapura due to water quality and quantity issues. All completed schemes were handed over to RSC (N/C) for the continuation of balance works and close monitoring of the operation and maintenance of the schemes.

Polonnaruwa District:

In Polonnaruwa, the project will provide 51 pipe schemes for 92,753 beneficiaries, 3,093 common and private dug wells (including rehabilitation works) for 17,627 beneficiaries, 1,205 rain water tanks for 6,501 beneficiaries and 6 tube wells for 490 people. The sanitation component includes 9,027 household toilets for 48,372 beneficiaries. The total estimated cost for the works in Polonnaruwa district is Rs. 874 million.

All the works were completed and augmentation works of 5 schemes are in progress due to water quality and quantity problems. All schemes and resources were handed over to RSC (NC) for the continuation of the balance works and close monitoring of the operation and maintenance of the schemes.

Batticaloa District:

In batticaloa, the project will provide 78 dug wells for 5,131 beneficiaries, 40 tube wells for 3,060 beneficiaries and 20 rain water tanks for 102 beneficiaries. The

sanitation component provides 293 household toilets for 1,465 beneficiaries. The total estimated cost for the works in Batticaloa district is Rs. 45 million.

All the works were completed and the schemes are in operation in Batticaloa district.

(iii) *Institutional Strengthening Component*

The objective of this component is financial and operational improvement of the NWSDB. The works includes implementing strategies to improve financial management, Assets registry management and improving operational efficiency. The total estimated cost of the project component is Rs. 372 million. All the works were completed under this component.

10. Dry Zone Urban Water and Sanitation Project (DZUWSP), ADB 5th Project

Spillway Structure Under Aru Dam construction in Vavuniya

NWSDB in implementing the DZUWSP for water supply and sanitation improvements in North Western and Northern Provinces. Under this project Vavuniya, Mannar, Chilaw and Puttalam towns will be provided with enhanced water supply and sanitation facilities. The total cost estimate of the project is Rs. 20,742.91 million. The overall physical and financial progress at the end of December 2015 is 76.34 % and 54.11 % respectively. Twenty-seven numbers of contracts were awarded in 2014 and another 08 contracts were awarded in 2015.

Vavuniya:

In Vavuniya, the project will provide a water treatment plant of capacity 12,000 cu.m/day and construction of an impounding reservoir of capacity 3.83 MCM across the Peru Aru stream. Causeway construction and construction of Peru Aru reservoir bund are in progress under the surface water contract (Physical progress 78%). Both surface water and ground water will be combined to provide 9,800 cu.m/ day of treated water to 109,432 people. The major elements consist of 3 new water towers, one reservoir and 137 km of distribution pipelines which are under construction. There is a sanitation component to provide four public latrines and 500 household toilets in Vavuniya which is almost completed.

Mannar:

Mannar improvements include, developing 10 bore holes to provide 12,000 cu.m/ day treated water to Mannar Murulakan, Vankali & Thiruketheeswaram. One new tower and two groundwater reservoirs are being constructed with 33 km transmission and 100 km distribution system to provide fully treated water to a designed population of 55,000 people. Four public latrines and 330 household toilets are in the construction stage. (Overall physical progress in Mannar 90 %)

Septage treatment facility, water storage structures, public toilets and supply and laying of DI, HDPE and PVC pipes for distribution system contracts were awarded. Septage treatment facilities and the public toilets are completed. Pipe laying is 95 % completed. The water storage structures civil construction completed and installation of M&E equipment was commenced in November 2015.

Chilaw:

In Chilaw, water will be extracted from Deduru Oya and it is expected to provide 12,000 cu.m/ day of treated water to a design population of 91,000. The major elements of the scheme will consist of 12,000 cu.m/ day water treatment plant in Bingiriya, 2 reservoirs, 43 km of transmission lines and 153 km of distribution lines. Under the sanitation sector five public latrines and 500 household toilets are being constructed. Septage treatment facility and most of the pipe laying contracts are completed. The construction of the intake and WTP are in progress. The rehabilitation works of existing water treatment plant at Chilaw is at tendering stage, the technical evaluation has been completed and awaiting approval from ADB to open the financial proposal.

Puttalam:

Puttalam WSS includes a 15,000 cu.m./day intake and water will be extracted from Kala Oya. The population to be served is 197,000. The proposed scheme will consist of 2 reservoirs, 7 pumping stations, 40 km transmission system from Eluwankulama to Puttalam and 12,000 cu.m/day water treatment plant. The sanitation component will include the construction of Six public latrines and 500 household toilets in Puttalam town and suburbs. The septage treatment facility and the public toilets are nearing completion. The pipe laying contracts are in progress. The construction of the intake and the WTP at Eluwankulam are progressing behind schedule. The contract for the rehabilitation of the existing WTP is tendering stage, the technical evaluation has been completed and awaiting approval from ADB to open the financial proposal.

11. Jaffna Killinochchi Water Supply & Sanitation Project (ADB 6th Project)

This project is to improve drinking Water Supply facilities of about 689,000 people in Jaffna city, suburbs and several townships in the Jaffna Peninsula. The total cost estimate is Rs. 18,328 million.

The goal of the project will be improved health and

human development in urban and pradeshiya saba areas of Jaffna and Kilinochchi. The project will contribute to rehabilitating, reconstructing, and developing areas affected by conflict.

The project components are improving Water Supply and Sanitation Infrastructure (Water supply for 300,000 and sanitation for 80,000 people), Strengthening Jaffna Water Resource Management (JWRM) and building capacity of the NWSDB to carry out project implementation and Building a Regional Office in Jaffna.

The project was formulated to extract water from Iranamadu tank located in Kilinochchi to supplement the ground water sources in the Jaffna Peninsula. Due to the social issues in sharing water from Iranamadu tank for drinking water, alternatively sea water from Thalayadi sea area (most feasible location) is proposed as water source. Project progress is lagging behind the expected progress due to water sharing problem of Iranamadu water tank.

Construction of new AGM & RM Buildings were completed and the opening ceremony was held on 22nd June 2015. Road crossings and Railway crossings completed. Tower construction and laying of distribution pipes were commenced. Two transmissions packages are in awarding stage. Sewerage woks are in detailed designs and bidding document preparation stage. RO plant is at conceptual design and bid document preparation stage. Physical Progress was 39.25 % while Financial Progress is 8.71 % by end of December 2015.

Tower construction at Velanai

12. *Greater Colombo Water and Wastewater Management Improvement Investment Programme (GCWWMIIP)*

Colombo was one of the few Asian cities to receive piped water supply in the 1800's. Many parts of distribution network have been built over 100 years ago. Although there have been many projects to address increasing water demand, there was no significant rehabilitation of the network, At present the Non-Revenue Water in Colombo city is approximately 48 % leading to poor water supply service due to leaking of pipes, makes it imperative to reduce NRW on an urgent basis.

The major objectives of the project are: (i) to increase of water supply availability and efficiency in Colombo city; (ii) enhance the distribution system and reduce NRW from 49 % to 18 % by the year 2020; (iii) to establish a long-term mechanism to reduce NRW; (iv) to enhance the institutional, operational and project management capacity of NWSDB.

The objective of GCWWMIIP will be implemented via two projects namely Colombo Water Supply Service Improvement Project and Ambatale Water Supply Systems Improvement & Energy Saving Project.

Asian Development Bank (ADB) finance the water supply network rehabilitation projects & other associated works in Colombo city. Ambatale Water Supply Systems Improvement & Energy Saving Project is co-financed by Agence Francaise de Developement (AFD). The originally estimated project cost is ADB/ AFD – 234 USD Million and GOSL - 85 USD million. At present, additional finance requested for Project 01 ADB and Project 02 ADB due to the additional scope change and price escalation, therefore Project cost increased by USD 52 million (ADB – USD 38 million & GOSL USD 14 million). Physical Progress was 6.4 % while Financial Progress is 21.7 % by end of December 2015.

13. *Improving Community Based Rural Water Supply & Sanitation in post conflict Areas of Jaffna and Killinochchi Project*

This project was formulized to reduce poverty and improve the quality of life in post-conflict rural communities for residents and returning internally displaced people in Jaffna and Kilinochchi districts through improved water supply and sanitation services. Japan Fund for Poverty Reduction (JFPR) through Asian Development Bank (ADB) and the Government of Sri Lanka (GOSL) funded for this project. The total allocation was JFPR – Rs. 269 million and GOSL – Rs. 34 million. The project area covers Mathagal, Shanthai and Delft in Jaffna District and Iyakkachchi, Akkarayan and Vaddakkachchi in Kilinochchi District.

Project Components included Improvement and Maintenance of Rural Water Supply and Sanitation System (Water supply for 1900 house holds and sanitation for 550 house holds), Capacity Development for O&M of WSS facilities and Livelihood Development, O&M Training and Livelihood Training for 200 People, Cash for Work Program engaging 1000 people, Hygiene Environmental and Water Conservation and Management Awareness Building and Educating 1900 house holds in Hygiene Awareness.

Project activities commenced on 21st January 2013 and grant closed 30th June 2014, due to the scope of changes (Supply and installation of RO plant to Delft Island) and inclusion of additional areas (Akkarayan & Iyakkachchi) grant extended up to September 2015. Iyakkachchi, Vaddakkachchi, Akkarayan, Mathagal and Shanthai water supply schemes were completed and handed over to the respective water user associations. Delft water supply

scheme was completed with the installation of RO plant and handed over to NWSDB, Jaffna.

The overall physical progress 100% completed and number of beneficiaries in the 05 project areas was higher than the originally targeted(1,900HH was targeted and achieved as 3,623HH) population. Nearly 10,683 members (4,856 male and 5,827 female) from 3,623 HH benefitting from this water supply facilities. More importantly water supply beneficiaries are composed of majority of women those who are internally displaced during the conflict times. Sanitation system also provided to 611 poor households based on the vulnerable groups such as widows, disabled and separated from spouses.

Documents sent to Ministry for the acquisition of Delft lands (Tower site and Site office) and acquisition is delay due to the procedure and process.

Project undertaken with Australian Assistance

14. Integrated Water Supply Scheme for the Unserved Area 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 and 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 100 km and Supply and laying of PE pipes and fittings for Distribution system (about 1200 km). This project can provide nearly 40,000 new water connections and total cost of the project has been estimated as Rs. 26,720 million.

NWSDB had awarded several contracts under this project. Main contract is the construction of treatment plant, supply and laying of transmission system and related works which is given to M/s Outotec (Pvt) Ltd, who was an Australian company, 1200 km Distribution system was awarded to M/s Sunpower Construction (Pte) Limited and another two contracts were awarded to M/s Isururu Engineering (pte) Ltd which includes construction of 06 towers.

The Main contract (M/s Outotec (Pvt) Ltd) has achieved 100 % physical progress and 100 % financial progress as at end of December 2015.

However other contracts had achieved 50% of physical progress and 50 % financial Progress.

Ampara Distribution Network Water Supply Project is on schedule, and it would be completed by June 2016. Tower Contracts might not be completed as scheduled.

This project is running short of local funds under GOSL component for the year 2012, 2013 and 2014 Enhancement of present loan between GOSL and ANZ/ EFIC, by 6.5 %, has been recommended to the Treasury, to receive necessary urgent fund requirement. However, ERD has agreed to enhance the foreign loan. Therefore it helps to settle the all due payments to foreign contractor.

Overall physical and financial progresses as at end of December 2015 was 97.6% and 75.17% respectively.

Project undertaken with Belgium Assistance

15. Kolonna / Balangoda Water Supply Project

Water Treatment Plant - Balangoda

Design & Construction of a New Water Supply Scheme for Kolonna & Augmentation of Balangoda Water Supply Scheme comprises two main components. They are augmentation of Balangoda Water Supply Scheme and construction of a new water supply scheme for Kolonna.

The project is funded by government of Sri Lanka and government of Belgium. Total (revised) estimated cost is SL Rs 4,988 million which SL Rs 1,562 million from Local funds (GOSL) and SL Rs 3,426 million from foreign funds (Belgium). Physical and Financial progress as at the end of 2015 were 100% and 88% respectively.

Augmentation of Balangoda Water Supply Scheme is planned to expand the water supply coverage by issuing new connections for 8,000 families and fulfill current deficiencies. In this regard, the augmentation of Balangoda WSS will serve 40,000 population and commercial & industrial water demands in Balangoda Pradeshiya Sabha area, Balangoda Urban Council area and a part of Imbulpe Pradeshiya Sabha area which are situated in Ratnapura District. Accordingly, the total water demand has been assessed as 7,000 cu.m. /day in 2030 which will be abstracted from Walawe river at Weliharanawa where the existing intake is situated in existing Balangoda WSS. Following components have been constructed. Components of Balangoda Water Supply Project are Intake well with capacity of 7,700 cu.m. /day, Water Treatment Plant with capacity of 7,000 cu.m. /day, 02 Ground water reservoirs at Jayanthimawata and Benkiyawatta with capacities of 1,500 cu.m. and 750 cu.m. respectively, Supply & Laying of 0.7 km raw water pumping main, Supply & Laying of

4.6 km treated water transmission main and Supply & Laying of 12.1 km distribution network.

Kolonna Water Supply Scheme is designed to provide safe drinking water to 40,000 people in Kolonna Pradeshiya Sabha area throughout the year and a part of Embilipitiya Pradeshiya Sabha area during the rainy season. Therefore 8,000 new connections will be issued, in addition to commercial and industrial demand. Total water demand has been assessed as 7,000 cu.m. /day in 2030, which is extracted from Ereporuwa river at Vijeriya by constructing a 3m high and 25 m long weir. Further the Irrigation Department and Agrarian Development Department abstract water from the downstream of the said weir for paddy cultivation of about 1,500 acres area. Therefore Memorandum Of Understanding was signed (MOU) among Irrigation Department, Agrarian Development Department and National Water Supply & Drainage Board for water sharing specifically during the dry season. Components of Kolonna Water Supply Project are Intake Weir having a 3 m height and 25m length capacity 7,700 cu.m. /day, Water Treatment Plant with capacity of 7,000 cu.m. /day, 02 Ground Water Reservoirs at Maduwanwela and Panamura with capacities of 1,000 cu.m. and 500 cu.m. respectively, Supply & Laying of 1.6 km raw water transmission main, Supply & Laying of 32 km treated water transmission main from Ereporuwa SWTP to Embilipitiya elevated tower and Supply & Laying of 21.2 km distribution system.

All constructions of Kolonna Balangoda Water Supply Project were completed during the year 2015. Water quality and required capacity were checked for both the Water Treatment plants and all the tests were passed. Therefore the project can be considered as successfully completed.

Projects Undertaken with Hungarian Assistance

16. Rehabilitation of Labugama – Kalatuwawa Treatment Plants Project

This Project is functioning under the funds of Hungarian government and from the local government funds. Project cost is as follows.

- Labugama - Euro 16,714,045
- Kalatuwawa - Euro 17,383,906

The project includes all renovation work and new construction work for identified components at Labugama & Kalatuwawa water treatment plants. Project was commenced on 21st October, 2013 and the project duration is 36 months.

The objective of the project is to improve the production capacities as well as the water quality of both water treatment plants at Labugama and Kalatuwawa. Accordingly the total production capacity of Labugama and Kalatuwawa will be increased by 45,000 cu.m/ day of by the end of the project.

The project is scheduled to complete in 2016 and the physical progress & financial progress at the end of December 2015 for Labugama is 73% and 54% respectively while the same for Kalatuwawa is 79% and 56 %.

The phase-1 of Kalatuwawa has been completed in December and it is ready to function. Labugama phase – 1 also could be completed by of February 2016.

Special Events taken place in the project during the year: No special event was taken place.

Some of the main items are not included in the scope. (Rehabilitation of main Bridge at Labugama & Newly construction of main bridge at Kalatuwawa, replacement of Lamella Plates in sedimentation tanks at both plants etc.) Funding to be identified for above items.

Productivity Improvement Activities on overall status of the project: Arranging of get-together, Attending of cricket matches, Avurudu festival, Annual trips and introduction of 5-S concept etc.

Back wash pumps at Kalatuwawa

Projects Undertaken with United States of America and GOSL Assistance

17. Badulla, Haliela and Ella Intergrated Water Supply Project

Construction of wash water recovery tank

The project is to implement an integrated water supply scheme to cover the Badulla, Haliela and Ella by developing pipe water supply scheme and providing safe and reliable water to the project area. The project aims to support smooth and timely implementation of the Badulla, Haliela and Ella Development plan and

contribute to the industrial development and economic growth in the project area.

- 100 % Design works have been completed excluding dam design. The Dam design completed 50% only. Balance design is in progress.
- Land acquisition works have been completed in order to start the construction of each item. Payment of compensation to land owners is in progress.
- Tender document have been prepared of Rs.1220 Million including pipe laying contract and permanent road reinstatement. GOSL funds were allocated from 60 billion Treasury bond released to NWSDB
- Pipe laying along RDA & MC roads principally agreed by RDA & MC Badulla. However the permanent road reinstatement shall be done by NWSDB by utilizing GOSL funds under the supervision of RDA, PRDD and MC
- Pipe laying along PRDD roads agreed by PRDD. Funds for permanent reinstatement should be paid to PRDD.

Construction of RSC office building, water treatment plants at Demodara and Bandarapura four Staff quarters and intake at Mediriya were started during the year 2015.

- GOSL funds hadn't been allocated until the 4th quarter of the year. Due to that local tenders could not been proceeded.
- Land acquisition process is almost completed and all the lands have been cleared as crown lands.

Productivity improvement activities and overall status of the project

- Total distribution system include 260km pipe network. But in the contract only 111km has been included. Therefore designs of balance 149km quantity will be attend by project engineers. It should be carried out by utilizing GOSL.
- Estimated cost for the rehabilitation of Eladaluwa treatment plant Tetratech was US $ 200million(Foreign funds). Therefore in order to minimize the cost it has been decided to rehabilitate the plant by NWSDB production team, Ambathale around Rs. 100 million. Now the design works are in progress.
- Rehabilitation of Bandarapura treatment plant and construction of Madiriya intake are ongoing. The designs have been done by Project engineers.
- It has been decided to prepare GIS as built drawings for both transmission and distribution pipe network and training session of GIS mapping also carried out for relevant staff.

Projects Undertaken with Chinese Assistance

18. Gampaha, Attanagalla & Minuwangoda Integrated Water Supply Scheme

Design & build basis construction of the Basnagoda Impounding Reservoir, construction of 85,000 cu.m/ d capacity intake and installation of 56,700 cu.m/ day pumps are under Phase I. Construction of raw water main from Basnagoda Intake to Karasnagala water treatment plant, construction of 54,000 cu.m/ day capacity water treatment plant with 1,500 cu.m capacity clear water reservoir, high lift pump house, chemical house , workshop, laboratory, stores and office facilities at Karasnagala with provision of a capacity to extend up to 81,000 cu.m/ day are covered under Phase II. Construction of treated water transmission main from high lift pump station at WTP to high level reservoir, Construction of 10,000 cu.m capacity high level reservoir, Laying of approximately 100 km long treated water gravity transmission mains (DI) of Dia 1100mm to 150mm from high level reservoir to existing and proposed water towers, construction of 5, 500 cu.m capacity water towers. Laying of 630kms of distribution main (DI/ uPVC) from diameters 90mm to 400 mm, Construction of Gampaha Manager's Office (500 sq.m), Area Engineers Office (200 sq.m), Quarters (150 sq.m), OIC Office (150 sq.m) and laboratory (50 sq.m) are the other components covered under Phase I

Detailed designs were carried out by the design groups for distribution and transmission pipe lines and tower/ reservoir. The detailed design of Naiwala, Pasyala and Attanagalla systems were completed by design groups and bid documents are being prepared.

Preparation of Resettlement Action Plan has been initiated.

Projects Undertaken with Spanish Assistance

19. Greater Ratnapura Integrated Water Supply Project (stage I)

Water Treatment Plant at Ratnapura

This phase will improve the services presently provided to the existing consumers as well as extending the supply to new areas. Project objective is to provide drinking water to a population of around 80,000 in 43 GNDs in Ratnapura, Kuruwita & Pelmadulla DSDs in Ratnapura District.

Main components of this phase are, construction of intake to suit 13,000 cu.m/ day at Kalugaga River, laying of 1.9 km long, 400 mm diameter DI raw water pumping main from intake to new water treatment plant, Construction of 13,000 cu.m/ day water treatment plant & pumping station at Pompakele, laying of 3.8 km long, 300 mm diameter DI treated water pumping main, construction of 02 reservoirs, construction of RSC office at Ratnapura New Town, construction of 10 quarters at Ratnapura New Town, Muwagama and Pompakele.

The cost estimate is Rs. 4,308.6 million for stage I.

As at end of December 2015, project has been substantially completed and it has been commissioned.

Laying of the distribution was not included to the scope of the main contractor and it is being implemented using local bank funds of the project.

Projects Undertaken with Austria

20. Augmentation of Mahiyanganaya Water Supply Project

Water Treatment Plant in Mahiyanganaya

The project is going to provide safe drinking water to a rural population of around 50,000 by design, constructing & expanding public water supply facilities in Mahiyanganaya and Redeemaliyadda.

The Construction of head works has almost been completed and commissioning of the project is scheduled for end of January 2016. Tender documents for supply and laying of distribution system have been prepared and laying is planned to complete within the year 2016. Pipe laying works were carried out without damaging RDA and PRDA roads.

The construction of laboratory, stores and quarters are completed. The construction of water treatment plant and the water tower at Tissapura is at completion stage. Finishing work is ongoing for intake also.

Target house connections of this project (100%) cannot be provided until completion of pipe laying works by utilizing funds from Rs. 60 billion Treasury bond.

The distribution system includes 190 km pipe network. But, only design of 90 km has been included in the contract. Therefore designs of balance 100 km will be attend by project engineers. It should be carried out by utilizing funds from the Treasury bond. It has been decided to prepare GIS as built drawings for transmission and distribution pipe network and for all plants and remote sites. GIS training program was carried out for all engineers and engineering assistance for the realization of task.

Overall physical and financial progresses as at end of December 2015 was 90 % and 18 % respectively.

Projects Undertaken with KBC Belgium

21. Monaragala-Buttala Integrated Water Supply Project

Kumbukkana treatment plant

The Monaragala-Buttala integrated water supply project was commenced on 30th December 2014 and the planned completion is 30th July 2017.

The objective of this project is to cater for the need of safe water supply facilities to Monaragala, Buttala, Okkampitiya and Madulla demand centers. This is to fulfill the current and future needs of pipe borne water supply facilities of the beneficiaries in the area and enhance their health and living standards. Target population served is 60,000 in Monaragala district.

The total cost estimate of this project is Rs. 5,506 million. The project funding agencies are KBC Bank of Belgium, HNB Bank of Sri Lanka and Government of Sri Lanka.

The water sources of the project are Kumbukkan Oya, Menik Ganga and Sumedha wewa. The components of the project are Intake which comprices of improvement of existing Menik Ganga intake (3,500 cu.m /day), new intake at Kumbukkana (6,600 cu.m /day) and new intake at Sumedha wewa (4,000 cu.m /day during drought); Treatment Plant at Kumbukkana (Capacity – 6,000 cu.m /day); the storage tanks at Kumbukkana (2000 cu.m), Buttala (450 cu.m), Horambuwa (650 cu.m), Weliyaya (225 cu.m) and Madulla (225 cu.m); Transmission &Trunk mains (DI or PE 450-150dia.)- 27 km, Distribution (90 – 300 dia.)-110 km and (supply & laying - 68 km Supply only - 42 km).

The construction of Kumbukkana water treatment plant, Okkampitiya intake, Buttala intake, Horombuwa and Weliyaya ground reservoirs, Madulla Tower, Office buildings and quarters are in progress. In addition, laying of transmission and distribution pipe lines are in progress.

The overall physical and financial progress as at end of 2015 are 48 % and 42 % respectively.

LOCAL BANK FUNDED WATER SUPPLY PROJECTS

1. Bentota Water Supply Project

The objective of the project is to extend distribution along Galle road about 9 km length and by roads of 22 GNDs in Bentota DS division. The project cost is Rs.1,239 million. The contract started in November 2014 & expected to complete in March 2016. Funding is from NSB. Expected number of Connections are 4,500 and number of beneficiaries are 18,000. Main project components are supply of PVC/ DI pipes, valves (100 % completed) Laying of PVC/ DI pipes and accessories (78 % completed). Physical progress is 66 % and financial progress is 31 % for the year. 33.17 km pipe laying (balance 2.16 km) & 26.48 km pressure testing (balance 8.85 km) are completed.

2. Ampara Distribution Network WSP

OIC Office - Paragahakele

Ampara Phase III Project was started in the year of 2011 and completed the construction of main components in the year 2014.This project can provide nearly 40,000 new water connections and total cost of the project has been estimated as US$ 126 million + Rs. 5680 million. Under the main components, Construction of 27,000 m^3/d Treatment Plant and Intake, Water Sumps (Himidurawa 2,500 cu.m, Paragahakele, Dhadayanthalawa and Gonagolla 1,600 cu.m), Supply and Laying of DI Transmission mains for 100 km, Supply of PE pipes for Distribution network for a length of 698 km and Supply and Installation of all Electromechanical equipments had been completed at a cost of US$ 126 million from ANZ/ EFIC of Australia and HNB and Rs. 3240 million from GOSL.

However due to the unavailability of necessary funds from GOSL to complete the project, the Government has decided to receive relevant funds from local banks of Sri Lanka.

With the assistance of BOC, DFCC and NDB. NWSDB has received necessary funds, as a loan for an amount of Rs. 6,848 million. With this assistance, NWSDB is now ongoing with Construction of the following components.

- Supply of HDPE & DI pipes, fittings and valves for 527 km.
- Laying of distribution network of 1,120 km.
- Construction of 3 nrs. of offices, 11 Nrs. of Quarters.
- Provision of 10,000 new water connections

The Project could be completed by end of the year 2016.

The Physical Progress of work is 62.54 % and financial progress is 48.2 % by the end of the 2015.

3. Ruhunupura Distribution WSP

water treatment plant at Ruhunupura WSP

The objective of the project is to enhance water connections in 24 GNDs in Sooriyawewa, Hambanthota, Lunugamwehera & Sevanagala DS divisions. The project cost is Rs.1,929 million and project period is November 2014 to April 2016. Funding bank is the Commercial Bank. 4,000 connections are planned with 63 mm dia. To 225 mm dia. pipe laying of 270 km. Physical progress is 53 % and financial progress is 23 % as at December 2015.

4. Colombo City Water Supply Improvement Project - Phase I

630 mm HDPE pipe laying at Jhone Keels Site (Slave Island)

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 year 2040 demands. Under this project it is

planned to lay approximately 6.1 km DI pipe, construct six bridge crossings and to lay 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. Up to end of June 2016 physical progress of the project is 66 % and financial progress is 62 %.

5. Towns East of Colombo District WSP - Package 1

The objective of the project is to provide safe pipe borne drinking water to an estimated population of 373,000 in the Homagama, Kaduwela Padukka and Seethawaka and Horana DS areas. Over 91,000 water supply connections are proposed to be given by this water supply project to the people by the year 2040. The project consist of 03 contract packages.

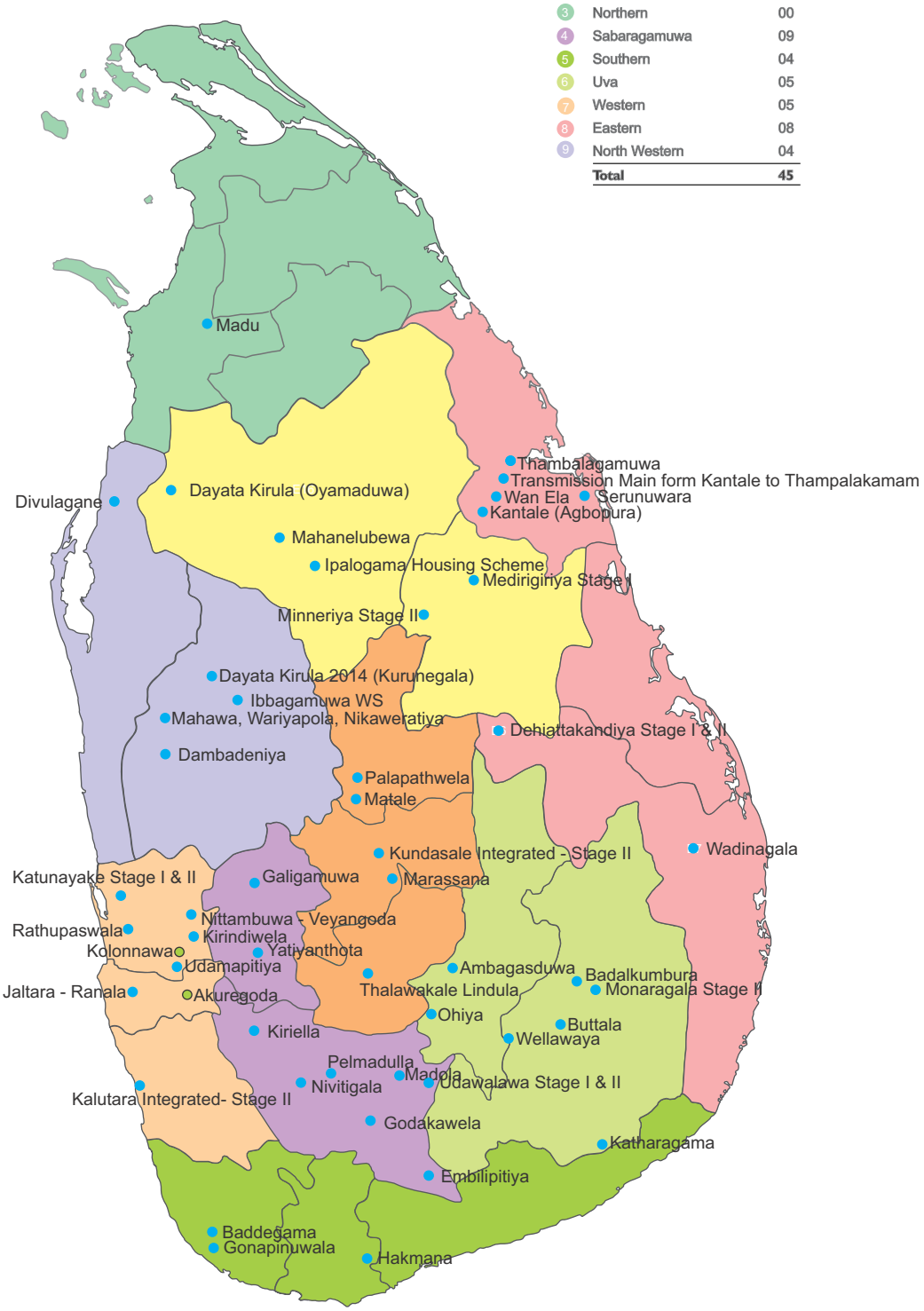
Towns East of Colombo District Water Supply Project (Package 01) with TCE Rs. million 5,170.00, Towns East of Colombo District Water Supply Project (Package 02) with TCE Rs. million 4,823. and Towns East of Colombo District Water Supply Project (Package 03) with TCE Rs. million 10,049.00.

Contract Package 1 is in progress and physical progress is 12 % & financial progress is 18 %. The advance payment was made to the Package 3 contractor and physical works were not commenced

GOSL Funded Small and Medium Scale Water Supply Projects

Location Map of Projects under Construction/ Augmentation During 2015 Funded by the Government of Sri Lanka

	Province	No. of Projects
1	Central	04
2	North Central	05
3	Northern	00
4	Sabaragamuwa	09
5	Southern	04
6	Uva	05
7	Western	05
8	Eastern	08
9	North Western	04
	Total	**45**



GOSL FUNDED SMALL AND MEDIUM SCALE WATER SUPPLY PROJECTS

1.) Central Province

I) Kundasale Integrated Water Supply Project - Stage II

This is an augmentation to serve about 130,000 people in Kundasale, Balagolla, Digana, Arattana and Wavinna, Pannila areas. Water source is Mahaweli River/ Huluganga with full treatment and capacity of 30,000 cum/day. Total Cost Estimate was revised in 2013 and the revised estimate is 1,685 million. Presently a production of 18,000 cum/ day is obtained from Arattana WTP. Treatment Plant improvements completed. Pipe laying and M&E works are in progress. The overall physical and financial progress at the end of 2015 were 95% and 97% respectively.

ii) Matale Water Supply Project

This is a rehabilitation of the existing WSS to serve 30,000 people in Matale town area and suburbs. Water source is Suduganga with full treatment having existing treatment plant capacity 12,000 cum/day. Total Cost Estimate of Rs. 385 million was revised to Rs. 525 million in 2013. It is proposed to improve the capacity up to 16,000 Cum/day. Under this improvement, construction of a new intake sump, pump house & pumping and distribution system improvements are completed while the treatment plant and M&E works are in progress. The overall Physical and financial progress at the end of 2015 were 96.5% and 77% respectively. (w.r.t. revised TCE)

iii) Marassana Water Supply Project

This is an augmentation to serve 25,000 new beneficiaries in Marassana town and suburbs, using raw water from Ma-oya with a full treatment method and the capacity of the treatment plant is 5,000 cum/day. The TEC was revised in 2013 to Rs. 339 million. Present production of 2,200 cum/day capacity is not enough to cater the rapid growing water demand of the area. All together there are about 3,500 service connections. Supply and laying of pipes at Mailapitiya and Pothgoda zones are completed. The overall Physical and financial progress at the end of 2015 were 96% and 96% respectively.

iv) Thalawakale / Lindula Water Supply Project

This is an augmentation of the existing scheme to serve 15,000 people in Thalawakele and Lindula areas. Water sources area Great Western and Nanuoya. The revised TEC is Rs. 352 million and funding sources are GOSL and Ceylon Electricity Board (rechargeable). The existing WTP of partial treatment having capacity of 1,650 cum/day is being augmented by increasing the production capacity up to 2,500 cum/day. It includes intake improvements and adding new components aerator, flocculator, sedimentation and pressure filters and rapid sand filters to the WTP. In addition it is expected to expand existing distribution system to resettled areas of Upper Kotmale hydro-power project. Construction of intake weir, pump house and treatment plant, chemical reuse and installation of intake pumps are completed while it needs to construct a rapid sand filters for the treatment plant. The overall Physical and financial progress at the end of 2015 were 96.5 % and 73 % respectively. (w.r.t. revised TCE)

2.) North Central Province

i) Medirigiriya Water Supply Project - Stage I

This scheme planned to serve about 62,500 in 2035 beneficiaries in Medirigiriya Divisional Secretary area. Water source is Kaudulla tank with treatment including flocculation, sedimentation, rapid sand filters and disinfection for 9,000 cu.m/ day. Sludge thickener and sludge drying beds are also proposed for treatment of sludge and backwash water. Total cost estimate is Rs. 638 million. The TCE was revised in 2013 and the revised TCE is Rs. 919 million. This scheme aims to provide safe drinking water from Kaudulla Tank. This project consists of intake, raw water pumping system, WTP, 02 nrs. water towers storage facilities, transmission system and distribution system. The construction of intake was completed and distribution works were commenced this year. Construction of WTP and towers and transmission main works are in progress. The overall Physical progress at the end of 2015 was 94 %

ii) Minneriya Water Supply Project

This is an augmentation of the existing scheme to serve 69,000 people in Minneriya, Girithale and Hingurakgoda area. Water source is Minneriya tank and existing treatment process consists of slow sand filters and a capacity of 10,900 cu.m/day. Total Cost Estimate is Rs. 173 million. Minneriya & Hingurakgoda water supply schemes are functioning from Minneriya WTP which is the only WTP available for the entire DS area. The scope of the project includes upgrading the intake capacity to 13,600 cu.m/day. Augmentation of the existing WTP consist of construction of sedimentation tank, rapid sand filter, storage facilities and new installation of M&E equipment. Improvements for the treatment plants and distribution lines were almost completed. The overall Physical progress at the end of 2015 was 98.5 %.

iii) Hingurakgoda Water Supply Project

This is an augmentation of existing scheme to serve 36,233 people in Hingurakgoda area. The project period is 3 years and the project component is distribution improvement only. This project was completed in year 2015. The Total Cost Eastimate is Rs. 130 millions. The physical progress at the end of 2015 was 100 %.

iv) Ipalogama Water Supply Project

This is a new scheme intends to serve 152,000 in 2030 beneficiaries in Ipalogama Ranaviru village including 4 GN divisions in IpalogamaPradeshiyaSabha area. The

treatment plant with 13,500 cu.m/day capacity and the intake are common to both Ipalogama and Kekirawa existing water supply schemes. The water source is Kalawewa. Total length of the raw water pumping main is 4 km and the length of transmission main is 4 km. Total Cost Estimate is Rs. 798 million under GOSL funds. The construction of intake and sewerage system for Ranaviru village were completed. The construction of treatment plant and water towers are completed. Distribution systems are to be completed. The overall Physical progress at the end of 2015 was 99.5 %.

v) Parasangaswewa Water Supply Project

This is an augmentation of existing scheme to serve 2855 in 2025 people in Parasangaswewa area. The project period is 1 year and the project component is distribution improvement only. This project was completed in year 2015. The Total Cost Estimate is Rs. 31.6 millions. The physical progress at the end of 2015 was 100 %.

3.) Northern Province

There were no small and medium ongoing projects in Northern Province during the year 2015.

4.) Sabaragamuwa Province

I) Embilipitiya Water Supply Project

This is an augmentation of existing scheme with a treatment plant which intends to serve 84,000 beneficiaries in Nindagampelessa,Embilipitiya, New town, Pallegama, Udagama, Kalagediara, Halmillaketiya, Yodagama. Kubugoda ara, Moraketiya, Higura, Thunkama ketagal ara Total cost estimate is Rs. 607.89 million. Construction of intake and water treatment plant is Completed.High lift pump to be installed the physical and financial progress at the end of 2015 was 98 % and 86 % respectively. Project has been already commissioned.

ii) Udawalawa Water Supply Project - Stage I & II

This is an augmentation of the existing WSS. TCE is Rs. 973.20 million. The total beneficiaries are 62,500 in Kolombage Ara, Nindagam Pelessa, Ranchamadama, Thibulketiya and Udawalawa, yaya2, Andaluwa, Maduwanwala, Panahaduwa, rathkarawwa, Gageyaya, Sankapala Miriswelpotha, Mahagama. The physical and financial progress at the end of 2015 was 99 % and 75 % respectively. Project is already commissioned.

iii) Godakawela Water Supply Project

This new project intends to provide safe drinking water to 22,500 beneficiaries in Godakawela, Galahitiya, Masimbula, suburbs, Alpitiya, Balavinna East, Godakawela, Wara yaya, Balawinna West, Balawinna North, Kompitiya, Mawatalanda Meddegama, Ridivita, Dambawinna, Kapuhenatenna, Balawinna East, Mawathalanda, Malwatta areas. The water source is Rakwana Ganga and the water is fully treated in a WTP with the capacity of 4,500 cu.m/day. Major project components are Water intake, WTP, Storage Tank & Distribution system. Total cost estimate is Rs. 288.80 million. The physical and financial progress at the end of 2015 was 98 % and 78.5 % respectively. Distribution extention are ongoing.

iv) Galigamuwa Water Supply Project

Currently there is no pipe borne water supply in Galigamuwa Town. This project includes construction of new intake of 5,000 cu.m/day capacity at Alawwa, a conventional WTP with the capacity of 5,000 cu.m/day, construction of ground reservoirs of capacities 225 cu.m and 1800 cu.m, pump house, supply & laying of 12 km. DI pumping mains, improvement for the existing distribution network & installation of pumps. Total Cost Estimate is Rs. 841 million and 30,800 people are to be benefitted in Galigamuwa town area including Helamada, Weragoda, Palapoluwa, Ballapana, Udabage, Naberiyawa, Arandara and Boyagama. The physical progress at the end of 2015 was 23 %. Implementation of this scheme has been transferred to Water Supply and Sanitation Implementation Project under World Bank funding. Material supplied for the project also distributed among the Board.

v) Nivithigala Water Supply Project

This project intends to provide safe drinking water to 14,500 beneficiaries covering Watapotha, Sidurupitiya, Thuththiripitiya Halkandaliya, Nivithigala, Yakdehiwatta areas in Ratnapura District. Total cost estimate is Rs. 153.4 million. Major Componants of the scheme are intake; storage tank, pumping Main and Distribution System are in progress. Most of the works are delayed due to issues in allocation of funds. The physical and financial progress at the end of 2015 was 100 % and 61 % respectively.project has been commissioned.

vi) Pelmadulla Water Supply Project

This project intends to supply safe drinking water to 22,500 beneficiaries in Pelmadulla covering Ihala Bopitiya, Pelmadulugama, Pelmadulla town, Pahala Bopitiya, Kuttapitiya, Ganegama, Godagama, Rilhena, Udathula, Denawaka, Udakada, Panawenna Borala, Morathota, Nugawela east, Nugawela west, Kattange, Kotakethana, Wellandura, Yainna and Narangoda The Total Cost Estimate is Rs. 384.20 million. The physical and financial progresses at the end of 2015 were 100 % and 96 % respectively. Original scope of works completed.project has been commissioned.

vii) Yatiyanthota Water Supply Project

This project intends to supply safe drinking water for 9,400 beneficiaries in Yatiyantota town, Parussella, Mahawila and Pahala Garagoda areas in Kegalle District. The revised Total Cost Estimate is Rs. 180 million. Intake improvement & pipe laying works were completed. The necessary arrangements have been made for erection of package treatment plant fabrication work is in progress at central work shop. The physical and financial progresses at the end of 2015 were 85 % and 84 % respectively.

viii) Kiriella Water Supply Project

This project intends to supply safe drinking water to 8,000 beneficiaries in Idangoda, Kiriella areas in Ratnapura District. The Total cost estimate is Rs. 205 million. Stage I of the project was completed. The physical and financial progress (stage -1) at the end of 2015 was 100 % and 24 % respectively.

ix) Madola Water Supply Project

This project is to provide pipe born water to Madola, Vikumsinhagama GN Division under Awissawella WSS. The number of beneficiaries of the project is 2,000. Total cost estimate of the project is Rs. 132 million. The physical and financial progress at the end of 2015 was 61% and 43% respectively.

5.) Southern Province

i) Bentota WSS (2014-2016)

Objective of this project is to provide safe and reliable drinking water supply to the people living in Bentota Township and suburbs. 22 GND's are covered by the scheme and it is proposed to serve 18000 populations in the area. This project consist of supply of uPVC pipes fittings & specials for distribution main, DI pipes fittings & specials, DI/CI valves, Accessories, Manhole covers & surface Boxes; Laying of uPVC pipes fittings & specials fixing of DI/CI valves and accessories; supply & Installation of Booster pumps at Ambalangoda and construction of RM Office at Galle for Manager Galle. Funding source is LBF (NSB). Total Cost Estimate is Rs. 1,239 million.

Supply of uPVC/DI/Valves/fittings has been completed and 79 % of pipe laying works was also completed by end of the year. Construction of RM office and supply and installation of booster pumps has not been commenced yet. The Physical and Financial Progresses at the end of 2015 were 65 % and 31.4 % respectively.

ii) Gonapinuwala WSS (2013-2016)

Gonapinuwala Water Supply Scheme was commenced in the year 2013 for distribution improvement to at Gonapinuwala and suburbs. TCE is Rs. 350 million. And the number of beneficiaries are 20,800. This project comprises of supply of uPVC & DI pipes and laying of pipes in the area. Funding Source is Capital Budget.

Supply of uPVC/ DI has been completed. Pipe laying works are being currently going on along HIkkaduwa – Baddegama Main Road. Balance distribution system of by roads is awarded to carry out under Galle Cluster. However, LBF has not finalized and work not commenced. The Physical and Financial Progresses at the end of 2015 were 89 % and 16.6 % respectively.

iii) ***Baddegama WSS (2013-2016)***

Baddegama Water Supply Scheme was commenced in the year 2013 for distribution improvement to Baddegama and suburbs. TCE is Rs. 441 million and the number of beneficiaries are 33,800. This project comprises of supply of upvc pipes & DI pipes and laying of pipes in the area.

At present, Supply of PVC/DI pipes has been completed. Pipe laying works are being currently going on. RDA approval is to be taken to continue the PE/DI laying in highway access road. The Physical and Financial Progresses at the end of 2015 were 54 % and 85.3 % respectively.

iv) Dikkumbura WSS (2013-2015)

Dikkumbura Water Supply Scheme was commenced in the year 2013 for distribution improvement to Imaduwa and suburbs. Number of Beneficiaries are 17100while the TCE is Rs. 275 million. Funding source is capital budget. This project comprises of supply of uPVC & DI pipes and laying of pipes in the area.

Pipe laying of Imaduwa Town Area has been done. Distribution extension from Greater Galle distribution system is awarded to carry out under Galle Cluster. However, LBF has not finalized and work not commenced. The Physical and Financial Progresses at the end of 2015 were 62 % and 14.5 % respectively.

6.) Uva Province

i) Ohiya Water Supply Project

This is a new scheme which intends to serve 10,000 people in Hinnarangalla, Galedanda, Welimada, Landegama, Chandamaduwa, Mirahawatha, Guruthalawa, Mahathanna, Dabawinna in Welimada town and suburbs. Water source is Uma Oya with full treatment plant of capacity 4,000 cu.m/ day. The total cost estimate is Rs. 264.7 million and the physical and financial progresses at the end of 2015 were about 99% and 98.7 % respectively. Pipe laying works are to be terminated and recall under the distribution improvement.

ii) Monaragala Water Supply Project Stage II

This is an augmentation of the existing scheme to serve about 10,000 people in Monaragala town and suburbs covering Monaragala, Hulandawa Left, Hulandawa Right, Muppana, Jayasenagama, Madurakatiya and Sirigala. Water source is a stream through G-Lon estate with partial treatment of capacity of 2,850 cu.m/ day. The Total Cost Estimate is Rs. 154.8 million and the physical and financial progresses at the end of 2015 were about 100 % and 102.6 % respectively.

iii) Ambagasdowa Water Supply Project

This is an augmentation scheme to serve 17,750 people in Ambagasdowa and suburbs covering Karagahaulpatha, Madawela and Uwaparanagama areas. Water source is Bomburu Ella with full treatment of capacity of 3,000 cu.m/day. Total cost estimate is Rs. 382 million. The physical and financial progresses at the end of 2015 were 100 % and 96 % respectively and the augmentation

works to be started.

iv) Wellawaya Water Supply Project

This project intends to provide safe drinking water to 6,000 beneficiaries of Wellawaya, Kudaoya, Handapanagala, Yalabowa, Warunagama, Thellula and Athiliwewa areas in Wellawaya in Monaragala District. The total cost estimate is Rs. 250 million and the physical and financial progresses at the end of 2015 were about 99 % and 75 % respectively. Existing network to be connected to the newly built reservoirs and the tendering is in progress.

v) Badalkumbura Water Supply Project

This project intends to provide water to 22,000 beneficiaries in Badalkumbura area in Monaragala district covering Badalkumbura, Alupotha, Nakkala, Karawila, Ella, Hindikiula, Thanwatta and Mediriya areas. The total cost estimate is Rs. 124.4 million. The project has been completed in year 2015.

vi) Buttala Water Supply Project

This project intends to provide water to 38,250 beneficiaries in Monaragala area under Dayata Kirula program. The total cost estimate is Rs. 295 million. This project has been completed.

7.) Western Province

A.) Western North

I) Kirindiwela Water Supply Scheme

The project is planned to serve 8000 people in the Kirindiwela area and the project period is 05 years. Water source is Kelani river with full treatment The total cost estimate is Rs. 198 million The new treatment plant with capacity of 2750 cu.m /day was constructed at the existing treatment plant site premises at Pugoda and production is in Progress. Construction work of sludge drying bed is completed .Overall physical and financial progress as at the end of 2015 are 100 % and 100 % respectively

ii) Katunayake Water Supply Project - Stage I & II

The project is planned to serve 65,000 people in 27 GNDs in Katunayake – Seeduwa Urban Council and part of Katana Pradeshiya Sabha. Treatment plant of Raddoluwa WSS which has capacity 4,500 Cu.m /day and TNC Water Supply Project supply water for this Project .Water sources are Dardugam Oya for augmented Raddolugama WTP and Kelani river to KRB WTP. The total cost estimate was revised to 470 million. This Water supply scheme was constructed in two stages and distribution system was commissioned on 05th Feb 2014. Infilling pipe laying is in progress. The physical and financial progresses at the end of Dec 2015 were 100 % & 96 % respectively.

iii) Rathupaswala Water Supply Project

This project was implemented urgently to serve 53,409 people in 28 GNDs in Rathupaswala, Belummahara, Nedungamuwa & weliweriya area. As a short term proposal water is supplied by extending the transmission and distribution lines of TNC project and extending the distribution lines on Yakkala WSS. The total cost estimate for the project is 800 million for 140 km new distribution system and laying of 112 km had been completed by Construction Section of RSC(W/N) Office The Physical and financial progresses at the end of 2015 were 95 % & 55 % respectively.

iv) Udamapitigama Water Supply Project – Stage I

This project is planned to serve 9,500 people in 06 GNDs in Dompe DSD. This project supplied water from KRB WTP by extending the transmission and distribution lines of TNC project. The total cost estimate for the project is Rs. 75 million. This project was commissioned on 05th December 2014 and infilling pipe laying was completed by the Construction Section of RSC (W/N) office The physical and financial progresses at the end of 2015 were 100 % and 56 % respectively.

B.) Western South

i) Kalutara Integrated Water Supply Project - Stage II

This scheme was designed in order to extend water supply to Payagala, Maggona, Beruwala, Dharga Town, Bentota and Aluthgama areas to serve 210,000 people. Project was started in 2006. Water Source is Kalu Ganga with full treatment and capacity is 56,250 cu.m/ day. The revised Total Cost Estimate is Rs. 1,366 million.

The main objective of stage II is to improve the distribution system to Southern areas of Kalutara. Laying of 600 mm DI/HDPE 9 km pipeline from central junction to Magonna and laying 600 mm DI/HDPE pipeline from Magonna to Beruwala (5 km) are completed . In addition, to strengthen the distribution system of Kalutara areas, specially Gladiswatta, Akkara80 and Maggona, laying of pipes and rehabilitation of Maggona pump house are also completed.

The physical and financial progress at the end of 2015 were 98.5 % and 95 % respectively.

8.) Eastern Province

i) Kantale (Agbopura) Water Supply Project

This project meets daily requirement of 8,000 beneficiaries in Akbopura Town, Batukachchi, Sugar factory Road, Bathiyagama in Trincomalee district. The estimated Total Cost Estimate is Rs. 275 million. The physical and financial progress at the end of December 2015 were 100% and 95% respectively and where the original scope of the works were completed and the additional requirement by politician and public are going on and received Rs. 5 million under the allocation 2015 and decided to complete within end of 2016.

ii) Thambalagamuwa Water Supply Project

This project intends to provide safe drinking water facilities to 30,000 beneficiaries in 96 mile post, Galmetiyawa, Mallipatana, Sirag Nagar, Mera Nagar, Mera Nagar, Kaviladi in Trincomalee District. The Total Cost Estimate is Rs. 95 million. As major component, the Supply & Laying of distribution mains are completed and this activity was deleted from the scope of the works due to poor performance of the contractor. The physical and financial progress at end of 2013 were 100 % and 89 % respectively and no any allocation for 2015 and this project was terminated mutually due to poor performance of the contractor.

iii) Serunuwara Water Supply Project

This is a new project proposed to serve 9,500 beneficiaries in Sumedankapura, Serunuwara, Mahaveligama, Thanganagar, Kawanthisaipura in Serunuwara, Kallaru and suburbs. The Total Cost Estimate is Rs. 110 million. Physical and financial progress at the end of 2013 were 60 % and 45 % respectively, no any allocation for 2015 and the activities was abundant and the balance works were included under the local bank funding projects which consists of 27 % physical progress and 12 % financial progress.

iv) Dehiattakandiya Water Supply Project -Stage I & II

This project intends to extend the safe water supply in Dehiattakandiya to 16,000 new beneficiaries in Kadirapura, Bakmeedeniya, Ridiella, Sandunpura.Total Cost Estimate Rs. 300 million and most of the original scope of work was completed and additional requirement are going on. The physical and financial progress at the end of 2015 were 99 % and 95 % respectively and received the Rs. 10 million for 2015.

v) Transmission Main from Kanthale to Thampalakamam

This project is to transport water from Kantale WTP to Thampalakamam and Trincomalee Town. Total transmission main distance is 40km. Total estimated cost is Rs. 1,397.80 million and most of the works were completed. Physical progress and financial progress at the end of December 2015 were 100 % and 95 % respectively and received Rs. 76 million for balance works and retention.

vi) Wadinagala /Wan ela WS

This project proposed to serve 14,000 beneficiaries in Jayanthipura, Pansalgodella, Soorangala and suburbs with 750 cu.m water tower construction, distribution and transmission pipe laying . The total cost estimate is Rs. 808.50 million physical and financial progress at the end of December 2015 were 75 % and 50 % respectively and received Rs.152 million for balance works in 2015 and requested the balance fund for 2016.

vii) Water Supply projects for CKD areas

a) This project intends to extend the safe water supply in Dehiattakandiya DS Division with new beneficiaries Sooriayapokuna & Pussalavinna GN Division (Sooriayapokuna & Pussalavinna RWSS) with new pipe extension work and with new beneficiaries Sandunpura, Lihiniyagama and Mawanawela GN Division (Sandunpura, Lihiniyagama and Mawanawela RWSS) with rehabilitation works with total beneficiaries 8,711 and Total Cost Estimate Rs. 156 million in Ampara District and works are on progress. The physical and financial progress were 30% and 20% respectively.

b) This project intends to extend the safe water supply in Gomarankadawala DS Division with new beneficiaries (1,820) Backeemeegama GN Division (Backemeegama RWSS) with new pipe extension work and civil works. Total Cost Estimate Rs. 34 million in Trincomalee District and works are on progress. The physical and financial progress were75 % and 60 % respectively and also Installation of RO Plant in Schools, Hospital and Villages to be implemented for CKDu affected areas.

viii) Community Infrastructure Development Funds

This project intends to extend the safe water supply in Batticalloa district with new beneficiaries 14,000 with pipe extension and civil works in the GN Divisions such as Chenkalady, Eravur, Kannampuram, Mandapathady, Karaveddy, Arayampathi and Total Cost Estimate Rs. 134 million in Batticalloa District and works are completed. The physical and financial progress were 100 % and 95 % respectively.

9.) North Western Province

i) Mahawa/ Wariyapola/ Nikaweratiya Water Supply Project

This is a new project planned to serve 45,000 families in the area. TCE is Rs. 996 million. Nikawaratiya and Mahawa part of the project is completed and now functioning. Capacity of Nikawaratiya/ Mahawa scheme is 6,500 cu.m/ day and the water source is Magalle Wewa. Full treatment facilities are available in the scheme. Construction of Wariyapola scheme commenced in the year 2013. Capacity of the full treatment plant is 2,000cu.m/ day. Water source is Maguru oya. Wariyapola Wss was commissioned on December 2014 without completing the balance works for Chemical , Office building and Sludge Drying Beds due to the funding issues. The overall physical and financial progress at the end of December 2015 were 99 % and 99 % respectively.

ii) Ibbagamuwa Water Supply Scheme

This is a new water supply scheme to provide drinking water facilities to 11 GNDs in Ibbagamuwa DS division.The total beneficiaries of the project are 7,400. The total estimated cost of the project is Rs. 239 million. The capacity of the treatment plant is 1,500 cu.m/ day. The overall physical and financial progress at the end of December 2015 were 65 % and 88 % respectively. Due to the fund restrictions, balance part of the WSS is now handed over to "Pura neguma" projects.

iii) Dambadeniya Water Supply Scheme

This is a new water supply scheme in Dambadeniya DS division to covers 70 GNDs with a total estimated cost of Rs. 796 million. The total number of beneficiaries of the project is 51,835. The capacity of the scheme is 4,500 cu.m/ day. The overall physical and financial progress at the end of December 2015 were 65 % and 22 % respectively. Suitable funding source has to be identified to carry out the balance works.

iv) Divulgane Water Supply Scheme

This project is to provide pipe born water to Divulgane and Dalupothagama GN Divisions by dug well with a total estimated cost of Rs. 47 million. The no. of beneficiaries of the project are 1,800. The overall physical and financial progress at the end of December 2015 were 99 % and 61 % respectively. Scheme can be commissioned within next three months.

Projects in Pipeline

1. Greater Matale Water Supply Scheme

The pipe borne drinking Water Supply coverage in the Matale district is only 27 % and outbreak of water borne diseases such as cholera had become a common occurrence. The quality and specially the quality of drinking water have always been a major concern and have been issues for a long period in the Matale district. The present demand amounts to 55,00 cu.m/ day against the total production capacity of 22,500 cu.m/ day. This makes provisions of new domestic and commercial water connections impossible.

Greater Matale WSP will be covering seven divisional secretariats such as Matale, Ratota, Ukuwela, Pallepola, Yataatte, Naula & Abangangakorale. These seven DS divisions cover 260GNDs. About 352,507 people living around these areas will be benefited by this project. This makes provision of new domestic and commercial water connections impossible.

2. Polgahawela, pothuhera & Alawwa Integrated water supply project

Existing Polgahawela, Pothuhera & Alawwa Stage I Integrated water schemes are operated at its maximum capacity catering only 33 % of the present demand. Large numbers of residents are registered in waiting lists for new water connections Therefore; it is proposed to integrate these two schemes and improves as one scheme. Covering eight divisional Secretariats such as Alawwa, Polgahawela, werambugedara, Imbulgasdeniya, Kurunegala & Mallawapitiya. These DS divisions cover 172 GNDs.

This project will be benefited to a population 180,000 in year 2030. Further it will ensure a very reliable water supply to export processing zone at Polgahawela which will be an encouragement for the prospective investors. The project has been proposed to be implemented with Indian financing assistance.

3. Aluthgama, Matugama & Agalawatta Intergrated Water Supply Project

The main objective of the project is to provide drinking water to Divisional Secretariat areas of Kalutara, Dodangoda, Beruwala, Mathugama, Agalawatte and Urban Councils of Kalutara District and Bentota DS division in the Galle District. The existing source for Kalutara water supply scheme has not been sufficient and cannot be expended to cater future demands. Also this project has been formulated to avoid the salinity problems of the integrated kalutara WSS, The problem is receipt of saline water at consumers during dry seasons of the year. The total Population of 573,500 will be served by this project in year 2030.

4. Kandy North Water Supply Project

The main objective of the project is to provide safe pipe borne water supply facilities to northern part of the Kandy district which includes 6 Divisional Secretariats viz. Pathadumbara, Pujapitiya, Akurana, Harispaththuwa and part of Gangawata korale and Thumpane in the Kandy District which covers 230 km^2 of area. The pipe borne water supply coverage in Kandy North Project area is 45 %. The proposed project is to build a water treatment plant having capacity of 100,000 cu.m/ day and includes 28 nrs. of service reservoirs, 17 nrs. of pumping stations 86 km of Transmission pipelines and 411 km of Distribution pipelines. The Projected population in the year 2035 is about 450,000. The initial cost of the project is estimated as Rs. 14,300 million.

5. Gampaha Attanagalla and Minuwangoda Integrated Water Supply Project

The Project area consists of 397 km^2 enclosing Gampaha, Attanagalla and Minuwangoda Divisional Secretariat Divisions in the Gampaha District and few Grama Niladari Divisions in Meerigama DSD. During the recent past the proposed project area have under gone a rapid development with the rapid increase of human settlement, the increase in land development activities carried out by various private property developers and the expansion of Gampaha MC limits up to Yakkala area etc. The present coverage from NWSDB is 15 % and the requestshave received from various parties including political authorities to supply water to unserved areas to cater for the rapid development in the project area. The objective of this project is to provide safe and reliable drinking water to the areas of the Gampaha, Minuwangoda, Attanagalla and part of Meerigama DS Divisions. Also the Gampaha Attanagalla and Minuwagoda Integrated Water Supply Project is anticipated to supply water to uncovered areas in these three DS Divisions and also to improve the existing water supply facilities in the areas. The present served population in the area is 110,000. The Projected population in the year 2030 is about 579,580.

6. Kundasale - Haragama Water Supply Project

The Project will cover 136 GN divisions in Kundasale, Pathahewahta, Kandy Four Gravets and Gangawata Divisional Secretariat Divisions in Kandy District. At present, there are five water supply schemes maintained by NWSDB. It is reported that the capacity of all existing water supply schemes are not sufficient to fulfill the demand in the area. The quality of water in most of the existing water supply schemes is not up to the standards due to lack of proper treatment plants except NWS&DB schemes. Therefore, planning to fulfill the present and future demands for water supply is an essential and urgent task. The proposed project includes 50,000 cu.m/ day capacity of water treatment plant, 105,000 cu.m/ day capacity of Intake, 22 nrs. of water reservoirs, 67.6 km of raw water & treated water transmission mains and 380 km of distribution system. The Projected population in the year 2038 is about 251,387. The initial cost of the project is estimated as Rs. 23,635.24 million.

7. Anamaduwa Integrated Water Supply Project

Proposed Anamaduwa Integrated Water Supply Project covers Anamaduwa, Arachchikattuwa, Mahakumbukkadawala, Mundalama, Nawagattegama, Pallama, Puttalam and Kotawehera DSDD and Kanuketiya GND of Rasnayakapura DSD which will be implemented in three phases. People in the area suffer from safe drinking water due to poor quality and scarcity of ground water. There are around 85 Community Based Organizations (CBO) operated water supply schemes, but they also have some quality and quantity problems, specially hardness and salinity. Anamaduwa and Udappuwa schemes are the only two NWSDB operated water supply schemes.

To overcome this situation, Anamaduwa Integrated WSP has been planned to implement in three phases. The phase I includes 11,000 cu.m/ day capacity of water treatment plant at Inginimitiya, 12,500 cu.m/ day capacity of intke at Inginimitiya, 1.5 km of raw water transmission main and 328 km of Distribution network. The Projected population in the first phase is about 82,000 and the initial cost of the project is estimated as Rs. 9,722 million.

Planning and Design

WATER SUPPLY SECTION

1)Western Section

Planning Works Carried out During 2015

The western sub section of Planning & Design Division has carried out the Planning Works of the following projects.

- Preparation of Feasibility Report for Jubilee Reservoir Area Service Improvement Project.

Proposed project comprises construction of 22,000 cu.m Capacity Ground Reservoir at Jubilee and Supply & Laying of pipes for Transmission & distribution system improvement and other associated works.

- Preparation of Feasibility Report for Augmentation of Rajasinghe Jalagaraya, Supply & Laying of Jubilee Transmission Main & Other Related Works

The project is proposed to increase treatment capacity by 50,000 cu.m/ day. Proposed project comprises construction of additional water treatment units, supply and laying of Transmission and distribution system and other associated works.

- Preparation of Feasibility report for Kalu Ganga Water Supply Project Phase – II

Proposed project comprises 280,000 cu.m/ day intake at Kadana and 210,500 cu.m/ day Treatment Plant, DI transmission main, 500 km long distribution network and construction of Towers and Ground reservoir.

Detailed Design Carried out During 2015

- Detailed design and coordination of construction activities of office building at the head office.
- Design of booster pump houses & pumping system improvement for Kalugaga Water Supply Scheme at Keselwatta and Kiriberiya, Panadura.
- Detailed design and construction coordination of 1000m3 Ground Reservoir and pump house for Katunayaka International Air Port and BOI.
- Network modelling and detailed design internal distribution network of Army Camp at Panagoda
- Design of 30,000 cu.m Ground Reservoir pump house at Gothatuwa and 1200 mm dia transmission main from Gothatuwa to Maligakandha for Greater Colombo Water and Waste Water Management Improvement Programme (GCWWIIP).

Design Review work carried out during 2015

- Rehabilitation of Labugama Water Treatment Plant and rehabilitation of Kalutuwawa Water Treatment Plant.
- Gampaha, Attanaglla and Minuwangoda Integrated Water Supply Scheme.
- Towns East of Colombo District Water Supply Project Package 1&3
- Colombo City Water Supply Improvement Project.

2) Southern/ Eastern Section

Planning Works Carried out During 2015

- ***Ruwanwella Water Supply Project***

Preparation of RFP document for consultancy works and design build works for Ruwanwella WSP which include Intake at Kelani Ganga, Treatment Plant of 4000 cu.m/ day capacity, 3 nrs. Water Towers and 1 nr. Ground Reservoir was completed with the incorporation of EDCF comments and obtained their concurrence. RFP documents were issued to bidders and clarifications were also issued for all the quarries raised by bidders. Engineer's estimates were prepared for both consultancy works and design build works.

- ***Pambahinna Water Supply Scheme***

Preparation of Tender Document for Construction of Pambahinna Water Supply Schemewas carried out.

Proposed Pambahinna Water Supply Scheme comprises of 4000 cu.m/ day capacity Water Treatment Plant, 4400 cu.m/ day Capacity Intake, 920 cu.m Ground Reservoir, 300 mm dia. DI Raw Water Main (3.6 km), 100 mm dia DI Transmission Main (2.3 km), 100 cu.m Ground Reservoir and 37 km long HDPE Distribution System (400 mm dia. - 90 mm dia.), Office Building, Quarter etc.,

- ***Siyambalanduwa Water Supply Scheme***

Preparation of Tender Document for Siyambalanduwa Water Supply Scheme was carried out.

- ***Kolonna Water Supply Scheme***

Preparation of Tender Document for Kolonna Water Supply Scheme (Panamura Zone) including preparation of BOQ and detailed drawings was carried out.

Detailed designs carried out during year 2015

- ***Pambahinna Water Supply Scheme***

Pambahinna proposed Intake location

Soil Investigation, Surveying and detailed designs including Hydraulic, Structural and Mechanical & Electrical designs for construction of Pambahinna Water Supply Scheme were carried out. The scheme comprises of 4000 cu.m/ day capacity Water Treatment Plant, 4400 cu.m/ day capacity Intake, 37 km long Distribution System, 300 dia. DI Raw water main, 100 dia. DI Transmission main, 920 cu.m Ground Reservoir, 100 cu.m Ground Reservoir, Office Building, Quarters etc.,.Preparation of detailed drawings and preparation of BOQs were also carried out.

- ***Kirindioya Water Supply Scheme***

Detailed designs were carried out for improvements ofKirindioya water supply scheme. Hydraulic and structural designs of Flocculator, Plate Settler, Rapid Sand Filter and Chemical Feeding System were carried outand preparationof detailed drawings and BOQs were completed.

- ***Ranna Water Supply Scheme***

Design for improvements offlocculatoratRanna Water Supply Scheme was completed.

- ***Bandagiriya Water Supply Scheme***

Detailed designs to feed existing Bandagiriya Water Supply Scheme from Andaragasyaya Ground Reservoir were completed. Hydraulic designs of gravity transmission main from Andaragasyaya Ground Reservoir of Ruhunupura Water Supply Project to Bandagiriya sump and Keliyapura Tower were carried out.

- ***Siyambalanduwa Water Supply Scheme***

Detailed design of Siyambalanduwa Water Supply Scheme including 4000 cu.m/ day Conventional WaterTreatment Plant,Pontoon Intake, 450 cum water tower, site works for water tower site, 225 m3 Ground reservoir and site works, 03 Nrs. Quarters, OIC office building etc., Treatment Plant include Aerator,Flocculator, PlateSettler, Rapid Sand Filter,Activated Carbon Filter, 500 cu.m Ground Reservoir,Pump House and Sludge Treatment process (Sludge RegulationTank, SludgeThickener and Sludge Drying Bed). Also, design of Raw Water Transmission main, Treated Water Transmission main,Treated Water Gravity main and Distribution main.

Siyambalanduwa Proposed Intake location

- ***Haldumulla Water Supply Scheme***

Detail design of Haldumulla Water Supply Scheme including 3000 cu.m/ day Conventional Water Treatment Plant including Aerator, Flocculator, Plate Settler, Rapid Sand Filter and 500 cu.m Ground Reservoir and Sludge Treatment Process. Also include 02 nrs. Ferocement Tanks, 225 cum Ground Reservoir, Pump House, 225 cu.m Ground Reservoir, 03 nrs. Quarters, OIC Office Building etc., and design of Raw Water main, Treated Water Transmission mains and Distribution mains.

- ***Un-served areas of Ampara Phase III Water Supply Scheme***

Prepared design drawing for balance pipe networks, Yard piping for un-served area of Ampara Phase III.

Design of distribution system for un-servered areas of Ampara district for Ampara Distribution Networks Water Supply Project.

- Design of Dhadayanthalawa Distribution System – 132 km
- Design of Central Camp Distribution system – 96 km
- Design of Paragahakalle Distribution system – 61 km
- Design of NamalOya Distribution System – 107 km
- Design of Inginiyagala Distribution System – 175 km
- Design of Himdurawa Distribution System - 43 km
- Design of Thottama Distribution System - 110 km

Review of Ancillary Building and Sump & Pump House (Piyangala) for Ampara Distribution Network Water Supply Project.

Detailed Designs Carried out During year 2014

- Continued Design Review of Monaragala – Buttala Integrated Water Supply Project.
- Continued Design Review of Badulla - Haliella Water Supply Project.
- Review and update of Feasibility Reports for Siyambalanduwa Water Supply Scheme, Valachcheni Water Supply Scheme, Haldumulla Water Supply Scheme and Preparation of Tentative Cost Estimates for Siyambalanduwa Water Supply Scheme and Haldumulla Water Supply Scheme.
- Review of conceptual designs and detailed designs of 6500 cu.m/ day Treatment Plant, Intake, Ground Reservoir, Elevated Water Tower Distribution System & Transmission Main for Mahiyanganaya Water Supply Project.

3) North/ North Central Section

Planning Work carried out during 2015:

Planning of proposed Mullativu water supply scheme (under World Bank funds).

Planning of Mulankavil water supply scheme (under World Bank funds)

Planning of Deduru Oya water supply project (EDCF – Korean Exim Bank funds), preparation of Consultancy services RFP, Design Build contract document, obtaining EDC & SCAPC approvals, conduct Pre-conference, pre-bid meetings etc.;

Design Review work carried out during 2015:

Review of conceptual designs & detailed designs of Weir Structure & Treatment Plant of Greater Kurunegala Water Supply & Sanitation Project.

Review of Transmission and Distribution network designs and conceptual designs and working papers of Water Treatment Plant of JICA Anuradhapura North Water Supply Project Stage 1.

Detailed Designs carried out during 2015:

Designs of Roughing Filter, Tower and Sump, Pump House & Ancillary Buildings for Mullativu water supply scheme (under World Bank funds).

Designs of Distribution Network and Water Tower Buildings for Mulankavil water supply scheme (under World Bank funds).

4) Documentation Section

(i)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 2015 has been summarized as follows:

- Preparation of 5 new Standard Bidding Documents.
- Revisions of 51 Standard Bidding Documents.
- Preparation of 4 new Specifications.
- Preparation of 3 new Pre-Qualification Documents.

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 16 meetings.

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

(ii) Design Manual Updating Sub Section

Design Manual section of P&D undertakes updating/preparation of Procedure/Design Manuals of NWS&DB. During year 2015 following works have been carried out under the guidance and instructions of the Planning & Design Manual Review Committee (PDMRC).

- PDMRC comments have been included into the P1 Manual. Discussions have been held following to incorporating the Review Meeting comments .Chairman (PDMRC), AGM (Doc) and CE (Design Manual) have participated for the discussions. The Manual shall be further discussed to incorporate relevant financial analysis scenarios in par with government funding strategies.
- Six numbers of Design Manual Review Meetings (10 days) on D3 –Manual have been held. Chapter -5 –Unit Processes is being reviewed. Other chapters to be reviewed by PDMRC
- Third draft of the Pre Stressed Concrete Manual: for Circular Tanks : D10 has been prepared with the comments of Design Manual Section. This Manual has been prepared by the Japanese contractor ABE Nikko under the JICA assistance It has been circulated to PDMRC members for their comments and it shall be reviewed by PDMRC.
- First draft of the D4 Manual has been completed in July 2015 and to be reviewed by PDMRC.

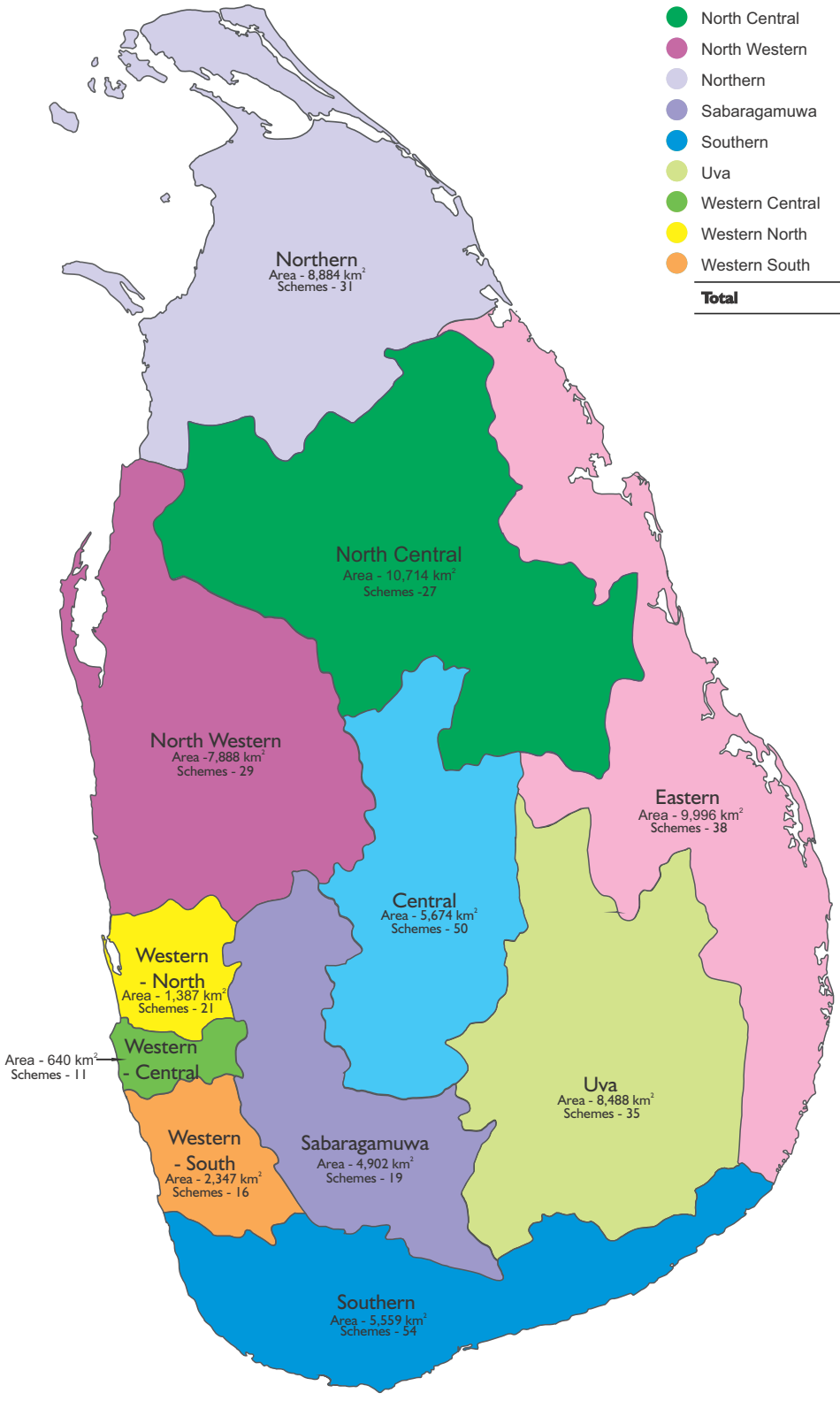
(iii) Quantity Surveying Sub Section

The Quantities work includes the preparation of BOQ of all the Design Works carried out by the P&D Section of Head office, Preparation of Engineers Estimates, Rate Book, Water & Sewerage work studies to prepare work norms for pricing of work items and reviewing of Engineers Estimates prepared by Projects.

During year 2015 this Sub Section has prepared 95 BOQs, 25 nos. of Engineers Estimates for local funded contracts and 03 nos. of Engineers Estimate for Foreign Funded Contracts and cost proposals for Design & Build Project for partially treated Water Supply Schemes while preparing, compiling and distribution of Annual Rate Book 2015 for Water and Annual Rate Book for Sewerage. Site visits were done for preparation of BOQ and Engineers Estimate for some projects. Involved in price negotiations with Contractors for some projects.

Regional Support Centres

Province/ RSC	Connections
Central	236,053
Eastern	185,303
North Central	100,668
North Western	69,183
Northern	14,834
Sabaragamuwa	94,784
Southern	293,330
Uva	813,08
Western Central	421,318
Western North	237,261
Western South	219,799
Total	**1,953,841**



REGIONAL SUPPORT CENTRES

New projects are originated from the 11 Regional Support Centers of the NWSDB. As representatives of the Project Review Committee, the staff of RSCs' closely coordinate the planning and regulatory procedures of new projects. Also, the existing WSSs and Sewerage Schemes are Operated and Maintained by them. Infrastructure Development, Reduction of Non Revenue Water, Energy Management and Institutional Development works and performance in water supply and sanitation sector of the RSCs have been included under appropriate sections. Some other important information which are not included in aforementioned sections are summarized below.

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. Many special social events took place as usual in the RSC-WC region in 2015. Programmes to celebrate Sinhala and Hindu New Year, turning of new calendar year on January 1st, Vesak and Poson Festivals were arranged. Religious activities such as Bana programmes were also conducted by the RSC (WC) welfare society.

With Non Revenue Water (NRW) reduction activities (valve tracing, pipe line tracing, illegal usage detection, leak surveys, internal leak detection) carried out within the region, NRW could be kept at 46.5% in Colombo city and at 35.2 % in the whole region.

Total length of pipe line extensions and common line improvements in fast developing Maharagama manager region is 195.8km compared to 30.0 km in the previous year. Same in CCS is 84.4 km and the figure for Kotte is 24.5km. More than 8,800 water connections were transferred to the new lines during these works improving the condition of service to the consumers.

Hanwella Water Supply scheme-Augmentation Pipe laying works along High level road, Godagama Improvements, Jaltara-Ranala WSS Phase I Stage II Project (Atigala East, Atigala West and part of Batawala and Panaluwa Grama Niladhari Divisions in Homagama Divisional Secretariat area) which were ongoing work last year are now complete. Further distribution improvement and extension work were carried out during the year by the Construction Section of the RSC-WC in Battaramulla, Akuregoda, Mirihana,Kaduwela, Kolonnawa, Moratuwa and Piliyandala areas completing 18km which is approximately 50% of the total planned work.

A total of 18,766 new connections were given in RSC-WC region during the year. This is a 100 % achievement of the target as the plan was to give 18,481 connections. The target was achieved by giving connections as follows. Manager (CCN) - 921, Manager (CCS) - 672, Manager (Kotte) - 5775, Manager (Maharagama) – 10923, Manager (NRW) – 451 and Priority Section – 24.

Construction of the new post tensioned 22,000 cubic meter reservoir at Maligakanda and connected lines, complete renovation of Elli House old reservoir (cell 1and 2), construction of new valve house and chlorinator house for Elli House reservoir, cell 1, 2 and 3 and landscaping work there, improvement of stores and renovation of chlorinator house at Maligakanda for Manager Colombo City North were done in year 2015. Many other minor development activities were carried out by the Operation and Maintenance Managers with the funds available to them to improve infrastructure facilities.

Selected employees of all categories were sent for scheduled in-house, external and foreign training programmes to improve their productivity during work. Energy saving activities such as changing of pumping hours in pump-houses more towards off-peak hours (Eg; Maharoof Tower – CCS) were carried out in all manager regions. Meter reading audits, defective meter replacement work were carried out throughout the region to improve billing accuracy and the quality of service to the consumers.

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 2015. RSC-WS office was relocated ot a newly constructed building at No. 07, Angulana Station Road, Angulana under funds the arranged by KWGSP.

RSC (W-S) office achieved 3rd place in the National Productivity Awards – 2014 held by National Productivity Secretariat for the year 2014.

Special proramme for positive thinking, attitude changing, Quality circle tools of productivity improvements, Pririth Chanting on 1st of January, New Year, Vesak and Poson festival celebrations. “Sonduru Adaraya” Musical Therapy Programme. Vesak Dansala at RSC –WS, Christmas celebration, an alms giving with Pirith chanting programme for RSC-WS new office and establishing a Buddha states at Panadura Mananger's Office were arranged in the RSC during the year.

In addition with the funding from Greater Kandy Water Supply Project RSC (WS) was arranged two days Plumber Training Programme with Practical Session for outside person who engaged in the industry.

Many NRW reduction activities were carried out within the region (RSC-WS). And the NRW was reduced by 2.2 % in Panadura-Horana Region, 1.2 % each in Dehiwala and Kalutara Region even continuing of more road rehabilitation projects during the year 2015.

Water quality surveillance and water security activities were carried out in several areas including few RWS

schemes and water safety plan all modules were completed 04 Water Supply Schemes (Matugama-Wettewa WSS, Panadura Zone - 2 Distribution System, Bobmbuwala-Pilaminawatta WSS, Ingiriya-Nimalagama WSS) and seven WSS are completed up to Module 5 (Dehiwala Zone E&F, Moratuwa Zone A, Beruwala WSS, Aluthgama WSS, Panadura Zone 3 and 4) 152 nrs. of RWS Schemes were being implemented within the region. Total nrs. of beneficiary families are 14,248.

Furthermore pipe line extensions for a total of 96km were completed which consists of 37 km in Kalutara Region, 54 km in Panadura-Horana Region and 5 km in Dehiwala Region. Many rechargeable and rehabilitation activities also carried out in all the regions throughout the year. Also RSC (W-S) is conducting new connection accelerated and pipe laying programme under the 3.5 billion connection enhancement with Local Bank Funding project and funds under Utilization of Kaluganga savings.

During year 2015, 250 mm diameter DI Pipe Pumping Main for Maggona Pump House to Maggona town was implemented using verification survey-prestreosed concrete tank funds. And also Beruwala precast tank construction was started. Pipe laying work Aluthgama-Mathugama road under Kalutara intergrated water supply scheme stage – II was implemented during the year 2015.

The Special Investigation Unit was inspected 1,016 nrs. of illegal connections and was able to final out 187 nrs. of illegal connections during the year 2015. Out of those 187 nrs., 83 nrs. are within Dehiwala area.

Western - North

Balance work at Katunayake – Seeduwa WSS, Rathupaswala WSS , Udamapitigama WSS & leak repair of Ground reservoir at Saunders place, were done under capital funded projects.

AC Pipe replacement at Dalupitiya Road and Handala Elakanda Road, repairing of reported leaks in distribution systems, replacement of DI/CI valves & washout valves and installation of flow meters and Bulk meters were some of the NRW reduction activities carried out in the year 2015. NRW monitoring work was carried out in Negombo area. 23 DMAs out of 29 total estimated DMAs were established. WAM offices were started at RSC (WN) Office and Gampaha Manager office and are functioning properly. In parallel to WAM programme, hydraulic modeling work of the distribution networks are in progress.

Many energy saving activities were carried out throughout the year. Installation of power improvement capacitors for Production Plant at Bambukuliya and Negombo Booster Pump Station at Negombo were completed successfully during the year.

Training for corporate membership recognition of Institution of Engineers Sri Lanka (IESL) was obtained and two chartered engineers were qualified during the year 2015. Construction of Area Engineer (Kelaniya) Office, renovation of existing 2 nrs. Quarters and Security Office at Church hill and security office at Aniyakanda were completed during the year 2015. Organization of awareness programme on Ground Water Conservation, Orientation programmes for newly appointed officers/ workers, NVQ certificate programme for clerks and pipe fitters, Commercial activities for Engineering Asistants, workshop for executives on supplies and material management on supplies and outside pipe fitter programme funded by Greater Kandy Water Supply Project were some of the Institutional development activities carried out during the year 2015. It is in the process of obtaining Accreditation of SLAD for the Regional Laboratory and fundamental testing was implemented.

A new bore hole of capacity 800 cu.m/ day was found for catering of Divulapitiya WSS.

Orders were made for digital instruments, flow meters, portable generators, IT equipment, chemicals and equipment for waste water analysis. Tenders were called for replacing of uneconomical pumps at Divulapitiya WSS, Gampaha WSS, Minuwangoda WSS and 100 KVA stand by generator for Ranpokunawatta Treatment and CCTV camera system for RSC(WN) Office.

Pipe laying at Kahatana road, Parakadukulla road & pipe line extensions of Minuwangoda WSS, Udugampola WSS, Pipe relocation for Outer Circular Highway, Kandy road etc. were the rechargeable work carried out during the year.

Construction of 1000 m3 capacity reservoir and pump house for Katunayake Air Port/ BOI water supply improvement project under JICA funds are in progress and the overall progress for the year 2015 is 65 %.

Detailed designs were done for Divulapitiya WSS. Structural designs were done for Area Engineer Office at Kurana and Stores building at Kelaniya. Design was done for Pahala Yagoda Water Supply Project.

Construction of stores & work shop for Bambukuliya WSS were completed during 2015 and commencing the construction of stores at Katana for Construction Section (WN) are the progress of rehabilitation and stores improvements carried out in the region.

Rural Water Supply & Sanitation activities such as Meethirigala & Ranwala new rural water supply schemes, improvement of sanitary facilities, laying of pumping main and pump house at Haloluwa, construction of package plant and pumping main at Nugedolawatta, installation of pumps at Haloluwa and Nawana, etc. were done.

A total number of 16,771 new connections were provided during 2015.

Preparation of Water Safety Plans for Negombo Water Treatment Plant and Ja Ela distribution system covering the whole region, 32 km of pipes of distribution system

was carried out under Local Bank funded projects.

Southern

Many special events were taken place during the year 2015 in the RSC such as health programme, "Positive thinking" awareness programme, dental clinic for staff, field trips, plantation programme, cricket tournaments and some awareness programmes for the school children. Relocating the water meters and sealing the defective meters, improvements to new connection practices, NRW measurement with adequate accuracy, reduction of leakage, distribution improvements, ensuring the quality of materials used and disconnecting illegal connections were some of the NRW reduction activities carried out throughout the year.

Furthermore, under energy saving activities, installation of Horizontal Split Casing Double Suction pumps for Kataragama Water Supply Scheme, 02 Nrs. Centrifugal Pumping Sets and accessories for Ranna (Yaya-20) Water Supply Scheme, 03 nrs duct foot type submersible pumping sets, one floor mounted motor control panel having three nrs VFDss to operate three nos duct foot pumps at intake Kattakaduwa of Ranna Water Supply Scheme, VSD for Hapugala, Mahagoda and Kowlhena Water Supply Schemes in Galle Region, Supply of ABC cable for Debarawewa intake has saved energy worth of Rs 1.3 million per month. Other activities such as supply and installation of end suction vertical delivery multi-stage centrifugal pumping sets & accessories for Agunukolapelassa Water Supply Scheme as well as Supply and installation of 363 kVA, 235 kVA, 179 kVA, 52 kVA switch mode capacitor banks for Galle region are in progress.

Water Quality surveillance, water security activities and water safety plans were carried out in Wakamulla, Tangalle, Kirinda – Puhulwella, Matara group, and Pitigala Water Supply Schemes. Furthermore pipeline extensions were carried out for a total of 163.3 km which includes 60 km in Galle region, 8.8 km in Matara region and 94.5 km in Hambantota region.

Development Activities

- Projects in Pre- Feasibility Stage

Greater Galle WSS which includes, Extension for hilly areas from Greater Galle WSS i. e. Kotigala Kanda, Akmeemana Kanda, Kurunda Kanda, Hiyare Kanda, Annasiwathugoda Kanda, Thalgampala, Nagoda WSS, Waduramba WSS are under preparation of feasibility reports. It is proposed to upgrade transmission main of Baddegama Integrated WSS. Proposal is prepared to improve water quality of Pitigala WSS. Feasibility report is prepared for Deiyandara WSS. Nadugala wss, Kadduwa Intake proposed to be upgraded. Proposal for capacity improvement of Lunugamvehera, Tissamaharama, Sooriyawewa & H'tota Integrated WSS was prepared.

Proposals for Pitigala, Neluwa, Muruthawela, Angunakolapellesa, Tissamaharama, Bundala & Kirinda, Kirindioya sent to Europian Union. Proposal for quality & capacity improvement of Kirinda , Bundala and Angunakolapellassa WSS were prepared. Proposed to Supply and laying of 300mm distribution system to feed industrial demand of Hambantota port business ventures and Gonnoruwa Ketanwila distribution.

- *Projects in Feasibility Stage*

Augmentation of Pitigala WSS, Neluwa WSS, Relaying of distribution pipes in Galle MC area WSS, Imaduwa WSS, Water Supply to Karandeniya area, Greater Galle WSS Stage III which includes 32,000 cu.m/ day treatment plant at Hapugala, Yakkalamulla WSS (construction of 1,000 cu.m/ day treatment plant at Yakkalamulla), Greater Galle WSS (Install high capacity pump at Hapugala intake), Galle WSS (Check possibility to pump additional capacity available at Wakwella T/P to Mahagoda reservoir), Matara Stage IV Water Supply Project, Morawaka WSS, Augmentation of Urubokka WSS , Augmentation of Deniyaya WSS, Middeniya Angunakolapellessa Integrated WSS, Weeraketiya Stage II WSS (Rehabilitation of Treatment plant, construction of intake and distribution improvements for the Muruthawela WSS), Barawakumbuka and Rote WSS, Kirama Katuwana Integrated WSS (Kirama Katuwana Integrated WSS using Kekirioboda Reservoir), Ruhunupura WSS Stage II (Preparation of feasibility report for construction of 17,500 cu.m/ day treatment plant at Rediyagama), quality & capacity improvement of Tissamaharama WSS are in feasibility stage.

- *Projects in Design Stage*

Augmentation of Uragasmanhandiya WSS (TEC Rs. 269.62 million), Implementation of Dikkumbura distribution system (TEC Rs. 269.4 million), Implementation of Gonapenuwala distribution system (TCE Rs. 348.94 million), Improvement of Baddegama WSS (Distribution system) (TCE Rs.1364), Implementation of Bentota WSS (TCE Rs. 789.3 million), Weligama WSS (Supply and laying of new distribution system to improve high elevated areas by in-cooperating Galkaduwahena reservoir TCE Rs. 232 million), Matara Stage IV Water Supply Project (Preparation of EIA Report & Consultancy for study and design Salinity barrier -TCE Rs. 20 million), Improvement of Malimbada Treatment Plant (TCE Rs. 300 million), capacity improvement for Sithulpawwa WSS (TCE Rs. 138 million) in design stage.

North Central

30 numbers of water supply schemes are in operation in the North Central Province up to 31/12/2015 providing 100,122 nrs. of connections. Number of connections given in the year 2015 alone is 8,222. Billing Target up to Nov. 2015 was Rs. 759,583,000.00 and achievement at the same was Rs. 772,585,000.00. Collection target up to Nov. 2015 was Rs. 765,262,666.00 and achievement at the same was Rs. 821,480,000.00

Anuradhapura Regional Office was awarded with 1st

Place at the World Water Day Program – 2015

Laboratory facilities & Water Quality activities have been improved to obtain ISO-17025. Some water quality parameters are higher than the permissible level (eg. Alkalinity, Hardness, fluoride etc.),since all the schemes in Northern part of North Central province are supplied with ground water sources and surface water of Malwathu Oya. Due to inadequate yield in wells in drought period it was unable to ensure 24 hrs supply in most of the water supply schemes. Water Safety Plan & Post Assessment of Water Safety Plan for Thuruwila WSS was completed. Water Safety Plan Auditing with the collaboration of WHO for Thuruwila WSS was completed & Water Safety Plans for Gallella, Nuwarawewa, Ihalagama, Sacred City and Eppawala Schemes were being prepared and necessary training for the relevant staff was given within three consecutive days in Anuradhapura.Relevant staff for above task was identified and initial training was given. 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.

Productivity Improvement Activities such as improvements of laboratory, repairs of regional stores were carried out. Development of pumping capacity and treatment facilities at Anuradhapura North, Sacred City, Thambuttegama & Minneriya is in progress. Achieved the NRW reduction of 17.5 % during the year 2015, as a result of identifying 11,558 numbers of leaks & rectifying 11,520 out of that, identifying 5776 number of defective meters and rectifying 5,720 out of that. Correcting 2,995 numbers of estimated bills and 11,846 numbers of zero bills and acquiring 53 numbers of connections with arrears over Rs. 50,000.00 bills.

Installation of 65 numbers of Reverse Osmosis (RO) water purification plants by Chronic Kidney Diseases (CKDu) prevention unit of NWSDB in the Divisional Secretariat Divisions (DSDs) of Rambewa, Madawachchiya, Kebithigollewa, Padaviya, Horowpothana in Anuradhapura and DSDs of Dimbulagala, Medirigiriya in Polonnaruwa Districts which have been identified as CKDu preventive areas. 26 numbers out of the total of RO plants in Anuradhapura district have been installed in collaboration with the Private Organizations. As a special programme of CKDu, a school programme was initiated in 2014 and 83 numbers of schools were covered by providing suitable capacity RO plants during the year 2015 in same DS divisions.

Several project appraisal reports were prepared by the Sector planning section. Pre-Feasibility Reports were Prepared & received NPD approvals for Mahawilachchiya WSP, Mihintale WSP, Palugaswewa WSP, Eppawala WSP & Somawathiya WSP. Plant design-build document was prepared for Towns East of Polonnaruwa WSP. Pre-Feasibility Reports were prepared and waiting for NPD approvals for Rajanganaya Nochchiyagama WSP & Manampitiya WSP

Ground water section carried out 56 Hydrological Investigations, 04 feasibility studies, 03 hand pump rehabilitations, 25 hand pump repairs, 138 well flushing, 03 HPTW drilling and 12 PWs drilling during the year 2015. Total value of work done for the year 2015 is Rs. 16 million. 87 million of rechargeable funds utilized in year 2015 for different projects.

Pipeline extensions have been done for Anuradhapura and Polonnaruwa for a length of 250 km within the range of diameters from 63 mm to 280 mm.

Under the Energy Saving Activities the tariff category of Anuradhapura & Polonnaruwa district was rearranged by discussing with CEB, Monthly electricity cost was reduced by minimizing peak hours operation for water supply operation wherever possible. New raw water pumping systems have been installed in Minneriya WSP & Ipalogama WSP as an energy saving purpose.Monthly energy consumptions of WSSs were continuously monitored. Under the energy efficiency improvement programme of the NWSDB, detailed energy auidits were conducted during the year 2015, for selected pumping equipment of the schemes of Minneriya Intake, Kalawewa Intake (New) & WTP, Thambuttegama Intake (New) & WTP, Medirigiriya Intake (New) & Galnewa & Bulnewa Intake & WTP Bore hole pumping stations of Kahatagasdigiliya, Horowpothana, Medawachchiya & Habarana, jointly with the staff of the M&E services division, Rathmalana.

Two day Stress Management Training program, Workshop on fire protection activities, Medical Camp for CKDu and testing blood sugar/cholesterol & Eye Clinic were also carried out during the year 2015.

North Western

There were many Special events taken place in the RSC during the year. A programme was commenced to supply safe water to CKDU prone areas. Supply and installation of 100 rainwater harvesting tanks among CKDU patients in Polpithigama, Galgamuwa & Giribawa DSDs, supply and installation of 147 RO plants for schools in CKDU prone areas in Kurunegala district and purchasing 1000 nrs. of 20 l canes for 500 families to collect water from RO plants were done under this programme.

Another programme was commenced under local bank funding to enhance the connections in Mahawa, Nikaweratiya & Wariyapola DSDs in which 360 nrs. of water supply connections were provided.

Targeting NRW reduction, replacement of valves and fixing of bulk water meters in problem areas were carried out which brought the NRW into 12 % in year 2015. Replacement of inefficient pumps at Rambadagalla, Alawwa, Polgahawela, Dankotuwa, Puttlam(low lift), Wariyapola (low lift) water supply schemes, Minimizing peak hours operations at possible WSS and reducing the maximum demand of WWS by

arranging separated operation of pumps and replacing capacitors were conducted to reduce the electricity usage as energy saving activities.

Purchasing of pipes & fittings were limited by using available materials to reduce the stock level and there are no additional quantities of stocks in the stores at the end of year 2015.

A Customer Satisfaction Survey was initiated to develop the CSI (Customer Satisfaction Index) within the RSC. A staff training & development database was developed for the monitoring efficient training programme.

Water supply schemes except Kurunegala, Nikaweratiya, Alawwa, Mahawa. Polgahawela, Galgamuwa, Udagama & Ambanpola are facing water quality issues. Among the schemes with unsatisfactory water quality, urgent water quality improvement is required in Rambadagalla, Hettipola,Andigama, Wariyapola, Ogodapola, Dankotuwa and Dodagaslanda

Preparation of water safety plans were being carried out actively in the RSC. Dankotuwa and Polgahawela WSSs are in this process and two CBO(Community Based Organization) WSSs are also working for the preparation of WSP(Water Safety Plan) for their schemes. The laboratory facilities and the water quality activities have also been improved and working toward ISO 17025.

Construction of rural water supply scheme at Samanalathenna was completed and the construction of rural water supply schemes at Madithiyawa, Kotakanda, Dedurunadeegama, Pallehorombuwa and Nelligala commenced in year 2015 are in progress.

Under Extension & Infilling, Divulgane pipe works are 99%completed under capital funds and Infillings & extensions at Ibbagamuwa & Dambadeniya WSSs are under construction.

Detail design & documentation for rural water supply schemes in Agarawatta & Randenigama area were completed under rechargeable funding from Department of National Community Water Supply and investigations were done for deep well constructions for Madige Midiyala, Thoranegedara and Ambukkagama under Department of National Community water Supply.

Under disaster preparation and disaster risk reduction activities, two bowsers, plastic water tanks and spare pumps for intakes are being kept standby to meet flood/drought situation in the region and there is an operational plan for maintaining residual chlorine in WSSs at a flood situation in the region.

Project proposals were prepared to increase the pipe borne water supply coverage in the region and RFPs have been issued for Melsiripura and Galgamuwa WS projects for local bank funding.

Productivity Development Programme was initiated in RSC (NW) as per the instructions given by the General Manager and necessary arrangements made to apply for the National Productivity awards in 2014 (Application submitted in June 2015). Five applications were submitted by Regional Support Centre (NW), Ground Water Office (Wariyapola), Regional Lab(Kurunegala), Narammala Water Supply Scheme & Wariyapola Water Supply Scheme. At the competition following awards were received in December 2015.

Regional Support Centre (NW) - 2nd place in Production & Service Sector - Medium Scale

Ground Water Office , Wariyapola-3rd place in Production & Service Sector - Small Scale.

Regional Lab, Kurunegala- Commendable Place in Production & Service Sector - Small Scale.

Narammala WSS-Commendable Place in Production & Service Sector - Small Scale.

Central

At the commencement of year 2015 religious activities were held at RSC-Central as usual. Wesak Dansela, alms giving to Dodamwela deaf and blind school, Bodipooja pinkama in parallel to Esala perahera, Medical camp and blood donation camp were the other main activities held with active participation of the staff. In addition, the annual trip to Jaffna, Cricket matches and a programme on nutritious dieting were also organized by the welfare society, of the RSC.

There were earth slips at Pinga Oya embankment at Greater Kandy WSS, Araththana and Ulapane WSS damaging transmission mains. Filter house of Polgolla WSS was damaged due to falling of a Bo-Tree. Water shortage issues were faced at Kundasale and Araththana WSSs. Another issue faced by RSC-C is lack of resources such as no replacement for retirements, new computers, vehicles and crew, non availability of funds etc. Further, the foreign funded Kandy North Pathadumabara, Kundasale-Haragama, Greater Matale Water Supply Projects (WSP) and local bank funded Laggala New Town and Wilgamuwa WSPs could not be physically commenced due to non availability of funds.

Leak surveillance using advanced equipment, investigation on disconnected customers to find out the current mode of water usage night flow tests domestic meter testing programmes, distribution zone improvement in high NRW zones (at Panabokka and Kendakaduwa - Uduyatinuwara WSS), fixing new valves and bulk meters, replacing defective water meters and air valves, laying PE pipes, replacing bundle pipes and under depth pipes, construction of valve chambers were done in order to reduce water loss in RSC-Central. Assistance was given for NRW reduction pilot project, funded by JICA at Harispattuwa division in Kandy North area by collecting GPS coordinates. Calibration of bulk meters considering tank levels was commenced this year and be continued in 2016 also.

Energy audits were carried out at Katugastota, Balagolla,

Marassana and Matale water treatment plants. Optimizing the pumping sequence at Gohagoda intake, implementing possible steps at Kahawatta, Asgiriya, Yatiwawala pumping stations were carried out to reduce energy losses. Florescent lamps were replaced with LED/ CFL bulbs mainly in Matale DE office and all schemes as a measure for energy saving. VSD installation at Meewatura WTP, installation of 245 KW highlift pump at Marassana and introducing a capacitor bank at Polgolla WTP were completed in 2015 under the Energy fund. Installation of another VSD at Elpitiya WSS is in progress. Available stocks were utilized as far as possible minimizing new purchases in order to minimize stock levels.

74 Multi skill trainees were recruited to RSC-Central in 2015. Many training programmes on team building, water safety plans, GIS, corporate plan, new billing system and awareness programme for plumbers and meter readers were carried out during 2015. Tool boxes and overall kits were also distributed among 13 selected plumbers.

Paradeka WTP and Polgolla WTP won merit awards in National Productivity Competition in year 2015. Polgolla WTP won the best work site award in World Water Day. Greater Kandy WTP was able to obtain renewal of ISO 9001:2008 quality management system certificate. Ms. R. N. C Rathnayake of Harispattuwa WSS won the gold medal for Shot-Putt and discus throwing in "Veteran Athletic Championships 2015" in Thailand. Water Safety Plan (WSP) was successfully implemented in Meewathura, Greater Kandy and Paradeka WTPs. In addition, another 06 WSS namely Nawalapitiya, Ukuwela – Udathenna, Pathadumabara, Rikillagaskada, Araththna and Hatton WSSs were identified for implementing WSP in year 2015. Awareness programme held, WSP committees appointed, field visits done and hazards identified by now with respect to above WSSs. A WSP cell has been established at Greater Kandy WTP under WHO funds to assist on implementing WSP Island wide.

In order to overcome the CKDu problem in Wilgamuwa area, many remedial actions were taken place. 157 water samples were tested in Wilgamuwa, Dambulla, Naula, Pallepola CKDu affected areas. Further, 37 number of water sources were improved and 42 hand pump wells were repaired. Under the medium term proposal of CKDu reduction programme in Wilgamuwa, intake improvement, TP construction, back wash pump installation is in progress. Further, raw water main and ferrocement tank has been completed. Plastic tanks and water cans were also distributed within this area.

New RWS units were established at NuwaraEliya and Matale DE offices. Awareness programmes on water meter repairing, care taker services and catchment management were held for CBO members. Plants were distributed to CBOs under catchment protection programme. Exhibition stalls on water conservation were held at six schools within the region. A research on "Historical evidences on Chronic kidney diseases based on life pattern with respect to environmental and social factors" is going on. Estimates for 86 nrs. rehabilitation and new small rural water supply schemes were prepared at the request of CBOs and other organizations. Further 103 chlorinators, 30 chlorine test kits and 12 water pumps were handed over to CBOs. Feasibility report has been prepared for construction of 85 toilets at Hanthanawatte estate and awareness on proper sanitary habits was conducted at Little Valley estate at Deltota.

Annual asset verification, asset register updating and capitalization of construction projects were done during this year.

Pipe line extensions were carried out in Kandy South, Kandy North and Kandy East regions and the total length was 106 km approximately.

Pipe line shifting and connection transferring due to road widening were done at Rikillagaskada, Ragala-Walapane and Kandy Matale (A9) road under RDA funds. New Pipe line was laid at Haragama-Kurunduwatte under funds from " Prime Lands".

Improvements to intakes, treatment plants, transmission and distribution lines and M&E works were carried out at Kundasale, Marassana, Thalawakele and Matale WSSs under capital budget. Construction of valve chambers in Udu Yatinuwara WSS, supply and installation of chlorinators in Gampolawatte, Rehabilitation of Paradeka and Nayapana intakes, renovation of Manager Kandy North office and Kandy East RWS office were completed under rehabilitation funds within this year. Relaying transmission main to Mount temple and from Pussellawa intake, conversion of pump house to a staff quarters at Akurana WSS , Narampanawa pump house, Marassana gas chlorinators, roller door to regional work shop are the other ongoing activities under rehabilitation funds.

Pipe break down due to earth slips were rectified with minimum interruption to water supply and bowser supply was provided to consumers during this time.

Further, new project proposals were prepared for Nanuoya, Pundaluoya and Pupuressa- Atabage water supply projects in order to enhance the pipe water coverage within the central region.

Sabaragamuwa

Many special events took place in the Kegalle, Ratnapura regions, and the RSC office of Sabaragamuwa. World Water Day, mobile services at several places, Cricket tournament, and get together were some of the special events.

Many NRW reduction activities were carried out in the RSC such as distribution improvements, replacing of bundle pipes, changing the damaged valves, construction of new valve chambers, pipe replacements, connection

transferring.

Furthermore several energy saving activities were also carried out such as replacing the old pumps with new pumps at Mawanella & Udawalawa water supply schemes. Total cost of the project is Rs 9.6 million. The expected saving to be Rs. 60,000.00 per month. Controlling of pumps and changing operational hours took place to save the electricity consumption. Preventive maintenance for all pumps and other equipment related to the water supply schemes in Ratnapura and Kegalle regions were also carried out.

Productivity improvement activities were also taken place in the regions and RSC office which included awareness programmes for basic productivity concepts and implementation of "6S" programmes in the regional offices. The "6S" competition also commenced and going on.

Implementation of Quality Management System (QMS) in the water treatment plants at Rathnapura and Kegalle regions were also commenced. This is to be getting the ISO 9001 -2008 certification for treatment plants in the region having more than 10,000 cu.m/ day.

Implementations of water safety plan in the regions also commenced in the year 2014 and continue in the year 2015 .The Eheliyagoda water supply scheme is the pilot project for this programme. Under this programme, catchment protection activates, like organic farming and providing sanitary facilities for people who living in the catchment area. In addition also commenced the catchment protections activates like demarcating reservation of the stream and provide sanitary facilities for people within the catchment area of Pelmadulla water supply scheme. Total cost of the project is Rs 1.1 million.

23 nrs. Training programmes conducted in 2015 in the RSC related to the productivity, quality management system, plumber training and other awareness programmes.

Accreditations for laboratories in the region were also commenced in the year 2014 and going on the year 2015.

During the year 2015 provided technical assistance for several rural water supply schemes in the regions, covering 21 RWS schemes in Kegalle region and 24 in Ratnapura region. Total cost is Rs 200 million for the technically assistance rural water supply schemes in kegalle region. Data collection from CBO schemes in the regions, water quality testing in CBO schemes were some of the other activities carried out in the year 2015.

Furthermore, the total pipeline extension carried out in the Rathnapura and Kegalle regions were 31 km and 50 km respectively. Also 4,242 numbers of connections given in the RSC during year 2015.

GIS mapping programme is going on in the Kegalle & Rathnapura regions. The event held on 23 rd November 2015 at manager office (Kegalle) for world GIS day.

The total cost of the locally funded project for pipe line extensions is Rs. 295 million for two regions. Over roll progress of the programme is nearly 80 %.

So many rehabilitation activities carried out in the Rathnapura and Kegalle regions in the year 2015. Total allocation for the programme is Rs. 67 million. At the end of the year physical progress of the program is nearly about 78 %.

Soil investigation, land survey and detailed designs including Hydraulic, Structural and Mechanical & Electrical designs for construction of Galigamuwa Water Supply Scheme was carried out, The scheme comprises of 9,000 cu.m/ day capacity water treatment plant, 9400 cu.m/ day capacity intake, 0.8 km long raw water pumping main, 250 mm dia. 13 km long clear water transmission main, 920 cu.m capacity ground reservoirs 2nos, 225 cu.m capacity ground reservoir, 40 km long distribution system ranging from 225 mm dia. to 90 mm dia., 3 nrs. of quarters and associated buildings. Preparation of detailed drawings and preparation of BOQs were also carried out.

Uva

Foundation stone laying of Boragas Water Supply Project, Shramadana campaign for Kahagolla catchment protection were some of the special events taken place in 2015. Water quality problems also occurred in some schemes and remedial actions were taken to remove blocks at intakes, reduce turbidity, install chlorinators in small WSS and to fabricate and install two package treatment plants.

Furthermore energy saving activities were also carried out. 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 the maintenance cost and the pump breakdown period has also been reduced. Introduction of SCADA System to Buttala WSS, rectification of existing house connections, replacement of bundled pipes and relaying of old pipes were the NRW reduction activities conducted in the RSC.

Furthermore, 32 training programmes were conducted including nine technical programmes, two Non-technical programmes, two computer training programmes, two CBO training programmes and fourteen staff awareness programmes. Three day workshop on water safety plan was conducted and the progress of the water safety plan was also satisfactory in 2015.

Total of Rs. 100 million worth RWS projects have been formulated for Monaragala and Badulla districts for the year 2015 and those projects are ongoing. Those water supply schemes are Kiriibbanwewa left, Buduruwagala Temple, Okkampitiya, Gangodaarawa Kolladeniya, Pallewela Govindupura, Siyambalanduwa Dugwell construction in Monaragala district and Bogoda,

Sinnamaligathanna, Galauda, Rahangala, Ketawela, Palgahathanna, Lunugala, Belaganwewa, Eladaluwa Extension, Kolatenna, Boragas, Kandana and Rahuppola in Badulla district.

Pipeline extension works were carried out for 51 km in Bandarawela region, 97 km in Monaragala region and 2,812 new connections were given under the local bank funded project (3.5 billion project). Safe drinking water was provided to the CKDu areas only for cooking and drinking purposes through bowsers. To improve Water Supply facility in CKDu areas Belaganwewa WSP, Rehabilitation of Bathalayaya WSS, Extension of Agalaoya WSS and Rathkinda WSP in Badulla District & Kukurampola, Rahathanagama, Kumaragama Extensions in Monaragala District were ongoing.

Northern

Operations and Maintenance (O&M) activities are divided into two regions namely Vavuniya and Jaffna. Expect Killinochchi district, 27 water supply schemes were in operation in the province. By the end of 2015 water supply connections in the Northern Province is 14,768, including the 2,464 connections provided during the year. Pipe line extensions and infilling work were carried out for about 53.1 km in Mannar, Jaffna and Mullaithivu Districts. Under the coverage improvement, contract was awarded through local bank funding under the 400,000 connection programs. The planning and designing of Periyamadu WSS in Mannar District was under UNICEF fund amounting Rs. 20.23 million is completed, and it is under construction.

Ground water section of RSC has done 96 Hydrological Investigations, 53 well drillings, 01 HPTW installation, 58 HPTW repairs and 41 well flushing with finances received from Government institutions, District secretaries and private establishments which generate income of Rs. 30.9 million to NWSDB. Source investigations were completed for 03 Nrs. of proposed water supply projects namely; Mullaitivu, Mulankavil and Mankulam and developments of ground water sources were carried out in 06 nrs. of existing schemes.

Some of water quality parameters are higher than the SLS permissible levels (eg. Alkanity, Hardness, oil & grease etc) because the schemes in northern region are supplied with ground water sources. Due to inadequate yield in wells in drought period in most of the schemes it was unable to ensure 24 hrs supply. Water safety plans for Araly and Mallavi Water Supply Scheme were completed and Murunkan water safety plan is under preparation. Relevant staff for the above task was identified and initial training was given. 4,272 nrs. of water quality testing were done in the year including Chunnakam oil affected area.

Institutional development works such as establishment of Assistant General Manger office in Jaffna, establishment of Regional Manger office in Jaffna, establishment of Rural Water Supply section in Jaffna and rehabilitation of District Engineer office in Mannar, rehabilitation of Ground Water Office were carried out.

Regional Manager Office-Vavuniya was awarded 2nd place of efficient office management and production and improvement at the World Water Day Program in 2015 . Office filing system was improved in most of the offices by introducing 5S systems.

Special water supply programs were carried out for Madhu church and Thiruketheeswaram temple for gazetted festivals. During drought and flood Period bowser water supply was arranged in Mannar, Killinochchi and Jaffna and also ensuring continuous water supply through bowsers to oil contaminated Chunnakam area. Madhu water supply (stage I) was completed along with approvals from board and agreement between Board and Church. Water supply and sanitation were provided for one million of devotees who gathered during the Holy Pope visit to Madhu on January 2015.

NRW reduction activities such as regularization of unmetered connections, replacement of defective water meters, regulation of illegal connections, use of appropriate equipment and accessories for reducing leakages, installation of valves and chambers and initial works for replacement deteriorated pipe line were carried out.

Many numbers of tenders and quotations were completed worth of Rs. 102.3 million.

Several Project Appraisal Reports were prepared for Vavuniya, Mullaithivu and Mannar districts for new schemes namely Greater Vavuniya, Mankulam, Welioya, Greater Mannar, etc.

Study was carried out and identified CKDu affected areas in Vavuniya, Mannar and Mulaithivu districts and a water supply scheme for Welioya area is under construction. Installations of 02 nrs. of RO plant for schools, 02 nrs. RO plant for hospitals and 01 nrs RO plant for village were completed in the year. Further 14 nrs. of RO plants to improve the quality of drinking water is under implementation. 03 Nrs. of tractor bowsers were handed over to Welioya DS division and Cheddikulam DS division to ease the water supply to CKDu affected areas.

03 nrs. of plumber training programme with the assistance from GKWSSP, 5S training programme, Financial & Administration workshop, training programme for CBOs, awareness programme for rainwater harvesting were carried out.

Eastern

A Deputy General Manager (DGM) heads the RSC - Eastern with the support of two Assistant General Managers such as Assistant General Manager (Eastern North) [AGM -EN] and Assistant General Manager (Eastern South)[AGM-ES]. Operations and Maintenance (O&M) activities are divided into four regions namely Batticaloa, Trincomalee, Ampara, and Akkaraipattu those are managed by Managers. Mainly the RSC

functions are to provide necessary support to the four regional offices in the day to day O&M activities through the both AGMM and to provide help and guidance in the existing scheme rehabilitation and augmentation work and 183,000 water supply connections have been provided by the RSC (Eastern), by the end of the year 2015.

All activities under the seven goals in the corporate plan were being implemented during the year 2015, to achieve these goals, according to this, Wanela WSS and Aqbopura WSS was implemented under the small and medium scale projects of Capital Budget - 2015, Serunuwara and Neelapola WSS are going Under Local Bank Fund and Yanoya WSP is planned to implement incorporated with Anurathapura WSP which is covering four DS Divisions namely Gomarankadawela, Morawawe, Padavisripura and Kuchchaveli from Trincomalee District. Water safety plan was implemented in Konduwatuwana Treatment Plant and Kantala Water Treatment Plan. Awareness programs for Water Safety plan and Catchment protection for NWSDB Staff, stake holders and students were held in Ampara, Akkaraipattu, Trincomalee and Batticaloa regions under quality improvement programme. In the same time, it was decided to implement the same awareness programs for Water Safety Plan and Catchment protection in other water supply schemes also. Pipeline extensions works were done for a total of 60km at Ampara, Akkaraipattu, Batticaloa and Trincomalee regions under the capital Budget, Rehabilitation Budget and Rechargeable allocations.

Energy auditing works, replacement of bulbs, replacement of energy WSS pumps, improvement of power factor, and usage of single pump instead of double pumps and minimization of operational costs were some of the energy saving activities carried out during the year 2015.

The following training programme were conducted during the year at RSC (East)

1. VSD training for Engineers and EA's of Electrical, Mechanical and plant OICs in the RSC (East).
2. Pump operators training for RSC (East) Pumps houses.
3. Water Safety Plan and Hygiene Awarness Programme for school students, farmer and staffs.
4. Plumbers Training for those who have got the NVQ 3rd level for license purpose.
5. Financial board regulation, construction management and administration.

Under the NRW Programme, Installation of flow meters & Chambers construction were implemented at Akkaraipattu Region (Karaitivu Tower site, Ninthavur sump site, Kalmunai sump site), Installation of pneumatic valve, butterfly valve & sluice valve were carried out at Konduwatuwa Treatment Plant, Raising of valve chambers, and Intake improvement were carried out at Padiyatalawa water supply scheme at Padiyatalawa water supply scheme at Ampara Region, Laying of DI pipes for protection of pumping line from Konduwattuwan to Nintavur BPS, Bulk meter installation & chamber construction at Ninthavur & Irrakkamam at Akkaraipattu Region, Bulk meter installation & chamber construction at Trincomalee Region were done during the year.

NRW reduction activities such as pipe replacements raising valve chambers, flushing and replacing the valves and usage of submersible pumps and vibrating rammer were carried out during the year.

In the same time, Awareness programmers to expedite new connections and NRW reduction programmes were held in some places.

In Dehiyathakandiya DS Division, Sandunpura, Lihiniyagama and Mawanawela Rural Water Supply Schemes were rehabilitated and taken over from CBO, Sooriyapokuna and Pussalavina RWS Scheme is implemented as a long term solution, and also, we are provided water supply by water bowser with Placing storage tanks in Trincomalee and Ampara district as short term solutionto the CKDu affected areas and under the CKD allocation, registration of CBO schemes under the National water trust, replacement of raw water pumps were some of the activities conducted. Many rural water and sanitation activities also carried out in 2015. Construction of toilets, exhibiting the RWS component under SACOSAN programme.

Under Community Infrastructure Development allocaton, Kannanpuram RWS scheme was rehabilitated and new distribution extension of about 110 km were carried out at various locations in the Batticaloa Region such as Chenkalady, Eravur, Kannampuram, Mandapathady, Karaveddy, Arayampathi etc, in order to provide 4,000 new water supply connection.

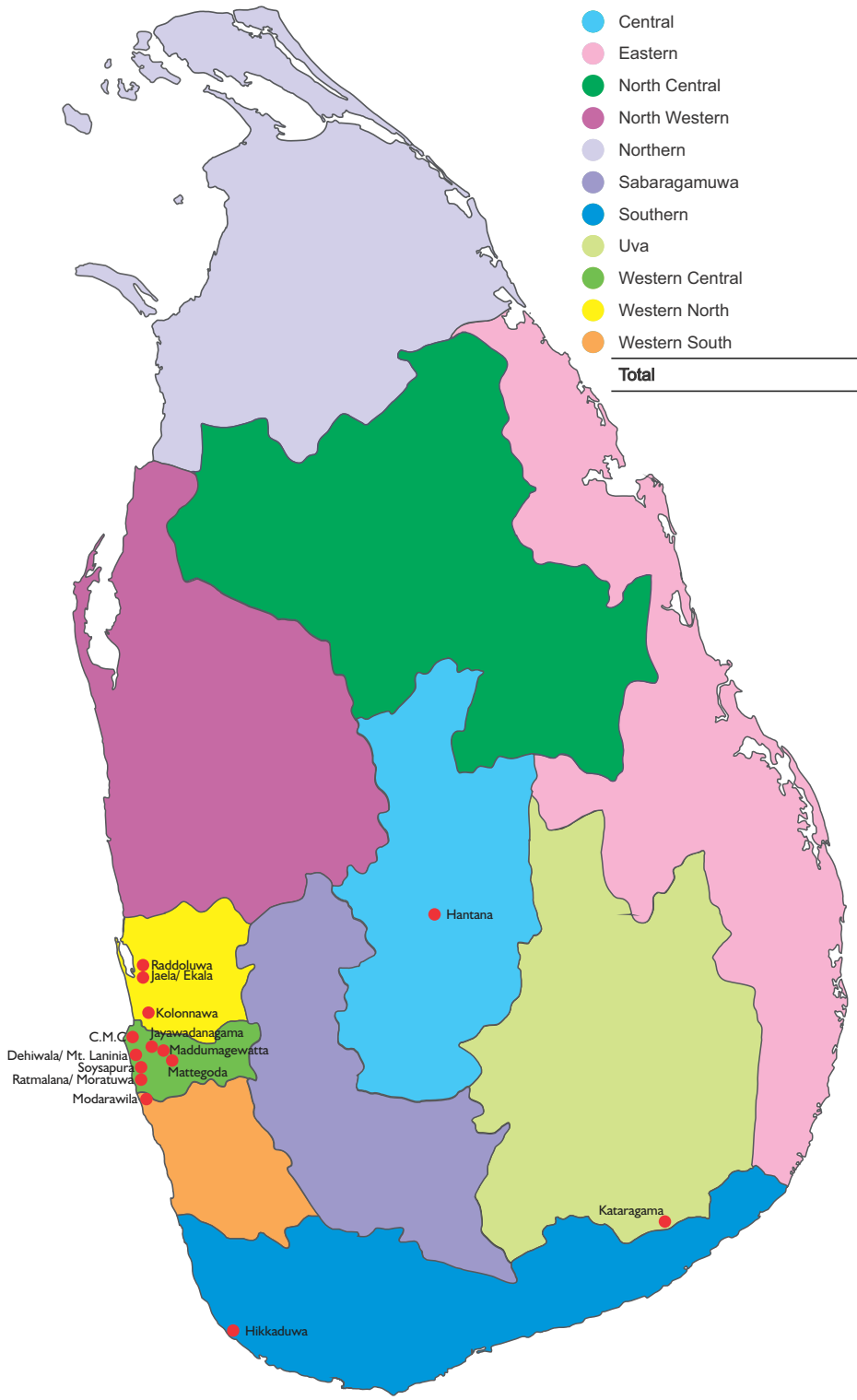
Under the Local Bank fund programme, 105 km of distribution pipe extension at Batticaloa Region and 160 km of distribution pipe extension Trincomalee Region were commenced in order to provide 6,400 new house hold connection at Irudayapuram, Eravur and Chenkalady area, In Batticaloa district and Serunuwara and Neelapola in Trincomalee District with the TCE of Rs. 800.00 million.

Social Activities

New SMS alert facilities to the customers were introduced during the year 2014/ 15. Shramadana programme at all regions, plantation of trees and mobile services at several places were some of the special events taken place at the RSC. Further Posan ceremony, Vany ceremony, Ifthar programme and Prith pinkama were carried out in the RSC (East) office.

Existing Sewerage Schemes

Province/ RSC	Number of SS
Central	01
Eastern	00
North Central	00
North Western	00
Northern	00
Sabaragamuwa	00
Southern	01
Uva	01
Western Central	07
Western North	03
Western South	01
Total	**14**



Commissioning of New Schemes

Moratuwa/ Ratmalana sewerage scheme was ceremonially opened in October 2014 in the presence of large gathering including representatives of SIDA, the funding agency.

Institutional Development Activities

(I) Establishment of a Regional Manager's Office at JaEla/ Ekala

A Regional Manager's Office was established at JaEla/ Ekala for better operation and maintenance activities of JaEla/Ekala Sewerage Scheme. Raddoluwa sewerage scheme was taken over by Manager (JaEla/Ekala) in September 2014 and Biyagama EPZ too will be added to the Manager (JaEla/ Ekala) in future.

(ii) Quarters for Executive and Non-Executive Staff at Soysapura

Construction of 04 quarters for executive and 4 quarters for non executive staff at Soysapura, Ratmalana were completed at a cost of Rs. 62.1 million.

iii) Developing a Quality Management System for Sewerage Section

Sewerage Section has been awarded ISO 9001: 2008 / SLS ISO 9001: 2008 Certification with effect from 2015.06.03. Sewerage Section is the first administrative office of NWSDB that received ISO 9000 Certification and also the first organization in sewerage arena of the country to receive such certification.

The scope of certification include

- Policy formulation for wastewater management
- Formulation, planning & designing and implementation of wastewater projects, and
- Operation & maintenance of wastewater facilities

iv) Establishing of "Sewerage Section Social Care Society"

After obtaining ISO 9001: 2008 / SLS ISO 9001: 2008 Certification, a Social Care Society was established to fulfill the Corporate Quality Objective of "More contribution towards social responsibility". The mission of this society is "Care wastewater protecting the environment".

Addl GM(Sewerage) is the chief adviser of this society.

Other Productivity Improvement Activities

(I) ***Detecting and Legalizing of Un-Billed Sewer Connections***

Survey for detecting of Un-Billed Sewer Connections has been carried out in Dehiwala-Mt. Lavinia and it was possible to identify 693 such connections. Actions have been taken to legalize those connections with 1-2 year penalty for loss of revenue.

(ii) ***Island wide awareness programmes on implementing Existing Code of Practices of Wastewater Discharge***

It was planned to organize island wide awareness programmes on implementing existing Code of Practices of Wastewater Discharge when implementing building construction.

O&M Activities

The Greater Colombo Sewerage Section 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 17,035 sewer connections maintained by the NWSDB.

Accordingly, Soysapura, Mattegoda, Jayawadanagama, Raddolugama and Maddumagewatta housing schemes and the government institutions like Presidential Secretariat, Speaker's Residence, Parliament (water and sewerage), Sethsiripaya (water and sewerage), Isurupaya (water and sewerage), Jayawardanapura Hospital etc are maintained by the NWSDB.

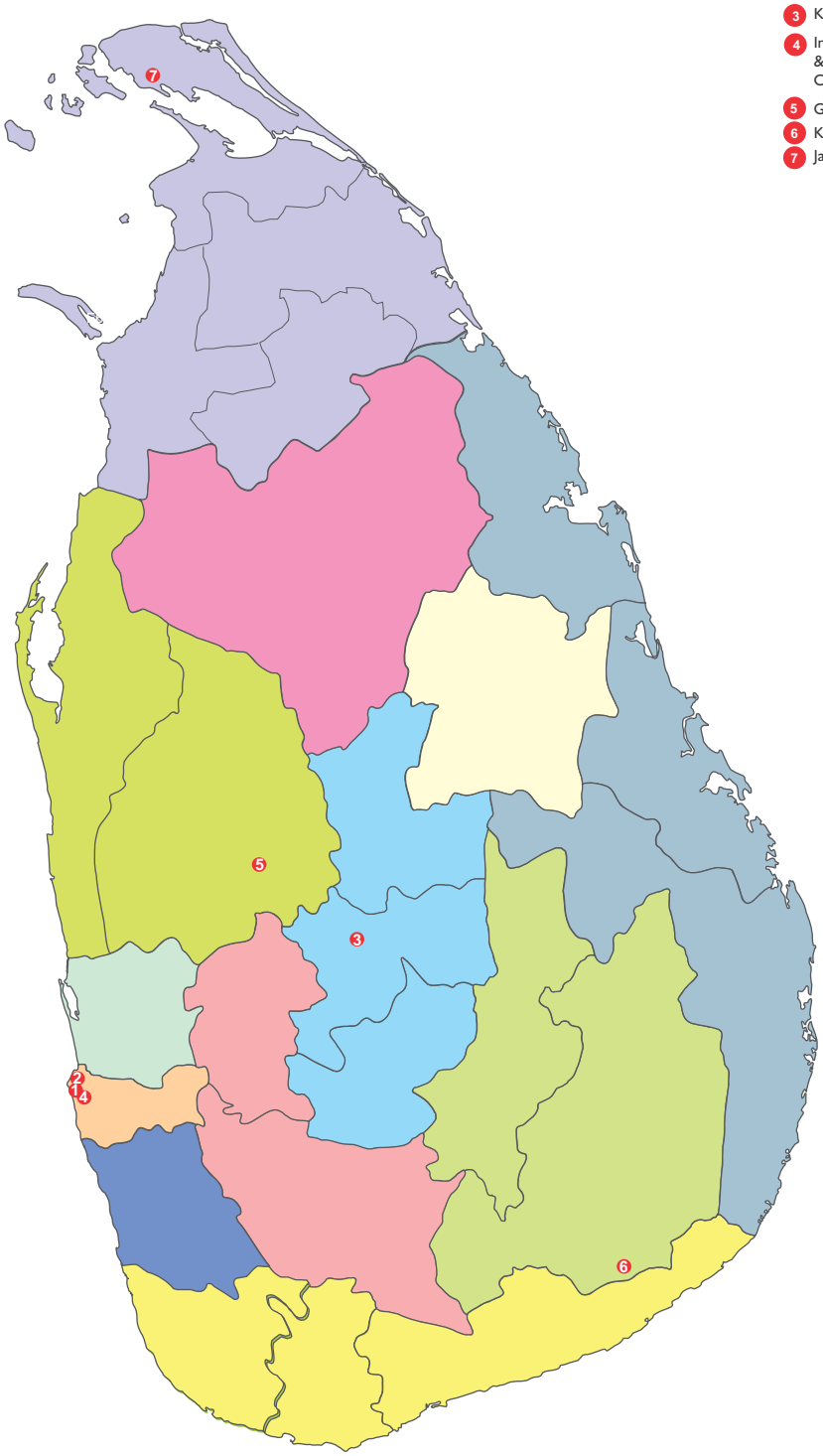
In addition, sewerage systems of Kataragama, Hikkaduwa and Hantana housing scheme are also maintained by respective area managers under RSCs. Furthermore, maintenance services are provided on contracts basis to BOI owned industrial parks such as Koggala, Biyagama and Seethawaka.

Ongoing Sewerage Projects

Accomplishments of Major Sewerage Projects under the Ministry of City Planning & Water Supply,

Location Map of Foreign-funded Projects under Construction/ Augmentation during 2015

	Project Name	Funding Agency
1	Greater Colombo Wastewater Management	ADB
2	Wastewater Disposal systems for Ratmalana/ Moratuwa & Ja-Ela/ Ekala Areas	SIDA
3	Kandy City Wastewater Management	JICA
4	Increasing Household Sewerage Connections & Off Network Sanitary Solutions in Greater Colombo	ADB
5	Greater Kurunegala WS & S	China
6	Kataragama Wastewater Disposal Project	Austria
7	Jaffna Municipality Sewerage Project	ADB



Foreign Funded Sewerage Projects

Projects undertaken with Asian Development Bank Assistance

1.) Greater Colombo Wastewater Management Project

This project consists of rehabilitation of six wastewater pump stations at Kolonnawa and Dehiwala/ Mount Lavinia areas. The total estimated cost is Rs. 1.1 billion. The project period is from 2010 to 2016. The physical works of the projects was started in 2014. It is also planned to map existing sewer connections with extensions jointly with the mapping section under this project.

• Special events taken place in the project during the year

• General issues :

As the rehabilitation of pumpstations under the project has to be done while pumpstations are in operation, special effort was taken to keep the operations uninterrupted.

• Productivity improvement activities and overall status of the project:

Some awareness and training programmes were carried out

KP 3 Site SCADA Room

Projects undertaken with Swedish Assistance

2.) Wastewater Disposal Systems for Ratmalana/Moratuwa & Ja - Ela/Ekala Areas

This project is implemented to provide infrastructures for safe disposal of wastewater generated in two industrial areas including households in Ja-Ela/ Ekala and Ratmalana/ Moratuwa at a cost of Rs.17,471 million. SIDA provided a loan of USD 93.75 million for construction works and a grant of SEK 56.21 million for the construction supervision contract, while GOSL provided Rs. 5, 122 million as counterpart funding.

Construction of 7,250 cu.m wastewater treatment plant and 3 pump houses together with associated pipe collection system in Ja-Ela were completed in Feb 2012 and handed over to the O&M section. Construction of 17,000 cu.m wastewater treatment plant and 5 pump houses in Rathmalana/ Moratuwa was completed and commissioned in October 2014.

· Project Description/scope in brief:

This project is to collect industrial, residential & commercial wastewater, treat and dispose to the water bodies in an applicable manner to avoid the harmful effects to the people and the environment of the project area. This project consists of;

Ratmalana/Moratuwa Area :

Pipe Net work - Gravity Pipes - 23 km
- Rider pipes - 10.4 km
- Pressure Mains - 6.4 km

Wastewater Treatment Plant of capacity 17,000 cu.m/ day

04 nrs. Pumping Stations

Out Fall pipe to Sea - Dia. 1100 mm, Length 600 m

Ja-ela Ekala Area:

Pipe Net work - Gravity Pipes - 08 km
- Rider pipes - 2.60 km
- Pressure Mains - 7.4 km

Wastewater Treatment Plant of capacity 7,250 cu.m/day

03 nrs. Pumping Stations

Out Fall pipe to Dadugam Oya- Dia.700 m,

Length 2,285 m

General comment of the PD:

•Activities of the Moratuwa component of the project that were to be completed in early quarter of year 2014 got seriously hampered due to the lead partner to the JV contractor being declared bankrupt leading to termination of the contract. This change of circumstances forced the PMU to change its role using available staff in the absence of the International supervising Engineer and to shoulder additional responsibilities amidst chaos. In the attempt of completing the work left unattended by the previous contractor, we were able to:

- Award a contract connect to complete infilling gaps and to replace defective pipes.
- Provide new connections to 121 Industries and 338 domestic users while accommodating the transferring of 2200 number of domestic connections from the Zoysapura Housing scheme.

The other component, Ja-Ela constructed under this project now operates under O&M section had achieved operational sustainability. With the completion of infilling contract Moratuwa component too will become operationally sustainable.

Special events taken place in the project during the year including Event, Date and Remarks (eg: Cost, duration, staff, status, etc.)

- General issues (eg: water quality, quantity, water sharing, land acquisition problems, clearances from RDA/ PRDA/ LAs, water pollution at intakes, felling

of trees, funding, material, procurement delays, any protests that delayed work, etc.)

- Productivity improvement activities and overall status of the project

Overall Financial Progress of the project upto end of December 2015- 87.33 %

Overall Physical Progress of the project upto end of December 2015- 97.18 %

Ratmalana/ Moratuwa Area :

96 % completed. Presently, 121 nrs. Industries/ Institutions and 2,538 nrs. Domestic consumers have been connected to the system and an income of Rs. 5,284,511.52 has been received from Jan. to Nov. 2015.

Ja-Ela/Ekala Area :

100 % completed in Feb 2012. The scheme is currently operated by O&M section and serves Industries 97 Nos., Commercial/Institution 26 Nos. & Domestic 1333 Nos and the Air force Camp - An income of Rs. 40,916,209.86 has been received from Jan to Nov. 2015.

Projects undertaken with JICA Assistance

3.) Kandy City Wastewater Management Project

• Description

The indiscriminate disposal of wastewater in the Kandy city causes pollution of the Kandy lake, Meda ela and Mahawali river, the main drinking water source to Kandy and Matale districts. In order to find a permanent solution to this problem, NWSDB proposed to implement a wastewater disposal system for the Kandy city. The proposed project intends to collect wastewater in 732 hectares of area in the city and then divert to a treatment plant of capacity 14,000 cu.m/ day through a network of 92 km long pipe lines.

This project will be completed in 2018. Around 55,000 resident populations and 150,000 migrant population in Kandy will be benefitted from this project.

The treatment plant will ensure the disposal of treated wastewater back to the environment complying with the following effluent discharge standards: Biological Oxygen demand (in 5 days at 20 ^{0}C) less than 20mg/l, total suspended solids less than 20 mg/ l, chemical oxygen demand less than 250mg/l. Total Nitrogen less than 10mg/l and fecal coliform (most probable number per 100ml) less than 40 as stipulated in the Central Environmental Authority guidelines.

The total cost estimate of the project is Rs. 22,585 million. JICA loan amount of Japanese Yen14,087 million and government consolidated funds of Rs. 4060 million is allocated for taxes, duties, road authority payments and land acquisition costs etc.

• General Comments of the Project Director:

Two contracts already awarded are being executed. Delay of award of property connection contract will have major consequences on the effective commissioning of the project.

• Special Events taken place in the project during the year:

Design activities of package 1 (Design and Construction of Wastewater Treatment Plant, Main Pump Station Treated Effluent Disposal System and Sludge Drying Beds) was commenced on 03rd March 2015.Construction Works of Package 2 (Design and Construction of Trunk Sewers, Branch Sewers and Service Connections, Manhole Pump stations and Supply of Operation and Maintenance equipment) was commenced on April 2015 and works are in progress. PAB decision for Package 3 (Design & Construction of Property Connections & Testing and Commissioning) was received on 14th May 2015 and contract was not awarded yet. MPC granted the approval to award the Package 4 (Construction of Communal Sanitation Facilities in Designated Low Income areas & Testing & Commissioning) to M/s CML-MTD Construction Ltd.

• General Issues:

Delays in procurement process

• Productivity Improvement Activities:

Obtained ISO 9001: 2008 Quality Management System Certificate

Awareness workshop of OPK

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

• Project description/ scope in brief:

Increasing Household Sewerage Connections and Off-Network Sanitary Solutions in Greater Colombo Low income households

• General comment of the PD:

a. Direct Connections to Households in Dehiwala / Mount Lavinia, Jaela/ Ekala, Ratmalana/ Moratuwa and Kolonnawa Area sub project has been completed by giving 1,135 sewerage connections. DEWTS (Decentralised Wastewater Treatment Systems) for Diyawarapura 64 number of fisheries houses successfully commissioned and completed the defect liability period.

b. 10 km length of pipe laying, 2 pumping stations completed and commissioned and 425 connections

delivered under Badovita simplified extension with pumping contract will cover 1,500 connections. Total physical progress is 74 %.

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

d. Sub project of Simplified and conventional extensions in Dehiwala/Mt.Lavinia, Moratuwa, Kolonnawa and Ja-Ela/Ekala area for 1,475 connections was commenced on 02.07.2015 and 2 km of pipe laying completed and physical progress is 9.5 %.

e. Bid evaluation is in progress of On –Site sanitation improvements for 3,785 households (Call for tenders on 11.11.2015 and tenders closed on 07.12.2015).

f. Detailed design of Lunawa DEWATS completed and preparation of BOQ and tender document are in progress for 160 households

• Special Events taken place in the project during the year:

•284 connects were delivered in 2015 under the contract of Direct Connections to Households in Dehiwala/ Mount Lavinia, Jaela/ Ekala, Ratmalana / Moratuwa And Kolonnawa Area. 425 connections and 2 pumping stations completed in 2015 under the contract of Badovita Waste water Collection And Disposal System for 1500 connections. 2km of pipe laying completed in 2015 under the contract of Simplified and Conventional Extensions for 1,475 connections. Tenders were called for On - site Sanitation Improvements for 3785 households on 11.11.2015 and closed tenders on 07.12.2015 and Bid Evaluations is in progress. Detailed design completed and BOQ preparation is in Progress in DEWATS for Lunawa Samudra Shakthi housing Scheme.

General issues:

Construction of direct connections in Moratuwa/ Ratmalana area was delayed due to partial completion of testing and commissioning of sewers of Moratuwa/ Ratmalana WWDP.

Productivity Improvement Activities on overall status of the project:

Project is improving according to the 5S system.

Project undertaken with China assistance

5.) Greater Kurunegala Water Supply & Sewerage Project.

• Project description/ scope in brief

The project commenced on February 2104 and the contractor is China Machinery Engineering Corporation (CMEC). Greater Kurunegala Water Supply & Sewerage Project contain both Water and Sewer components.

The project consists of weir across Deduru oya, Raw water intake with Raw water transmission line of 8.5 km, New water treatment plant of capacity 5000 cu.m/ day and rehabilitation of existing WTP to capacity 9000 cu.m/ day, Ground reservoir at Wehera, Elevated reservoir, supply & laying of 7.5km treated water transmission and 110 km of distribution network for the supply drinking water.

Sewerage plant with the Capacity of 4500 cu.m/ day, Gravity sewer pipe line length - 134 km, Force main pipe length - 4.5 km, pumping stations - 06 nrs, 4500 nos of house connection and Repair and refurbish the sewerage pipe system of Kurunegala Teaching Hospital for the providing adequate sanitary facilities to improve the living standards of the people living in and around Kurunegala City.

Export – Import Bank of China and Government of Sri Lanka (GOSL) are providing the necessary funding for the project as US$ 77.30 million and SLR. 3,200.00 million respectively.

• General comment of the PD/ GKWSSP

The project achieved physical progress of 42.23 % and financial progress of 34.44 % at the end of 2015. Foreign and GOSL funds were disbursed as US $ 32.37 million and SLR. 203.31million respectively.

As per the scope of the Water Component, construction of the Weir was 15% completed but due to a public protest, The Contractor was demobilized from the site on 14th June, 2015. Intake and Pump House was 13 % completed. 6,814m pipe laying work was completed in the Raw Water Main. The Structural work of the Dormitory and the Distribution Chamber completed and 15 % of work in Water Treatment Plant was completed. All the Structural work was completed and 64 % of work in Elevated Tank was completed, 28,475 m pipe laying work was completed in Water Distribution Network.

For the Sewerage component, the combined tank Screed Concrete, Structural work on the Sludge Storage tank and Deodorization device and part of combined tank were completed to achieve 20 % overall completion of Sewerage Treatment Plant. 8,409 m pipe laying work was completed in Sewer Collecting Network.

• Special Events taken place in the project during the 2015.

•The Construction Started on 12th January, 2015 and Detail Design Completed on 29th May, 2015. Provincial Steering Committee Meeting held on 07th August, 2015. Awareness Programme held on 18th September, 2015. National Steering Committee Meeting held on17th November, 2015

General issues:

Public unrest at the weir site after the recent flooding. Lands acquiring issues occurs on Theliyagonna, Sarvoday, Mawatha and Yanthampalawa lands. Approval received for sewerage pipe laying in RDA roads and public protest held against locating the Sewerage Treatment Plant in the proposed land.

• Productivity improvement activities and overall status of the project

Greater Kurunegala Water Supply & Sewerage Project was awarded ISO 9001:2008 certification on 03rd June, 2015 by Sri Lanka Standard Institution. This is a great achievement by the Project Management Unit in collaboration with Sewerage Section of NWSDB.

Construction of Retaining wall of the Intake and Pump House

Project undertaken with Austrian Assistance

6.) Kataragama Wastewater Disposal Project

The proposed project has focused on provision of the pipe borne sewer facilities for pilgrim rests, hotels, shops, domestic units and offices etc. around the city limits to avoid further pollution of Manik Ganga and the surrounding environment. The main scope 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 is providing funding for implementation of this project. The total estimated cost is Rs. 2,040 million.

The project work was commenced on August 2014. It is expected to complete the work by August 2016, nr. of beneficiaries will be 15,000. The project components are construction of 7 nrs. pumping station installation with pumps and necessary electrical items, 16.5 km length of sewer pipe network and 3000 cu.m/ day capacity wastewater treatment plant with aerated lagoons with downstream maturation pond.

The project management unit was established in Year 2014. 75 % of the land acquisition works were completed. The environmental impact assessments for the project were completed and approval to be obtained. This contract is awarded STRABAG-Austria and the contractor was mobilized at site and surveying works, investigations and conceptual designs were completed. 99% of detailed designs were completed. Final consignment of PVC & PE pipes were delivered to the site at the end of October 2015 and construction has been started in July 2015.

The physical progress of the project at the end of December 2015 was 42.26 %. The project is scheduled to be completed in December 2016.

GOSL FUNDED SMALL AND MEDIUM SCALE SEWERAGE PROJECTS

Western Province

(a)Construction of wastewater disposal system for defense head quarters complex at Akuregoda Battaramulla

The work consists of construction of 1200 cu.m/ day capacity wastewater treatment plant consisting of inlet pumping station, debris and grit removal facility, aeration tank, settling tank, sludge pump station, sludge thickener, sludge drying beds, compost filter, maturation ponds, distention chamber, office building and control room and electro mechanical installation.

TCE is Rs, 437 million. Physical and financial progress as at December 2015 is 55 % and 17.3 % respectively.

(b)Upgrading the Wastewater Collection and Transmission in Kolonawa

The work consists of supply and laying of 458 m long, 315 mm dia. HDPE gravity sewer main from Puwakgaswatte junction to KP2 pumping station with 08 nrs. concrete manholes, supply & laying of 40 m long 250 mm dia HDPE pipes from Salamulla housing scheme to KP1 pumping station with 04 nos concrete manholes including canal crossing and 458 m long permanent reinstatement of roads from Puwakgaswatte junction to KP2 pumping station.

Physical and financial progress as at December 2015 is 89% and 58.7% respectively.

Sabaragamuwa Province

(a) Construction of Wastewater Collection & Disposal System for Sripadasthanaya

The work consists of supply and laying of 500 m long, 150mm dia. HDPE gravity sewer main from Udamaluwa to Treatment Plant, Construction of a Treatment Plant consisting Equalisation Tank, Septic Tank, Anaerobic filters,Wetland and disinfection facility. The capacity of the Treatment Plant is 62.6 cu.m/ day. The total estimated cost is Rs 220 million.

Physical & financial progress as at December 2015 is 99.2% and 56.5 % respectively.

Projects in Pipeline

The planning & Design works carried out by Planning & Design (Sewerage) section during the year 2015 are as below.

Western Province

1. Sri Jayawardenapura Kotte Wastewater Collection & Disposal System

With the rapid development of Sri Jayawardenapura Kotte during the last two decades, most of the existing developed lands have been undergone sub divisions to meet the demand for housing and along the main roads for commercial development. Due to reduction of the size of building plots and existence of shallow wells nearby lands, it has become very difficult to establish a proper septic tank in a given building plot.

Low lying areas have also been filled to meet the demand for lands. This has increased the water spread of marshland and waterways contributing to flooding. With the increase of ground water table and due to the low permeability of soil, large amount of wastewater from poorly functioning septic tanks and soakage pits collects to side drains and ultimately drained to nearby surface water courses finally contaminating the ground water sources. Therefore, 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. It is expected to provide about 28,000 sewer connections as the total estimated cost is Rs.40,542 million.

The cabinet approval has been obtained for this project. Request for Proposals (RFP) has to be called immediately and preparation of the RFP documents is in progress. Contract for Environment Impact Assessment (EIA) is in the calling situation for Sri Jayawardenapura Kotte Wastewater Disposal Project. Since the Tentative Cost Estimate (TCE) was prepared for the project in 2012, the TCE has to be revised according to the 2015 rates. Lands for 21 pump houses were identified in the project area and the land acquisition is in progress.

2. *Negombo Wastewater Disposal System*

Negombo is a major coastal town on the western coasts of Sri Lanka; the Tsunami in December 2004 destroyed and rendered inoperable many elements of the existing on-site sanitation infrastructure. With continuing population growth in the town, which has resulted due to pressure on land availability and a consequent steady reduction in the sizes of building plots, the problem of septic tank effluent disposal could be aggravated with time. It is expected to provide about 15,154 sewer connections. The total estimated cost is Rs.16, 477 million.

Agence Franciase Development (AFD) has been committed to finance the project under 'Sanitation and Hygiene Initiative for Towns (SHIFT) in South-West of Sri Lanka and under the SHIFT-1 component of the project, Design and Implementation have been planned to undertake. The project is financed under a soft loan and the loan agreement was passed at the Cabinet of ministers Meeting on 05.08.2015 and now under review of the Department of Attorney General. Under the same program, a grant will be received from European Union for the capacity development of the Sewerage Section. The loan agreement will be signed in mid 2016 and establishment of the Project Management Unit is ongoing.

3. *Maharagama & Borelasgamuwa Wastewater Disposal System*

There are important national institutions such as University of Sri Jayawardenerpura, National Institute of Education, and National Cancer Institute are located in Maharagama area. A centralized sewerage system is essential to cater for the rapid development that has taken place in the, Maharagama and Boralesgamuwa townships, and to prevent further deterioration of the environment.

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 5000 sewer connections. The total estimated cost is Rs.5,125 million.

The contract was awarded to M/s CCOEC- GSE JV (China National Corporation for Overseas Economic Corporation and Golden State Environment Corporation Joint Venture) on 05 th November 2014 for the implementation of the project and the proposed Bank for funding is Export Import Bank of China. The loan Agreement with Export Import Bank of China and GOSL is to be signed.

4. Dehiwala/ Mt.Lavinia Wastewater Disposal project

Dehiwala Mt. Lavinia is highly urbanised, residential and commercialized city since it is located adjoining to Colombo and Sri Jayewardenepura Kotte the commercial capital and administrative capital of Sri Lanka respectively. It is situated in Colombo District and consists of Dehiwala and Ratmalana Divisional Secretariat Divisions. Dehiwala DSD comprises of 15 GN divisions and Ratmalana DSD comprises of 13 GN divisions.

There is an existing sewerage disposal facility, has been functioning since 1987, covering the GN Divisions of Dehiwala West, Jayathilaka and Mt. Lavinia GN Divisions including the segment of Galle Road from sea side of Mt Lavinia Junction up to the bridge across Dehiwala canal in the Dehiwala Mt. Lavinia Municipal Council area.

Currently there is a high demand for piped sewerage disposal system due to unavailability of proper wastewater disposal system in the unsewered area. Therefore, the rest of the area in Dehiwala and Mt. Lavinia together with adjacent three GN divisions of Kesbawa DSD are incorporated into the proposed project area. The estimated total area covered under this project is approximately 919 ha and the expected population to be served in the year 2040 is 138,230 being the 75 % of the projected population of 184,306 in year 2040. The proposed project consists with 41.2 gravity sewer mains, 4.1km of gravity mains as deep tunnel, 39 km of rider & branch sewer pipes, 12 numbers of wet well pumping stations, 6.5 km of pumping mains and 1.7 km long sea outfall(1500 mm dia.) etc. The estimated cost of the project is Rs. 28, 523 millions.

The bids were called for the project during year 2015 and four bidders were submitted their bids. The technical bid evaluations were completed and the financial bids to be opened. A proposal for EIA study was invited from M/s Uni Consultancy services is under evaluation. Already pump house lands were identified by the P&D (Sewerage) section and it has been forwarded to the land section for acquisition.

5. Kelaniya/ Peliyagoda Wastewater Disposal Project

Kelaniya PS and Peliagoda UC are situated in Gampaha district of western Province along Colombo-Kandy Road in the interior part of the country. They are rapidly developing as a gateway to the Colombo, the commercial Centre of Sri Lanka. Both Kelaniya PS and Peliyagoda UC are depends on septic tanks and pit latrines for disposal of night soil. Some people who have settled near canals and marshland discharge the effluent directly into the waterways, there by polluting the environment and posing health hazards. Therefore there is potential demand for sewerage services. Ground water table is very high in this area.

The proposed project consist with 12.5km gravity sewer mains, 10.4 km of pumping mains, 50km of Riders,Laterals and Branch sewer pipes, 7 numbers of wet well pumping stations and 1.5km length long sea outfall(1500mm dia.) etc. In the proposed wastewater disposal system, the wastewater collected in Kelaniya PS and Peliyagoda UC will be reticulated with series of pumping stations and finally will be disposing to the sea through a long sea outfall. The projected population to be covered in both Kelaniya PS and Peliyagoda UC in 2043 will be 76,279 at the annual growth rate of 1.1 %. Tentative cost estimate is Rs. 14,605 million for the completion of the project and expected numbers of connections are 14,081.

Agence Franciase Development (AFD) has been committed to finance the project under 'Sanitation and Hygiene Initiative for Towns (SHIFT) in South-West Sri Lanka' Project and under the SHIFT-1 component of the project, Detailed Designs have been planned to undertake. The project is financed under a soft loan and a grant and the loan agreement was passed at the Cabinet of ministers Meeting on 05.08.2015 and now under review of the Department of Attorney General.

At the AFD Annual Consultation Meeting held on 06.10.2015, ERD confirmed that the loan agreement will be signed shortly. Establishment of the Project Management Unit (PMU) is ongoing

North Western Province

6. Chilaw Wastewater Disposal System

Chilaw is situated 75km north of Colombo is a populous town and is famous for coconut, prawn and fishing industry.

Due to flatness of the topography in Chilaw , there is no readily identifiable drainage pattern, but there are four main storm water drainage canals that discharge directly into the sea. Drainage is particularly challenging, due to faults in canal leveling, water from the lagoon backs up into the main drainage outlets in the urban area. Chilaw Urban council emptying the septage, that is collected from the pits and tanks directly on to the ground surface. Waste water from the Base hospital is discharged directly into a pond situated between the rail line and sea through a pumping main.

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 to M/s CCOEC- GSE JV (China National Corporation for Overseas Economic Corporation and Golden State Environment Corporation Joint Venture) on 05 th November 2014 for the implementation of the project and the proposed Bank for funding is Export Import Bank of China. The loan Agreement with Export Import Bank of China and GOSL is to be signed.

7. Puttalam Wastewater Disposal System

Puttalam is situated 125 km north of Colombo is a small but very populous town and is famous for salt and fishing industry. Puttalam lagoon is one of the largest lagoons in Sri Lanka. Norochcholai Coal power Plant is located 12 km from Puttalam on the Kalpitiyapenisula.

Under the proposed scheme, a 1000 cu.m/ day capacity treatment plant with 500 m 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 to M/s CCOEC- GSE JV (China National Corporation for Overseas Economic Corporation and Golden State Environment Corporation

Joint Venture) 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 with Export Import Bank of China and GOSL is to be signed.

Southern Province

8. Galle Wastewater Disposal Project

Galle is a major coastal town on the western coasts of Sri Lanka. It is located at about 117 km to the south of Colombo on Colombo- Hambantota Main Road. The Tsunami devastation in December 2004 destroyed and rendered inoperable many elements of the existing on-site sanitation infrastructure.

The population in year 2007 is 97,360 and it is projected to grow to approximately 120,600 in year 2030. It is expected to provide about 11,402 sewer connections. The project cost is Rs. 13,325 million.

Agence Franciase Development (AFD) has been committed to finance the project under 'Sanitation and Hygiene Initiative for Towns (SHIFT) in South-West of Sri Lanka and under the SHIFT-1 component of the project, Design and Implementation have been planned to undertake. The project is financed under a soft loan and the loan agreement was passed at the Cabinet of ministers Meeting on 05.08.2015 and now under review of the Department of Attorney General. Under the same program, a grant will be received from European Union for the capacity development of the Sewerage Section. The loan agreement will be signed in early 2016 and establishment of the Project Management Unit is ongoing.

9. Hambantota Wastewater Disposal Project

Hambantota to be developed as an economic hub mainly interconnected to the natural harbour that has enormous potential to develop as an international Sea Port. Proposed infrastructure includes Oil Refinery, Industrial Zone, and Administrative Centre, International Convention Centre, Botanical Garden, International Sport Complex and International Airport. It is expected to provide about 9,034 sewer connections. The water supply and sewerage project is to be implemented in ports development area in Hambantota in order to cater for industries located within the port premises. The total estimated cost is Rs. 11,519 million.

Hambantota wastewater project has been awarded to M/s China Textile Industrial Corporation for Foreign Economic and Technical Cooperation and the agreement also signed between two parties. The lands for the pump houses and treatment plant have been acquired already. There is a small delay in the EIA process since the approval to discharge the treated effluent is getting delay. Since the treated effluent is going to be re-used for irrigation purposes, consent of the farmers' associations to be obtained.

Eastern Province

10. Kattankudy Wastewater Disposal Project

Kattankudy is a coastal town located 7.0 km South of Batticaloa Town in the Batticaloa District in the Eastern Province, consisting of 18 GN Divisions extends over a land area of 3.89 Sq. km. A world famous major tourist attraction, Pasikuda beach is situated not so far away from the project area. The treatment plant is proposed to locate within Kattankudy and the consent from the land owners have been obtained this year. It is expected to provide about 13,308 sewer connections. The total estimated cost is Rs. 11,407 million.

Kattankudy wastewater project has already been awarded to M/s Hunan Construction Engineering Group Corporation and subsequently the agreement also has been signed between the contractor and NWSDB. The loan agreement has to be signed shortly and the implementation of the project is to be started in the year 2017. The Initial Environmental Examination (IIE) study is in progress by University of Peradeniya. The land acquisition is in progress for the pump house and treatment plant lands.

11. Batticaloa Wastewater Collection, Treatment and Disposal Project

The Batticaloa town is to be developed as a fisheries and tourism related urban agglomeration, because of its high potential for tourism development and fisheries expansion. This town is to be developed as a second order service center by 2030, in the proposed hierarchy of urban centers. The area lies on the narrow belt of land between the sea and the lagoons. 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 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. 14,915 million.

PAC and Board approvals have been obtained for the Batticaloa Wastewater Project and the Project Concept Paper has been sent to NPD approval. Identification of the lands for the pump houses in progress by the RSC. EIA study has to be carried out to the project in 2016.

Report of the Audit and Management Committee

"During the year under review the Audit & Management Committee Meetings were held 4 times."

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 also address relevant issues concerning the subsidiaries of the enterprise, if any, on a regular basis.
- 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 continuously reviewing and monitoring, also making recommendations to the Board on noncompliance.
- 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 2015 the Committee was consisted of the following members.

01.	Mr. J. M. U. P. Jayamaha Board Member	- Chairman of the Committe
02.	Mr. Shantha Rathnayaka Board Member	- Member
03.	Ms. K. A. Subadra Walpola Board Member	- Member
04.	Mr. B. W. R. Balasuriya General Manager	- Member
05.	Mr. D. Thotawatte Addl. GM (Finance)	- Member
06.	Mr. G. K. Iddamalgoda Addl. GM (HRM)	- Member

07. Mr. W. B. G. Fernando - Member
Addl. GM (CS)

08. Mr. R. M. A. S. Weerasena - Member
DGM (IA)

09. Mr. B. W. D. Lasantha - Member
Audit Superintendent

10. Mrs. S. W. Gunawardene - Member
Chief Internal Auditor

11. Mrs. W. P. Sandamali de Silva - Secretary to the Committee
Secretary to the Board

During the year under review the Audit & Management Committee Meetings were held 04 times & among the matters discussed the following were noted as important highlights.

I. Submission of Annual Report of National Water Supply & Drainage Board for the years 2011, 2012, 2013, & 2014.

II. Online Inventory Management System

III. Project Finance procedure Manual

IV. Operation & Maintenance and Capital Budget of year 2015

V. Operation & Maintenance Budget of year 2016

VI. Review of Internal Audit Report of 1st & 2nd Quarter

The focused areas of discussion were;

a. Water Supply Projects
b. Commercial Operations
c. Stores and Supply Management
d. Vehicle Utilization
e. Financial Management

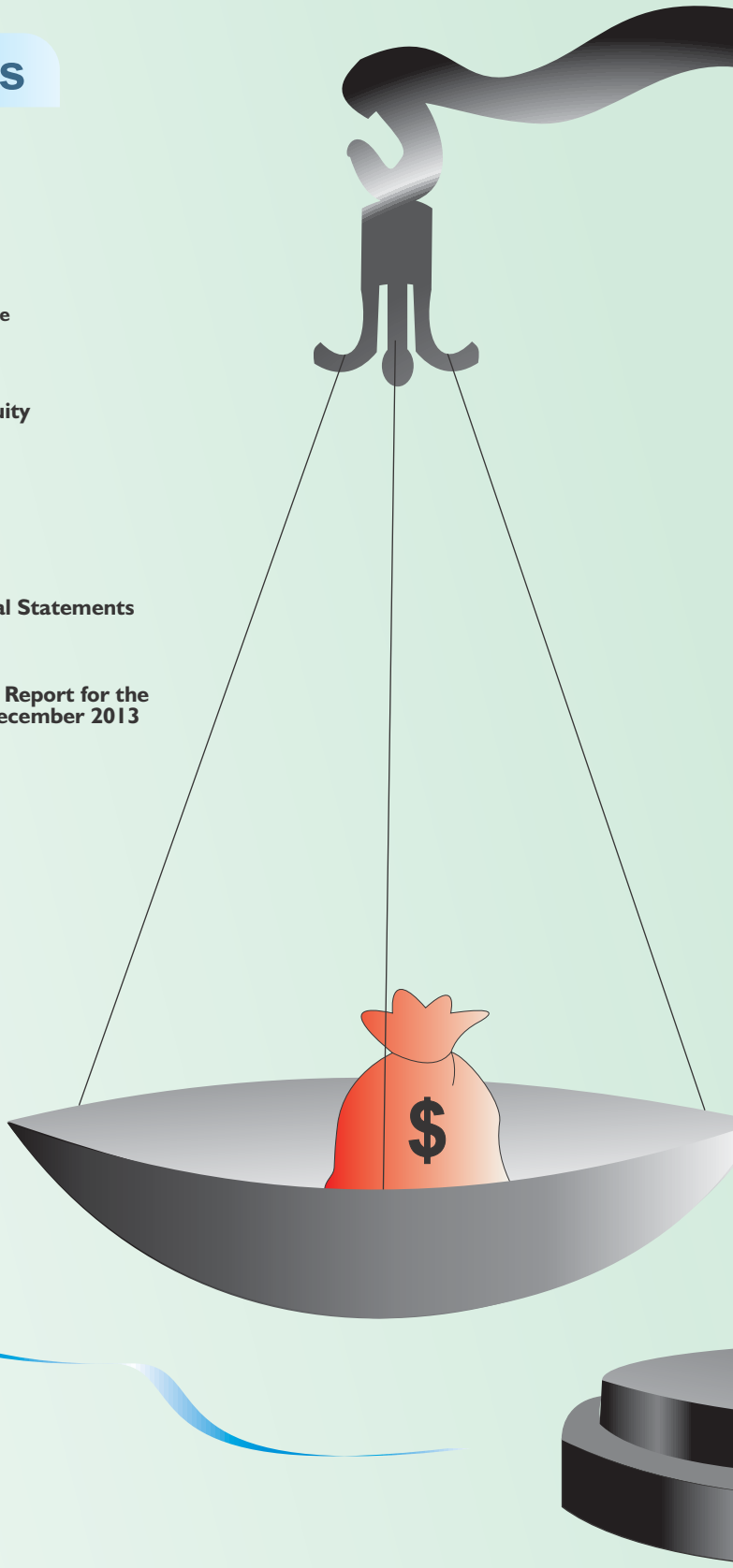
VII. Internal Audit Plan 2016

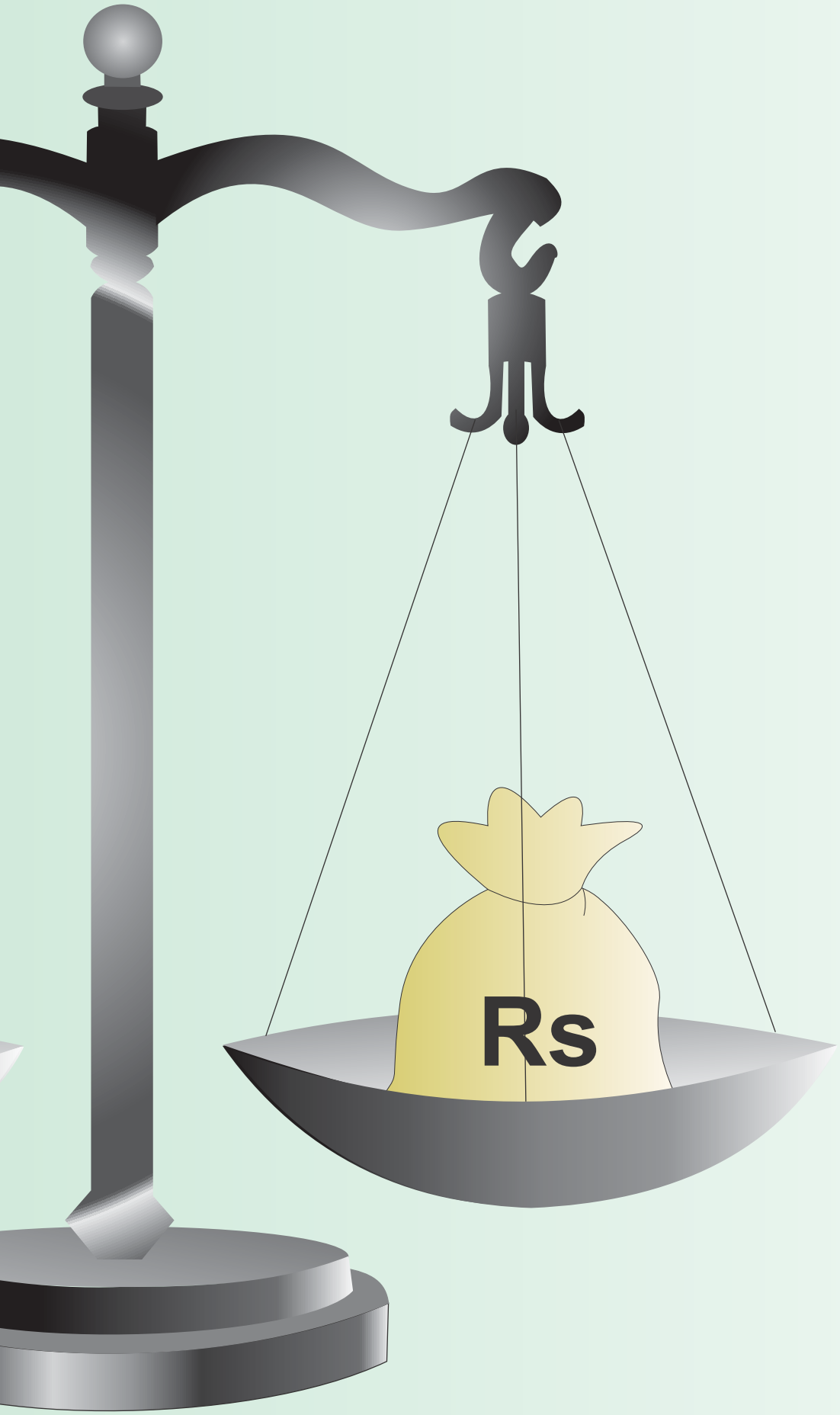
VIII. Responses to Audit Queries raised by Government Audit

IX. Circuit Bungalows of National Water Supply & Drainage Board

Matters were discussed and recommendations were given by the Committee to strengthen Internal Control System of National Water Supply & Drainage Board.

Financial Statements

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National Water Supply And Drainage Board

STATEMENT OF FINANCIAL POSITION

Year ended 31 December 2015

Assets	Notes	2015 Rs.	2014 Rs. (Restated)
Non- Current Assets			
Property ,Plant & Equipment	15	140,175,091,619	110,021,058,452
Intangible Assets	16	1,619,633	52,964,022
Capital Work in Progress	17	149,657,485,153	148,987,947,722
Other Financial assets	18	7,660,037,237	22,810,677
Total Non Current Assets		297,494,233,644	259,084,780,873
Current Assets			
Non Operating Assets	34.2	154,040,268	154,040,267
Inventories	19	6,403,839,146	5,624,531,319
Trade & Other Receivables	20	5,953,318,769	5,534,634,636
Deposits & Advances	21	13,089,002,984	9,527,444,911
Investments	22	5,194,262,510	244,262,510
Cash & Cash Equivalents	23	3,877,651,734	2,756,518,649
Total Current Assets		34,672,115,411	23,841,432,292
Total Assets		332,166,349,055	282,926,213,166
Equity and Liabilities			
Equity			
Assets taken over from Government Dept.	24	185,480,387	185,480,387
Government Equity	35	63,736,423,921	
Staff Welfare Fund	25	16,506,484	15,239,298
Retained Earnings		(11,757,090,006)	(10,806,208,171)
Government Grant	26	90,627,548,649	88,161,757,133
Capital Grants	27	165,957,115,697	151,974,122,319
Total Equity		308,765,985,132	229,530,390,966
Non-Current Liabilities			
Loan Payable	28	9,412,094,521	37,715,434,998
Other Deferred Liabilities	29	4,489,088,098	2,194,044,137
Total Non Current Liabilities		13,901,182,619	39,909,479,134
Current Liabilities			
Trade & Other Payables	30	9,427,039,885	7,061,300,745
Loan Capital Payable		-	3,440,617,294
Loan Interest Payable		-	2,912,497,278
Non Operating Liabilities		72,141,419	71,927,749
Total Current Liabilities		9,499,181,304	13,486,343,066
Total Equity and Liabilities		332,166,349,055	282,926,213,166

D. Thotawatte
Addl.G.M.(Finance)

The Board of Directors is responsible for the preparation and presentation of these financial statements.

K. M. Ansar
Chairman

G.A.Kumarathna
General Manager

Accounting Policies & Notes from pages 7 to 29 form an integral part of these Financial Statements

Colombo

National Water Supply And Drainage Board

STATEMENT OF COMPREHENSIVE INCOME

Year ended 31 December 2015

	Notes	Budget 2015 Rs.	Actual 2015 Rs.	Actual 2014 Rs.
Revenue	7	20,875,923,000	**19,584,021,370**	18,710,049,680
Cost of Sales	8	(13,779,185,419)	**(12,314,954,106)**	(11,325,829,471)
Gross Profit		7,096,737,581	**7,269,067,264**	7,384,220,209
Other operating income and gains	9	2,064,670,000	**1,665,908,597**	1,390,066,559
Administrative Expenses	10	(8,247,865,581)	**(8,571,562,031)**	(5,985,331,888)
Other Operating Expenses	11	(500,000,000)	**(463,870,115)**	(334,370,432)
Operating Profit / (Loss)		413,542,000	**(100,456,285)**	2,454,584,449
Finance Income	12	100,000,000	**1,186,119,227**	213,239,303
Finance Cost	13	(1,700,000,000)	**(1,736,845)**	(1,242,530,161)
Profit / (Loss) before tax		(1,186,458,000)	**1,083,926,097**	1,425,293,591
Provision for Income Taxation	14	(60,000,000)	**(53,881,978)**	(53,113,301)
Profit / (Loss) for the Year		(1,246,458,000)	**1,030,044,119**	1,372,180,290
Other Comprehensive Income for the Year.				
Actuarial Loss on Defined Benefit Obligation.		-	**(1,979,658,769)**	
Revaluation surplus		-	**-**	53,710,538
		-	**(1,979,658,769)**	-
Total Comprehensive Income for the Year		(1,246,458,000)	**(949,614,650)**	1,425,890,828

Accounting Policies & Notes from pages 7 to 29 form an integral part of these Financial Statements.

National Water Supply And Drainage Board

STATEMENT OF CHANGES IN EQUITY

Year ended 31 December 2015

	Note	Assets from Government Departments Rs.	Govt Grants Rs.	Government Equity	Capital grants Rs.	Staf Welfare Fund Rs.	Accumulated Profit/Loss Rs.	Total Rs.
Balance as at 1 January 2014		185,480,387	81,069,995,266		129,350,331,843	15,101,490	(12,240,036,367)	**198,380,872,619**
Prior Year correction -								
Assets recognised and derecognised	**34.1**						141,398,285	**141,398,285**
Depreciation adju for assets recognised and derecognised	**34.1**						14,025,000	**14,025,000**
Write off long outstanding balances	**34.2**						36,145,199	**36,145,199**
Rehabilitation & Construction works	**34.2**						(71,390,879)	**(71,390,879)**
Write off long outstanding trade debtors	**34.2**						(9,639,469)	**(9,639,469)**
Recognize arbitration fee	**34.2**						(100,108,972)	**(100,108,972)**
Restated balance as at 1 January 2014		185,480,387	81,069,995,266		129,350,331,843	15,101,490	(12,229,607,203)	**198,391,301,783**
Net profit for the year		-	-		-		1,425,890,828	**1,425,890,828**
Opening balance Adjustment - 9233/536/1 RCNo.-2678							25,126	**25,126**
Receipts / Transfers during the year		-	7,091,761,866		22,623,790,477	-	-	**29,715,552,343**
Transfers to Staff welfare fund		-				137,808	(137,808)	-
Write of short term deposit	**34.2**						(3,112,400)	**(3,112,400)**
Derecognize inventories	**34.2**						733,287	**733,287**
Restated balance as at 31 December 2014		185,480,387	88,161,757,133		151,974,122,319	15,239,298	(10,806,208,171)	**229,530,390,966**
Net profit for the year		-	-		-	-	(949,614,650)	**(949,614,650)**
Opening balance Adjustment - 9233/536/1 RCNo.-2678		-	-		-	-		-
Receipts / Transfers during the year		-	3,356,774,908		13,092,009,986			**16,448,784,894**
Loan to Equity conversion				49,836,439,996				**49,836,439,996**
Government contribution through bond				13,899,983,925				**13,899,983,925**
Transfers to Staff welfare fund		-	-		-	1,267,186	(1,267,186)	-
Balances as at 31 December 2015		**185,480,387**	**91,518,532,041**	**63,736,423,921**	**165,066,132,305**	**16,506,484**	**(11,757,090,006)**	**308,765,985,132**

Accounting Policies & Notes from pages 7 to 29 form an integral part of these Financial Statements.

National Water Supply And Drainage Board

STATEMENT OF CASH FLOW

Year ended 31 December 2015

For the year ended	Notes	2015 Rs.	2014 Rs.
Cash Flows from/(used) in Operating Activities			
Net Profit/(Loss) before Tax		1,083,926,097	1,425,293,591
Adjustments for			
Interest Income	12	(1,186,119,227)	(213,239,303)
Profit on disposal of Fixed Assets		-	(3,922,353)
Depreciation	10.2	2,237,159,613	2,031,036,338
Retiring gratuity provision	29.1	391,422,596	227,136,696
Opening balance Adjustments			25,126.00
Interest Expense	13	1,736,845	1,242,530,161
Operating Profit before Working Capital Changes		2,528,125,924	4,708,860,256
(Increase)/Decrease in Inventories		(779,307,827)	(1,747,040,583)
(Increase)/Decrease in Debtors, Rece'bles & Deposits		(3,664,857,013)	(5,402,599,585)
Increase/(Decrease) in Creditors & Provisions		2,564,675,885	1,756,947,297
Cash Generated from Operations		648,636,969	(683,832,614)
Tax Paid		(39,677,127)	(53,113,301)
Gratuity Paid	11	(391,422,596)	(227,136,696)
Net Cash from Operating Activities		217,537,246	(964,082,611)
Cash Flows from/(used) in Investing Activities			
Investments in Fixed Assets & Work-In-Progress		(33,652,546,584)	(31,619,414,419)
Withdrawal of other financial assets		6,323,440	8,197,324
Sale proceeds for disposal assets		-	7,995,275
Investment Income Received		1,186,119,227	216,449,698
(Investment) / Withdrawl of Investments		(4,950,000,000)	96,707,679
Net Cash Flows used in Investing Activities		(37,410,103,917)	(31,290,064,442)
Cash Flows from/(used in) Financing Activities			
Government Grant during the Period		2,709,730,350	7,768,323,405
Capital Grant during the period		14,518,201,341	23,177,800,979
New Loans		15,180,696,992	5,569,216,314
Loan Repayments		(498,375)	(1,030,498,375)
Interest Paid		(137,722,880)	(1,871,942,868)
VAT payments through treasury funds		(213,141,596)	(482,110,508)
Sales proceeds of treasury bond		6,256,433,925	-
		38,313,699,758	33,130,788,947
Net Increase in Cash & Cash Equivalents		1,121,133,086	876,641,893
Cash & Cash Equivalents at the begining of the year		2,756,518,649	1,879,876,757
Cash & Cash Equivalents at the end of the period		3,877,651,734	2,756,518,649

The accounting policies and notes on Pages 6 throug 29 Form an integral part of the financial statements.

NATIONAL WATER SUPPLY AND DRAINAGE BOARD

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2015

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 and Water Supply.

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.

For all periods up to and including the year ended 31st December 2011, the NWS&DB prepared its Financial Statements in accordance with Sri Lanka Accounting Standards (SLAS). From the financial year ending 31st December 2012 onward Financial Statements are being prepared in accordance with the new Sri Lanka Accounting Standards (SLFRS/LKAS).

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.

3.1.1Depreciation

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:	1.67%
Equipments	10%
Furniture & fittings	10%
Computers Peripherals & Mobile Phones	20% - 33.3%
Motor Vehicles	10% - 20%
Lease hold Vehicles	14.3%

3.1.2 Investment Property

When the use of a property changes from owner-occupied to another party is classified as Investment Property and the Investment Property is measured at cost less accumulated depreciation.

3.1.3 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.

3.1.4 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.

3.1.5 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.

3.1.6 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.

3.1.7 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.

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.

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

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date. Deferred tax liabilities are recognised for all taxable temporary differences, except:

When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

Deferred tax assets are recognised for all deductible temporary differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised outside profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity. Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

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 2015 and 2014.

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. The losses arising from impairment are recognized in the income statement in finance cost.

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 bold it to maturity. After initial measurement, held-to-maturity investments are measured at amortised cost using the effective interest method, less impairment. Amortised 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 amortisation is included in finance income in the income statement. The losses arising from impairment are recognised 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. NWS&DB did not have any available for –sale financial investments during the years ended 31 December 2015 and 2014.

6.1.2.5Derecognition

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, recognised 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 2015

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 amortised 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 recognised initially at fair value and, in the case of loans and borrowings, carried at amortised 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 amortised cost.

Derecognition

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

		2015 Rs.	2014 Rs.
7. REVENUE			
Metered Sales		**18,102,363,486**	17,190,548,690
Bulk Sales		**204,211,966**	186,952,902
Bowser Supply		**66,967,315**	69,515,149
Income from main operations	7.1	**1,210,478,603**	1,263,032,939
		19,584,021,370	18,710,049,680
7.1 Income from main operations			
Income related to New connection		**1,430,997,587**	1,261,020,050
Expense related to New connection		**(975,190,105)**	(895,759,712)
Income related to other main operations		**754,671,121**	897,772,600
		1,210,478,603	1,263,032,939
8. COST OF SALES			
Personnel Cost		**5,824,762,465**	4,631,740,022
Pumping Cost		**3,511,913,535**	3,801,834,059
Chemicals		**601,539,437**	630,582,551
Repairs & Maintenance		**1,046,395,799**	955,992,424
Establishment Expenses		**432,157,560**	430,648,961
Rent, Rates,Taxes, Security & Other Expenses		**782,394,641**	734,500,154
Rebates		**115,790,669**	140,531,301
		12,314,954,106	11,325,829,471
9. OTHER OPERATING INCOME			
Capital Recovery Charges		**668,431,101**	616,231,430
Other Income	9.1	**960,860,177**	726,471,076
Staff loan benefit		**36,617,319**	47,364,054
		1,665,908,597	1,390,066,559
9.1 Other Income			
Incom related to other operations		**1,037,111,108**	784,443,122
Expenses related to other operations		**(76,250,931)**	(57,972,046)
		960,860,177	726,471,076

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2015

		2015 Rs.	2014 Rs.
10. ADMINISTRATIVE EXPENSES			
Repairs & Maintenence		179,200,602	153,728,144
Establishment Expenses		586,981,952	524,384,794
Rent,Rates,Taxes, Security & Other Expenses		257,943,106	241,181,755
Staff Cost	10.1	5,310,276,758	3,035,000,857
Depriciation	10.2	2,237,159,613	2,031,036,338
		8,571,562,031	5,985,331,888
10.1 Staff cost			
Staff Cost		36,617,319	47,364,054
Personnel Cost		5,273,659,439	2,987,636,803
		5,310,276,758	3,035,000,857
10.2 Depreciation			
Building and structure		757,296,729	677,626,798
Plant & Machinery		868,713,608	776,691,309
Equipments		1,113,242,306	1,030,041,202
Furniture and Fittings		32,019,269	27,845,827
Computers & Periparels		69,851,973	56,320,228
Motor Vehicles		123,838,138	161,910,646
		2,964,962,022	2,730,436,009
Less: Depn. for Grant funded Assets		(773,396,579)	(699,105,182)
Less: Depn. for Rechargable funded Assets		(2,547,097)	(588,330)
Add: Amortization of leased Assets		47,847,426	-
Add: Amortization of Intangible Assets		293,841	293,841
		2,237,159,613	2,031,036,338
11. OTHER OPERATING EXPENSES			
Bad & Doubtful Debts		90,254,064	83,294,669
Provision for Irrecoverable Staff Loans		2,537,470	3,616,235
Provision for Obsolete Stock		(20,344,015)	20,322,832
Retiring Gratuity		391,422,596	227,136,696
		463,870,115	334,370,432
12. FINANCE INCOME			
Investment Income		1,186,119,227	213,239,303
		1,186,119,227	213,239,303
13. FINANCE COST			
Interest On Loans		137,722,880	2,352,782,069
Less: Capitalised Interest on Construction Projects		(135,986,035)	(1,110,251,908)
		1,736,845	1,242,530,161
14. TAXATION			
Economic Service Charge		53,881,978	53,113,301
		53,881,978	53,113,301

15. PROPERTY, PLANT AND EQUIPMENT

15.1 Gross Carrying Amounts	Restated Balance As at 01.01.2015	Additions after Adjustments	Transfers	Balance As at 31.12.2015
Cost	**Rs.**	**Rs.**	**Rs.**	**Rs.**
Freehold Assets				
Land Freehold	7,515,738,064	856,135,914	47,006,600	**8,324,867,378**
Land Leasehold	587,058,964	154,435,137	151,503,750	**589,990,351**
Infrastructure	3,874,089,439	1,481,307,175	7,961,115	**5,347,435,498**
Building - Freehold	7,710,219,053	2,098,627,830	43,315,725	**9,765,531,157**
Structures	28,397,282,289	9,784,687,867	35,002,893	**38,146,967,263**
Plant & eq: pumping treatment	15,931,502,627	7,892,745,110	35,953,197	**23,788,294,540**
Service meter	5,421,254	13,303,000	-	**18,724,254**
Bulk water meter	183,087,670	272,241,325	568,903	**454,760,093**
Transmission & Dist:	53,844,138,461	9,868,061,994	13,801,957	**63,698,398,498**
Mobile Eq:	326,423,458	54,205,284	6,057,875	**374,570,868**
Survey Eq:	21,006,232	4,406,700	-	**25,412,931**
Laboratory	344,555,328	162,142,746	8,462,789	**498,235,285**
Other Equipment	1,167,645,710	294,555,664	23,620,042	**1,438,581,332**
Furniture & fittings-computer	321,603,481	76,806,516	7,640,535	**390,769,462**
Computers & Periparels	326,050,455	85,711,057	3,717,663	**408,043,848**
Motor vehicles cars	124,093,940	27,325,732	(6,188,894)	**157,608,566**
Van busses & jeeps	356,783,163	29,034,053	14,541,200	**371,276,016**
Lorries & trucks	1,258,135,852	202,326,281	55,603,376	**1,404,858,756**
Tractors & trailers	59,403,460	25,291,286	1,643,000	**83,051,746**
Water bowsers,Heavy veh:	729,526,679	187,435,369	11,720,000	**905,242,049**
Motor cycles	16,129,607	3,099,500	225,000	**19,004,107**
Three Weeelers	1,338,240	449,380	-	**1,787,620**
Lease hold Vehicles	22,671,376	23,180,000	16,876,376	**28,975,000**
Total Value of Depreciable Assets	123,123,904,802	33,597,514,918	479,033,102	**156,242,386,618**

15.2 Depreciation	Restated Balance As at 01.01.2015 Rs.	Charge for the Period Rs.	Adjustments Rs.	Balance As at 31.12.2015 Rs.
Depreciation				
Freehold Assets				
Land Freehold	-	-	-	-
Land Leasehold	-	-	-	-
Infrastructure	377,631,290	84,765,846	-	**462,397,136**
Building - Freehold	791,454,475	163,132,851	-	**954,587,326**
Structures	2,342,256,378	509,398,032	-	**2,851,654,410**
Plant & eq: pumping treatment	3,522,626,954	844,890,746	-	**4,367,517,700**
Service meter	1,771,618	756,204	-	**2,527,821**
Bulk water meter	73,996,461	23,066,658	-	**97,063,120**
Transmission & Dist:	4,010,101,694	918,171,917	-	**4,928,273,611**
Mobile Eq:	105,905,257	31,842,025	-	**137,747,282**
Survey Eq:	2,264,072	2,310,367	-	**4,574,440**
Laboratory	162,541,995	38,162,464	-	**200,704,459**
Other Equipment	398,794,127	122,755,532	-	**521,549,659**
Furniture & fittings-computer	156,214,675	32,019,269	-	**188,233,944**
Computers & Periparels	209,548,698	69,851,973	-	**279,400,671**
Motor vehicles cars	111,975,393	6,944,565	(760,760)	**118,159,199**
Van busses & jeeps	337,619,756	5,364,287	(59,375)	**342,924,667**
Lorries & trucks	276,640,606	61,952,627	415,551	**339,008,784**
Tractors & trailers	43,627,030	6,523,753	-	**50,150,782**
Water bowsers,Heavy veh:	152,959,643	37,185,360	(108,789)	**190,036,214**
Motor cycles	6,743,304	1,524,396	-	**8,267,700**
Three Wheelers	463,462	147,972	-	**611,434**
Lease hold Vehicles	17,709,462	4,195,178	-	**21,904,640**
			-	-
	13,102,846,351	2,964,962,022	(513,373)	**16,067,294,999**

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

15.3 Net Book Values	**2015 Rs.**	**2014 Rs.**
At Cost		
Land Freehold	**8,324,867,378**	7,515,738,064
Land Leasehold	**589,990,351**	587,058,964
Infrastructure	**4,885,038,362**	3,496,458,149
Building - Freehold	**8,810,943,831**	6,918,764,577
Structures	**35,295,312,853**	26,055,025,911
Plant & Eq: pumping treatment	**19,420,776,840**	12,408,875,672
Service meter	**16,196,433**	3,649,636
Bulk water meter	**357,696,973**	109,091,209
Transmission & Dist:	**58,770,124,887**	49,834,036,767
Mobile Eq:	**236,823,586**	220,518,201
Survey Eq:	**20,838,492**	18,742,160
Laboratory	**297,530,826**	182,013,333
Other Equipment	**917,031,673**	768,851,584
Furniture & fittings-computer	**202,535,518**	165,388,805
Computers & Periparels	**128,643,177**	116,501,756
Motor vehicles cars	**39,449,368**	12,118,547
Van busses & jeeps	**28,351,348**	19,163,407
Lorries & trucks	**1,065,849,972**	981,495,246
Tractors & trailers	**32,900,964**	15,776,430
Water bowsers,Heavy veh:	**715,205,835**	576,567,037
Motor cycles	**10,736,407**	9,386,303
Three Wheelers	**1,176,186**	874,778
Lease hold Vehicles	**7,070,360**	4,961,914
Total Carrying Amount of Property, Plant & Equipment	**140,175,091,619**	110,021,058,452

15. PROPERTY, PLANT AND EQUIPMENT

15.4 Investment Property

The Building constructed by the Board at Sunil Mawatha, Battaramulla currently occupied by the Ministry of City Planning and Water Supply is recognized as Investment Property according to the LKAS 40 - Investment Property.

This Investment Property is included under the Property, Plant & Equipment

	Land	Building	Total
Cost			
Balance as at 01.01.2015	138,500,000	238,053,034	376,553,034
Additions	-	-	
Balance as at 31.12.2015	138,500,000	238,053,034	376,553,034
Depreciation			
Balance as at 01.01.2015	-	14,965,989	14,965,989
Charge for the Period	-	4,761,061	4,761,061
Balance as at 31.12.2015	-	19,727,050	19,727,050
Net Book Value	**138,500,000**	**218,325,984**	**356,825,984**

Additions related to previous years amounting Rs 26,447,089.00 and depreciation thereon Rs 506,249.00 has been adjusted to respective opening balances

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2015

			2015 Rs.	2014 Rs.
16.	**INTANGIBLE ASSETS**			
	Indian IT Solution Software		**51,012,942**	102,025,883
	Soft Ware SAP 7000		**188,036**	263,250
	Soft Ware - Sewerage		**1,763,045**	2,056,886
	Amortisation		**(51,344,390)**	(51,381,997)
			1,619,633	52,964,022
17.	**CAPITAL WORK IN PROGRESS**			
	Construction Work	34.2	**144,446,281,802**	127,784,179,727
	Rehabilitation	34.2	**5,211,203,351**	21,203,767,995
			149,657,485,153	148,987,947,722
18.	**OTHER FINANCIAL ASSETS**			
	HDFC Investment for Staff Housing Loans		**15,322,302**	21,691,344
	Bank of Ceylon Saving - II		**1,164,935**	1,119,333
	Treasury Bond		**7,643,550,000**	-
			7,660,037,237	22,810,677
19.	**INVENTORIES**			
	PVC Steel Pipe		**3,392,095,366**	2,669,416,046
	Water Meter & Fitting & Brass Items		**743,331,981**	700,971,396
	Chemical Material		**117,617,218**	106,028,250
	Electricals		**382,799,033**	399,525,157
	Building Material		**49,937,381**	31,748,687
	Pump & Spare Parts		**903,040,106**	781,103,254
	Vehicle Spare Parts		**83,096,233**	83,172,286
	Stationary & Office Equipment		**44,692,449**	41,252,984
	Other Items	34.2	**420,441,774**	483,304,271
	Stock in Transit	34.2	**557,590,430**	650,194,705
	Stock Adjustments		**2,651,389**	3,994,431
			6,697,293,361	5,950,711,468
	Less- Major spares			
	Property Plant and Equipment at Stores		**(261,050,602)**	(273,432,521)
	Provision for Obsolete Stock		**(32,403,613)**	(52,747,628)
			6,403,839,146	5,624,531,319

			2015 Rs.	2014 Rs.
20.	**TRADE AND OTHER RECEIVABLES**			
	Trade Debtors	34.2	3,813,272,977	4,004,182,148
	Other Debtors		345,086,098	282,195,544
	Less : Debtors Impairment		(1,197,441,625)	(1,117,560,450)
	Debtors Collection Control		453,509,342	414,324,843
	VAT Receivable		378,901,522	6,652,511
	WHT Receivable		34,144,822	28,452,205
	Advances to Staff		33,203,391	24,376,293
	Loans To Employees		1,788,580,352	1,878,673,515
	Receivable on Interest & Others		304,061,890	13,338,027
			5,953,318,769	5,534,634,636
21.	**DEPOSITS AND ADVANCES**			
	Rechargeable Project Work		90,578	37,525,499
	Pre Payments		1,253,500	25,000
	Advances (Including Mobilizations)		13,005,670,673	9,417,218,575
	Deposits	34.2	81,988,233	72,675,838
			13,089,002,984	9,527,444,911
22.	**INVESTMENTS**			
	Held to Maturity		5,194,262,510	244,262,510
			5,194,262,510	244,262,510
23.	**CASH AND CASH EQUIVALENTS**			
	Cash In Bank		2,317,564,300	612,293,709
	Cash Imprest Head Office		1,290,751	3,189,348
	Cash Imprests Regions		3,473,591	4,246,706
	Cash In Transit		294,470,231	336,341,611
	Call Deposits		968,700,192	1,628,058,432
	Savings Account		292,152,669	172,388,843
			3,877,651,734	2,756,518,649
24.	**ASSETS TAKEN OVER FROM GOVERNMENT**			
	Assets taken over from Government Dept.		185,480,387	185,480,387
			185,480,387	185,480,387

		2015 Rs.	2014 Rs.
25. STAFF WELFARE FUND			
Opening Balance		15,239,298	15,101,490
Received during the year		1,267,186	137,808
		16,506,484	15,239,298
26. GOVERNMENT GRANT			
Treasury Grant		90,627,548,649	88,161,757,133
		90,627,548,649	88,161,757,133
27. CAPITAL GRANTS			
Foreign Grants		165,066,132,305	151,416,090,457
Local Grants		890,983,392	558,031,863
		165,957,115,697	151,974,122,319
28. LOAN PAYABLE			
Foreign Loans through Treasury		-	36,397,895,995
Local Loans		9,412,094,521	1,317,539,003
		9,412,094,521	37,715,434,998
29. OTHER DEFERRED LIABILITIES			
Provision for defined benefit plan	29.1	4,076,428,515	2,096,769,746
Customer and Employee Security Deposits		118,930,258	97,274,390
Treasury Bond discount received in advance		293,729,325	
		4,489,088,098	2,194,044,137
29.1 Movement of Retiring Gratuity Provision			
Balance at the Beginning of the Period		2,096,769,746	2,096,769,746
Add Provision for the Period		2,371,081,365	227,136,696
Less: Gratuity Payments during the Period		(391,422,596)	(227,136,696)
		4,076,428,515	2,096,769,746
30. TRADE AND OTHER PAYABLES			
Rechargeable Work - Customer Advances		3,013,472,388	2,386,334,108
Abitration fee	34.2	-	100,108,972
Contractors Retention		3,497,975,058	2,525,408,496
Lease Hold Creditors		33,822,215	164,547
Less: Interest in Suspense		(8,413,409)	(2,297)
Creditors Control		1,418,387,592	1,158,282,524
Other Creditors		94,752,654	71,026,920
Accrued expenses		861,687,410	294,900,920
Deposits		101,391,187	106,405,671
VAT Payable		227,329,734	282,340,601
With Holding Tax		2,972,264	205,867
Salaries and Other Payables		183,662,792	136,124,416
		9,427,039,885	7,061,300,745

31. DEFERRED TAXATION

Deferred Tax Assets, Liabilities and Income Tax relates to the followings

	Balance Sheet		Income Statement	
	2015	2014	2015	2014
	Rs.	Rs.	Rs.	Rs.
Deferred Tax Liability				
Capital Allowances	**10,232,612,468**	8,129,594,181	**2,103,018,287**	1,424,739,938
Intangible assets	**453,497**	14,829,925	**(14,376,428)**	(13,737,322)
	10,233,065,965	8,144,424,106	**2,088,641,859**	1,411,002,615
Deferred Tax Assets				
Debtors Impairment	**298,860,427**	278,911,735	**19,948,692**	89,724,996
	298,860,427	278,911,735		
Deferred income tax charge/(reversal)			**2,108,590,551**	1,500,727,612
Net Deferred Tax Liability/ (Asset)	**9,934,205,538**	7,865,512,371		

The existence of unused tax losses is strong evidence that future taxable profit may not be available. NWSDB has a cumulative tax loss of Rs.64,136,657,455 as at 31/12/2015. Therefore paying Income Tax by NWSDB is very unlikely, resulting in not recognising a net deferred tax asset /liability.

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 are as follows:

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.

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. 141.4 million had been adjusted for carring amount of PPE and Rs.14 million had been adjusted for depriciation as at 31.12.2014 as follows.

34.1.1 Gross Carrying Amounts

Cost Freehold Assets	Balance As at 31.12.2014 Rs.	Prior Year Adjustments Rs.	Restated Balance As at 31.12.2014 Rs.
Land Freehold	7,515,738,064		7,515,738,064
Land Leasehold	587,058,964		587,058,964
Infrastructure	3,874,089,439		3,874,089,439
Building - Freehold	7,710,219,053		7,710,219,053
Structures	28,355,282,289	42,000,000	28,397,282,289
Plant & eq: pumping treatment	15,816,032,627	115,470,000	15,931,502,627
Service meter	5,421,254		5,421,254
Bulk water meter	183,087,670		183,087,670
Transmission & Dist:	53,834,138,461	10,000,000	53,844,138,461
Mobile Eq:	325,993,458	430,000	326,423,458
Survey Eq:	21,006,232		21,006,232
Laboratory	344,555,328		344,555,328
Other Equipment	1,167,645,710		1,167,645,710
Furniture & fittings-computer	321,598,481	5,000	321,603,481
Computers & Periparels	326,050,455		326,050,455
Motor vehicles cars	124,093,940		124,093,940
Van busses & jeeps	364,483,163	(7,700,000)	356,783,163
Lorries & trucks	1,275,865,852	(17,730,000)	1,258,135,852
Tractors & trailers	59,403,460		59,403,460
Water bowsers,Heavy veh:	730,321,679	(795,000)	729,526,679
Motor cycles	16,411,322	(281,715)	16,129,607
Three Weeelers	1.338.240		1,338,240
Lease hold Vehicles	22,671,376		22,671,376
Total Value of Depreciable Asse	**122,982,506,517**	**141,398,285**	**123,123,904,802**

34.1.2 Depreciation Freehold Assets	Balance As at 31.12.2014 Rs.	Prior Year Adjustments Rs.	Restated Balance As at 31.12.2014 Rs.
Land Freehold	-	-	-
Land Leasehold	-	-	-
Infrastructure	377,631,290		377,631,290
Building - Freehold	791,618,737	(164,262)	791,454,475
Structures	2,344,690,771	(2,434,393)	2,342,256,378
Plant & eq: pumping treatment	3,528,439,982	(5,813,028)	3,522,626,954
Service meter	1,771,618		1,771,618
Bulk water meter	73,996,461		73,996,461
Transmission & Dist:	4,010,101,694		4,010,101,694
Mobile Eq:	105,905,257		105,905,257
Survey Eq:	2,264,072		2,264,072
Laboratory	162,829,393	(287,398)	162,541,995
Other Equipment	398,794,127		398,794,127
Furniture & fittings-computer	156,214,675		156,214,675
Computers & Periparels	209,548,698		209,548,698
Motor vehicles cars	111,975,393		111,975,393
Van busses & jeeps	336,413,867	1,205,888	337,619,756
Lorries & trucks	283,506,225	(6,865,619)	276,640,606
Tractors & trailers	43,624,536	2,494	43,627,030
Water bowsers,Heavy veh:	152,540,735	418,908	152,959,643
Motor cycles	6,830,895	(87,591)	6,743,304
Three Wheelers	463,462		463,462
Lease hold Vehicles	17,709,462		17,709,462
Total Value of Depreciation	**13,116,871,351**	**(14,025,000)**	**13,102,846,351**

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

	Balance As at 31.12.2014 Rs.	Prior Year Adjustments Rs.	Restated Balance As at 31.12.2014 Rs.
Capital Work In Progress (Note 17)			
Construction Work	127,855,775,365	(71,595,638)	127,784,179,727
Rehabilitation	21,203,563,236	204,759	21,203,767,995
	149,059,338,602	(71,390,879)	148,987,947,722
Deposit and advance (Note 21)			
Deposits	75,788,238	(3,112,400)	72,675,838
Trade and other payable (Note 30)			
Arbitraton settlement	-	100,108,972	100,108,972
Inventories (Note 19)			
Stock in transit	645,606,587	4,588,118	650,194,705
Other items	487,159,103	(3,854,831)	483,304,271
	1,132,765,690	733,287	1,133,498,976
Non operating assets	117,895,068	36,145,199	154,040,267
Trade and other receivable (Note 20)			
Trade debtors	4,013,821,617	(9,639,469)	4,004,182,148

NOTES TO THE FINANCIAL STATEMENTS

Year ended 31 December 2015

	2015 Rs.	2014 Rs.
35. Government Equity		
Equity loan conversion	49,836,439,996	-
Goverment contribution (bond)	13,899,983,925	-
	63,736,423,921	-

Durring the year government has decided to convert Rs 49,836,439,996 worth loans to the equity and bond with a value of 13,899,983,925 has been given to Board for raise funds.

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எனது இல.
My No. WSS/A/NWSDB/01/2015

ඔබේ අංකය
உமது இல.
Your No.

දිනය
திகதி
Date 24 January 2017

The Chairman
National Water Supply and Drainage Board

Report of the Auditor General on the Financial Statements of the National Water Supply and Drainage Board for the year ended 31 December 2015 in terms of Section 14 (2) (c) of the Finance Act, No 38 of 1971

The audit of financial statements of the National Water Supply and Drainage Board (NWSDB) for the year ended 31 December 2015 comprising the statement of financial position as at 31 December 2015 and the statement of comprehensive income, statement of changes in equity and cash flow statement for the year then ended and a summary of significant accounting policies and other explanatory information, was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Section 13(1) of the Finance Act, No.38 of 1971. My comments and observations which I consider should be published with the annual report of the Board in terms of Section 14 (2) (c) of the Finance Act appear in this report. A detailed report in terms of Section 13(7) (a) of the Finance Act will be issued to the Chairman of the Board in due cause.

1.2 Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Sri Lanka Accounting Standards and for such internal control as the management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

1.3 Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Sri Lanka Auditing Standards consistent with International Standards of Supreme Audit Institutions (ISSAI 1000-1810). Those Standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial

statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Board's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. Sub-sections (3) and (4) of Section 13 of the Finance Act, No 38 of 1971 give discretionary powers to the Auditor General to determine the scope and extent of audit.

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

1.4 Basis for Qualified Opinion

My opinion is qualified based on the matters described in paragraph 2.2 of this report.

2. Financial Statements

2.1 Qualified Opinion

In my opinion, except for the effects of the matters described in paragraph 2.2 of this report, the financial statements give a true and fair view of the financial position of the National Water Supply and Drainage Board (NWSDB) as at 31 December 2015 and its financial performance and cash flows for the year then ended in accordance with Sri Lanka Accounting Standards.

2.2 Comments on Financial Statements

2.2.1 Compliance with Sri Lanka Accounting Standards (LKAS)

The following observations are made.

(a) **LKAS 16 - Property Plant and Equipment:** According to the provisions of the Standard, if an item of property plant and equipment revalued the entire class of property plant and equipment to which those assets belong shall be revalued. However, the fixed assets valued at Rs.167.90 million had been brought to the accounts during the year under review without being revalued as requested.

Further, 405 and 461 fixed assets items used by Jaffna and Hambantota regions had not been valued and capitalized. As a result, the value of fixed assets shown in the financial statements had been understated.

(b) **LKAS 20 - Accounting for Government Grants and Disclosure of Government Assistance -.**

(i) Foreign grant received during the year 2015 for Improving Community Based Rural Water Supply and Sanitation Project was amounting to

Rs. 135.75 million. However, the related cost included in work-in-progress had not been brought to the financial statements for the year under review.

(ii) Foreign grant balances aggregating Rs. 9,517.27 million relating to 28 projects which remained unchanged over a period of 10 years had been brought to the financial statements as at 31 December 2015 without being amortized. The impact to the financial statements due to non-amortization could not be ascertained in audit as there were no details available relevant to those foreign grants.

(iii) The, unallocated transactions relating to specified projects aggregating Rs. 2,465.18 million accounted for as foreign grants had not been amortized as at 31 December 2015.

(c) **LKAS 37 – Provision**

(i) The indemnity claim of Rs.100.11 million for the year 2014 had been paid in 2016 to the contractor of a foreign funded project without being made provision in the financial statements. Although legal proceedings are continued in respect of interest claim by the contractor, it had not been disclosed in the financial statements as contingent liability.

(ii) A legal proceeding against the Board had been continued at Kegalle District Court claiming an indemnity of Rs.5 million for damage caused to the property of a third party when laying the pipes lines. The disclosures in this connection had not been made in the financial statement for the year under review.

(d) **LKAS 38 - Intangible Assets**

(i) According to the financial statements for the year under review Indian software received as a grant and used by the Board had become a zero value as at end of the year under review. However, a balance of Rs.20.74 million had remained in the grant account according to the ledger without being amortized.

(ii) It was observed that the amortization of Rs.31.9 million relating to the year 2013 and 2014 had been erroneously included in the comprehensive income statement for the year under review. As a result the profit for the year under review had been overstated by similar amount.

(e) **LKAS 39- Financial Instruments Recognized and Measurement:** The balance of Rs.7,643.55 million received as Treasury Bond to meet the local fund requirements of donor funded water supply projects during the year under review had not been categorized as financial assets available for sales in financial statements. Further, the gain or loss on fair value of this balance had not been identified in other comprehensive income for the year under review.

2.2.2 Accounting Deficiencies

The following observations are made.

(a) Although the Emergency Northern Recovery Project had been completed in the year 2013, the assets belonging to the Project valued at Rs.1,298.46 million had remained in work-in-progress without being capitalized. Further, the buildings, lab equipment and vehicles valued at Rs. 258.84 million Rs. 4.88 million and Rs. 23.50 million respectively had not been capitalized and brought to the financial statements during the year under review which were granted by the Jaffna killinochchi Water Supply Project.

(b) The abnormal credit balances of Rs.929.82 million, Rs.17.45 million and Rs.440,694 had been shown in the debtors collection control account, new connection debtors account and trade debtors account respectively and as such those debtors and receivable balances had been understated by Rs. 947.71 million in the financial statements for the year under review.

(c) The foreign grant amounting to Rs.111.59 million and Rs.27.23 million received from Australia Upgrading Sewerage Project and Greater Colombo Wastewater Management Project respectively during the year under review had been credited to the grant account twice, as a result of that grant and work- in- progress account had been overstated by Rs. 138.82 million.

(d) The sea water purification plant constructed in the year 2009 under the Project of the Design and Construction of Drinking Water Treatment Facility for Moratuwa, Panadura and Negombo by using Spanish Tsunami Facility Fund of Rs. 363 million had not been capitalized even elapsed of six years as at 31 December 2015 and as such the value of Property, Plant and Equipment (PPE) shown in the financial statements had been understated by similar amount. It was further observed that, the plant had not been in operation since July 2010 due to problems in the intake.

(e) Even though, the stock balance brought to the financial statements as at 31 December 2015 was Rs. 6,137.05 million, the physically verified balance as at that date was Rs.6,124.06 million. Hence, the stock balance shown in the financial statements as at 31 December 2015 was overstated by Rs.12.99 million.

(f) An outside project valued at Rs. 110.95 million which completed and handed over to the respective parties as at 31 December 2015 had remained in the work-in-progress without being cleared.

(g) Balances aggregating Rs. 1,090.55 million shown under the work-in-progress in respect of 34 projects had remained unchanged over a period ranging from three to ten years without being investigated in order to make necessary adjustments in the financial statements.

(h) The work-in-progress balance had been overstated by Rs.36.67 million and Rs.148.79 million due to entering the amounts twice in the financial statements during the year in respect of ADB Wastewater Project and Upgrading of Sewerage Infrastructures for Kataragama Sacred Project respectively.

(i) Although six projects had been completed and capitalized, the work- in -progress balances totaling Rs.90.98 million had remained under the respective projects without being cleared.

(j) The cost of 97 completed and commissioned water supply projects amounting to Rs. 4,287.15 million had remained in the work-in- progress as at 31 December 2015 without being capitalized.

(k) The interest payables on loans obtained for two projects aggregating Rs. 81.92 million for the years 2010, 2011, 2012 and 2013 had not been accounted for. Further, the Government equity of the Board had been understated by Rs.81.92 million as a result of the non-consideration of those interests.

(l) Seven vehicles valued at Rs.33.08 million received from Moratuwa Ratmalana, Jaela / Ekala Projects used since the year 2012 had been capitalized during the year under review instead of being adjusted to the prior years. However, depreciation thereon amounting to Rs. 6.42 million had been accounted as prior year adjustments. As a result the additions to fixed assets for the year had been overstated by similar amount.

(m) Three Lorries and one double cab used by the Board since 2012 which brought to the accounts twice had been corrected during the year under review. However, depreciations thereon Rs.1.16 million had not been accounted as prior year adjustment in the financial statements.

(n) Value of assets totaling Rs. 43.97 million had been brought forwarded year by year without being identifying them separately in the fixed assets register.

(o) A Bowser valued at Rs.2 million had been brought to the accounts by Batticalo and Ampara Regions as Rs.2 million and Rs.1.77 million respectively. As a result, the

value of vehicles shown in the financial statements for the year under review had been overstated by Rs.1.77 million.

(p) Value of three vehicles had been brought to the accounts at book value and as well as revalued value. As a result value of vehicles had been overstated by Rs.6.2 million.

(q) Fixed assets valued at Rs 8,119.58 million received as grant for three projects had been capitalized during the year under review. However, relevant grant had not been amortized. As a result profit had been understated by Rs. 34.58 million.

(r) The cost incurred for the construction of boundary wall at the Head Office amounting to Rs.6.87 million had not been capitalized and as such the fixed assets as at the end of the year under review had been understated by similar amount.

The Chairman of the Board had stated "that there is a legal case going on in the courts relating to the construction of the boundary wall ".

(s) The value of vehicles shown in the financial statements as at the end of the year under review had been understated due to not valued and brought six vehicles released to the line Ministry during the year under review.

(t) According to the financial statements for the year under review the Value Added Tax (VAT) payable as at 31 December 2105 after set off the debit balance of Rs.6.09 million was Rs. 227.33 million. As such the VAT payable had been understated by Rs.6.09 million.

(u) An over provision of Rs. 4.32 million was made to the obsolete stocks in the financial statements. Hence, the profit for the year under review had been understated by similar amount.

(v) The interest of local bank loans for the year under review was Rs. 441.23 million. Out of that Rs.137.72 million and Rs.303.51 million had been paid during the year under review and in the year 2016 respectively. However, the amount payable as at end of the year under review had not been shown in the financial statements. In this result the work-in–progress and interest payable had been understated by Rs. 303.51 million.

(w) The interest income on investments totaling Rs.2.19 million for the bond received from the General Treasury had not been accounted as interest income for the year under review.

(x) Although the works had been completed, the advances received totaling Rs. 40.46 million had been remained without being set off against the expenditure in respect of 60 rechargeable schemes at Vavuniya and Jaffna Regions.

2.2.3 Un-explained Differences

The following differences were observed in audit.

(a) A difference of Rs.168.51 million was observed between the trade debtors shown in the financial statements and the age analysis of trade debtors which was submitted by the Commercial Division of the Board.

(b) Differences aggregating Rs. 2.81 million was observed between the debtor collection shown in the financial statements and the corresponding schedules furnished by the relevant Regional Support Centres.

(c) As per the information in relation to income from water sales is being maintained by the Commercial Division of the Board, significant difference of Rs.368 million was observed between the financial statements and the figures in the records maintained by the respective Divisions in respect of Meter Sales, Bulk Supply and Bowser Supply respectively.

(e) Differences totalling Rs.1.54 million were observed between ledger balances and the schedules balances in respect of two advance accounts of special projects.

(f) Differences of Rs.1.2 million and Rs. 934,349 were observed between the bank balances shown in the bank reconciliation statements and the balances shown in the cash books of two current accounts.

(g) Differences totalling Rs 212.52 million were observed between the imprest made on the bond received from the General Treasury shown in the financial statements of the Board and the individual financial statements of the eight projects.

(h) A difference of Rs.13.06 million was observed between the work-in-progress in respect of 2KR project implementing in the Vavuniya Region shown in the schedules and the ledger.

(i) A difference of Rs. 7.08 million was observed between book balance and system balance of stationary stock due to unit price was incorrectly mentioned in the computer system.

(j) Due to a difference between the physically verified balance and the computer system balance of the pipe equipment accessories, nuts, bold and loud, a shortage worth Rs.1.40 million and excess worth Rs. 442,870 million were observed.

(k) According to the cash flow statement, the loan obtained during the year under review was Rs.15,288.48 million. However, according to the schedules submitted to audit, it was Rs.15,180.44 million. Hence, an unexplained difference of Rs. 108.04 was observed in audit.

(l) A difference of Rs 216.73 million was observed between the actuarial loss on defined retirement obligations shown in the financial statements and the valuation report prepared by outside party. Further, according to the actuarial valuation report the expenditure for the service cost and net interest on the defined benefit liability was amounting to Rs.622.19 million as at 31 December 2015. Nevertheless, as per the financial statements of the Board these was shown as Rs.391.42 million. Hence a difference of Rs.230.77 million was observed.

(m) A difference of Rs.1.19 million had been observed between the gratuity payments shown in the cash flow statement and total payments shown in the gratuity register.

(n) The differences aggregating Rs.543,556 were observed between system balances and values in the financial statements in respect of PVC pipes stocks.

2.2.4 Un-reconciled Differences

Even though there was a net difference of Rs.3,547.35 million observed between the work-in- progress balance shown in the financial statements and the corresponding balances shown in the individual financial statements of fourteen foreign funded projects, it had not been reconciled.

2.2.5 Unidentified Balances

The following observations are made.

(a) The unidentified grant balances of Rs.108.51 million were remained as at the end of the year under review at Vaunia Region. Out of that Rs.142.23 million remained in the accounts for over four years without being identified. In addition to that it was unable to identify the country which granted the amount of Rs.149.16 million included therein.

(b) Stocks adjustment accounts balance of Rs. 2.42 million had been remained at Kelaniya Region over three years without being cleared.

(c) The abnormal credit balances totalling Rs.5.66 million was observed in new connections debtor balance at two Regions. Further, the unidentified debit and credit balances totaling Rs. 5.78 million and Rs.1.74 million had remained in bank reconciliations statements of seven Regions without being identified.

(d) Unidentified long outstanding debit and credit balances of Rs. 236.23 million and Rs.154.33 million respectively shown under current assets and current liabilities in the statement of financial position had not been identified even as at 31 December 2015. In addition to that, there were several balances already being categorized as

inactive and other unidentified balances aggregating Rs. 35.39 million existed as at 31 December 2015 as well.

(e) The Board had written off unidentified credit and debit balances aggregating Rs.230 million after obtaining approval from the Board of Directors without getting approval from the General Treasury as per the Financial Regulation 113.

(f) Although new connection control accounts should be zero at the year end, a debit balance of Rs.1.15 million and a credit balance of Rs.31.91 million had been remained in the accounts of three Regions. Further, a sum of Rs. 5.11 million and Rs. 2.19 million remained over three years and two years respectively in Trincomalee Region.

(g) Although internal cash transfer control accounts should be zero at the year end, the debit balances totalling Rs. 2,218.04 million were observed in these accounts.

(h) It was observed in audit that an income of Rs.87,982.86 million had been received in time to time during the year under review from the investments made in REPO. Out of that a sum of Rs.79,119.56 million and Rs. 9,207.51 million had been accounted in cash book and inter cash transfer control account respectively. Therefore, an amount of Rs.344.21 million had been transferred to Inter Cash Transfer Control account excessively.

(i) A sum of Rs.405.46 million had been considered as during the year payments in the actuarial valuation report for the calculation of net present value of defined benefit obligation as at 31 December 2015. As per the cash flow statement, it was shown as Rs.391.42 million. Therefore, a difference of Rs.14.04 million had been identified in audit.

2.2.6 Lack of Evidence for Audit

The following evidence as indicated against the each item shown below had not been furnished to audit.

	Item of Accounts	Value	Evidence not made available
		Rs. Million	
(a)	Expenditure made for 2KR project for the period of 2009 to 2011	-	Payment vouchers and expenditure details
(b)	Acquisition of 79 lands for the Regional Support Centre of North	-	Lease agreements and title deeds.

(c)	Trade debtors, debtor collection accounts, new connection debtors	2,266.33	Details schedules relating to 14 Regions
(d)	Advances and deposits	336.73	Detailed schedules
(e)	Net suspense account balance	39.89	Detailed schedules
(f)	Inactive balances written off	22.25	Required information

2.3 Accounts Receivable and Payable

The following observations are made.

(a) The balances of trade debtors, sewerage debtors, Colombo Municipal Council debtor, debtor collection and other debtors aggregating Rs. 1,419.43 million had remained for over a period of 3 years without being recovered.

(b) Short Term Deposits balance of Rs.14.64 million kept by the Board at the Road Development Authority (RDA), Provincial Road Development Authority (PRDA) , Colombo Municipal Council and Urban Councils had remained unrecovered since the year 2001.

(c) Advances given to than Ministry of Water Supply and Drainage amounting to Rs.4.38 million had not been settled even at the end of July 2016 and no action thereon had been taken by the Board. Further, the balance of Rs.15.23 million remained at end of the year 2014 had been transferred to the category of inactive balances without given any reason.

(d) Advances totaling Rs. 54.93 million granted to the contractors during the period from 2000 to 2013 had not been recovered even up to the year under review.

(e) Advances totalling Rs. 5.04 million granted for the special projects had not been settled by the relevant parties for over three years.

(f) Although the lands had been acquired, action had not been taken to recover the advances granted for acquisition of such lands amounting to Rs. 178.55 million during the period of 2009 to 2013.

(g) Value Added Tax (VAT) payable aggregating Rs. 36.82 million remained in the accounts for over three years without being remitted to the Commissioner General of Inland Revenue.

(h) The unclaimed input VAT amounting to Rs. 378.9 million relating to foreign and local funded projects was remained in the accounts without being claimed. Further, it was increased by 5595 per cent as compared with previous year. Moreover, VAT receivable amounting to Rs. 1 million relating to Trincomalee Region had remained over three years without being recovered.

(i) The advances received totaling Rs.876.78 million and Rs. 415.73 million on behalf of 106 and 60 rechargeable schemes respectively had remained for over 3 years and 2 years without being settled.

(j) The debit balance of Rs.333,333 and credit balances of Rs.6.27 million in respect of rechargeable works in Ampara Region remained in the accounts since 1999 without being cleared.

(k) The local loan balance of Rs.20.71 million relating to UDA project was remaining since 2011 up to the end of the year under review without being settled.

(n) The identified balance out of inactive balances of Rs.37.09 million had been remained long a period of time without being settled even up to 31 December 2015.

2.4 Non – compliance with Laws, Rules, Regulations and Management Decisions

The following instances of non-compliance were observed in audit.

Reference to Laws, Rules and Regulation etc.	Non-compliance
(a) Section 03 of the Finance Act, No.05 of 2005	The construction Industry Guarantee Fund Levy of Rs. 55.9 million had not been deducted and remitted to the Commissioner General of Inland Revenue with regard to three projects.

(b) Section 08 of the Public Contract Act, No. 03 of 1987.	Large number of Contracts valued at Rs.5 million or more than that had not been registered within 60 days after the awarding them to the contractors .
(c) Department of Public Enterprises Circular No. PED/12 of 02 June 2003 Section 8.3.9	(i) Nine motor vehicles had been released to the line Ministry and Rs.421,459 had been incurred by the Board for renewal of license and insurance policies of those vehicles contrary to the provisions in the Circular. (ii) Twenty nine employees had been released to the line Ministry and other Ministries during the year under review contrary to the provisions in the Circular. The salaries of 25 employees had not been reimbursed by the line Ministry.
(d) Department of Public Enterprises Letter No. PE/WS/NWSDB/GEN/ 2015 of 20 March 2015	The Treasury bond worth Rs. 13.9 billion received to the Board from the General Treasury to meet the local fund requirements of the donor funded water projects for 2015. However, the interest income earned thereon amounting to Rs.1,001.54 million had been used for the operational and maintenance expenses of the Board.
(e) Guideline 3.2.1of the Government Procurement Guidelines	Competitive bidding procedures had not been followed in implementing the Water supply Project costing Rs.1,754.79 million during the year under review.
(f) Treasury Circular No. 02/2015 dated 10 July 2015	101 vehicles recommended for dispose during the year under review had not been disposed even up to 30 September 2016.

3. Financial Review

3.1 Financial Results

According to the financial statements presented, the working of the Board for the year ended 31 December 2015 had resulted in a pre-tax net profit of Rs.1,083.93 million as compared with the corresponding pre-tax net profit of Rs.1,425.29 million for the preceding year, thus indicating a deterioration of Rs.341.36 million in the financial result. The significant increase in staff cost as compared with the previous year was the main reason attributed for this deterioration in the financial results.

3.2 Analytical Financial Review

3.2.1 Profitability

The following observations are made in this correction.

(a) The gross profit of the year under review had decreased by 1.56 per cent as compared with the preceding year while administrative expenses had increased by 43.21 per cent as compared with the preceding year due to adjustments in anomalies of salaries and increased of salaries. As such an operating loss of Rs. 100.46 million had been recorded during the year under review. However, as a result of increase in the finance income by 456.24 per cent as compared with the preceding year the profit for the year had indicated a positive figure. In this favorable effect has provided sufficient strength to manage the increase of operating loss of the Board. In scrutinizing the financial results, the Board had earned Rs. 1,001.54 million as interest income from the investment of the Bond received from the General Treasury during the year under review which was out of the main activities of the Board.

(b) The contribution per employee of Rs.776,224 in the year 2014 had decreased by 1.08 per cent in the year 2015, while net profit per employee of Rs. 144,242 in the year 2014 had decreased to Rs. 108,872 in the year 2015 reflecting a 24 per cent decrease.

(c) The revenue of Rs. 45.89 per unit of water consumed in year 2014 had decreased by 1.08 per cent in the year 2015.

(d) The following observations were made at scrutinizing the regional income and expenditure report.

(i) According to the information furnished to audit, it was revealed that 16 Regional Offices had sustained a total operating loss of Rs.739.63 million during the year under review.

(ii) Operating income of 9 Regional Offices had been decreased by Rs.21.51 million or 4 per cent during the year under review as compared with the previous year.

(iii) Six profitable Regional Offices had been converted to loss making Regions during the year under review as compared with the previous years.

(iv) The actual operating income had been decreased by Rs.2,422.81 million or 22.7 per cent as compared with the budgeted operating income in respect of 17 Regional Offices.

3.2.2 Significant Accounting Ratios

Certain significant accounting ratios for the year under review and preceding year are given below.

Year	2015	2014
Gross Profit Margin	37.12	39.47
Net Profit Margin	5.53	7.62
Current Ratio	3.6	1.76

The following observations are made in this correction.

(a) According to the above information the gross profit margin and net profit margin had decreased by 2.35 per cent and 2.09 per cent respectively as compared with previous year.

(b) It was revealed that the Board had maintained excess working capital without being invested them in the long term investment sources and as such the working capital management of the Board was at very weak level.

3.2.3 Value Addition

Although the financial results for the year under review had dropped by 25 per cent as compared with the previous year, the contribution of the Board had increased from the year 2011 to the year under review by 77.76 per cent. The remarkable increase in employee remuneration, depreciation of property plant and equipment and the custom duty were the main reasons attributed for this favorable situation.

4 Operating Review

4.1 Performance

(a) **Production and Distribution of Clean Water**

The Board had produced 600 million cubic meters of clean water during the year 2015 as compared with the production of 575 million cubic meters in the year 2014, which indicated 9.48 per cent increase. The number of water supply connections given at the end of the year under review had been 121,843, thus indicating a decrease of 1.94 per cent as compared with that of previous year. The unit production cost had been increased as follows.

Year	2015	2014	2013	2012
Unit cost (Rs.)	46.79	43.96	44.39	41.22

According to the above table the production cost of the unit in the year under review had been increased by 13.51 per cent as compared with the year 2012. The main reason for this increase was increase of staff cost and energy cost remarkably.

(b) According to the target set out for the year under review it had expected to give 15,028 connections during the year under review. However, it had given only 5,979 connections during the year under review. It was revealed that the 60 per cent of target had not being achieved.

(c) **Non - revenue Water (NRW)**

The loss incurred by the Board due to non-revenue water which had not been identified and accounted separately, but it had been brought to the accounts as a normal cost. Details of non-revenue water of the year under review and the last four years are given below.

Description	2015	2014	2013	2012	2011
Water Production (Cu. m.)	600.14	575.00	547.0	525.6	490.0
Water Consumption (Cu.m.)	436.27	410.92	381.6	368.5	344.5
Non-Revenue Water (Cu.m.)	163.87	137.07	165.4	157.1	145.5
NRW as a Percentage of Water Production	**27.30**	**28.53**	**30.24**	**29.89**	**24.64**

The following observations are also made in this connection.

(i) Out of the quantity of water produced by the Board in the year 2015, non-revenue water represented 27.30 per cent due to leakage, unlawful connections, free supply, and administrative reasons etc. The portion of the non-revenue water in the city of Colombo in 2015 had been 46.03 per cent.

(ii) Even though the Board had taken certain course of action during the past period to minimize the unlawful connections and expediting the systems of repairing the temporary breakdowns of water distribution lines, the rate of non-revenue water in the current year as compared with the year 2011 had increased by 10.67 per cent.

(iii) As there is a need for the modernization of the main water distribution systems in the city of Colombo, which is older than 75 years, special attention of the Board is drawn to the urgency for the preparation and implementation of plans for that purpose. Even though two foreign funded Projects are being implemented in this connection at present, an adequate reconstruction of water mains had not been achieved therefrom.

The water distribution mains that should be replaced due to water leakages have not been specifically identified to date. Even though the proposals for the implementation of the several major projects have been made, their implementation is moving at a very slow pace.

(iv) The attention of the Board for reducing the non-revenue water in the areas other than the city of Colombo was also inadequate and it was observed that the targets included in the Corporate Plan were also not realistic.

(v) Although 6 projects with the estimated expenditure of Rs.3,100.17 million had been commenced to reduce the non-revenue water, considerable reduction could not be identified.

(d) <u>Sewerage System</u>

The need for carrying out improvements to the infrastructure facilities for the disposal of sewerage in the cities has arisen due to urbanization taken place along with the economic development of the country. Even though the supply of such facilities is the responsibility of the Board, an adequate progress in this area was not shown in recent years. Although the supply of sewerage disposal facilities to 7 per cent of the population had been expected as a national policy, the information to check the achievement was not made available to audit.

(e) Achievement of Targets

The following observations are made relating to the targets set out in the Action Plan for the year under review.

(a) Although it was targeted to reduce the percentage of Non-Revenue Water, only three Regional Support Centers out of 12 only had been able to achieve that target. Even though it was expected to reduce the total Non-Revenue Water up to 40 per cent at Colombo city, the actual reduction was remained 46.16 per cent at the end of the year 2015.

(b) Although it was expected to increase total pipe water supply coverage and total sewerage connections coverage up to 50 per cent and 2.4 per cent of total population, the actual coverage were only 45.9 per cent and 2 per cent respectively at the end of the year 2015.

4.2 Implementation of Foreign Funded Projects

A large number of water supply and sanitation services projects using local and foreign funds are carrying out during the year under review and in the previous years. However, the following weaknesses were observed in this connection.

(a) Most of the large-scale foreign funded projects had not been completed on due dates and cost had highly escalated due to additional works and price increases resulting from the extension of the project period.

(b) Uniform accounting policies had not been followed for the preparation and presentation of financial statements of such projects.

(c) Jaffna Kilinochchi Water Supply and Sanitation Project

The following observations are made.

(i) A separate Loan Agreement had been entered into between the Government of Sri Lanka and the Agence Francaise de Development in order to provide US$ 48 million equivalent to Rs. 5,363.04 million for the construction of new water intake lift station, treatment plants, pumping station at Iranamadu tank and supplying and laying of raw and treated water transmission main to the Jaffna Municipality area. Out of that, the Project had utilized a sum of Rs. 124.64 million or 2.3 per cent as at the end of the year 2015. However, the loan had been cancelled in 06 October 2015 due to abandonment of the activities of the Project. As a result, a compensation of Rs. 11.90 million and

appraisal fees of Rs. 15.2 million had been paid by the project. In addition to that a commitment charge of Rs. 57.80 million had been paid on underutilization of funds from 2012 to 2015.

(ii) A sum of US$ 35.64 million equivalent to Rs. 3,982 million had been allocated by the Project for the purpose of improvement of sewerage and sanitation systems in Jaffna Peninsula, including construction of a building for sewerage collection system, sewerage treatment plant, an effluent sea outfall and providing maintenance equipment. The designing works and bidding process for the construction of sewerage treatment plants and sewerage reticulation had been completed. However, the construction works had been suspended subsequently in 2016. Therefore, the information collected through household and topographic surveys conducted in this connection in 2015 by incurring a cost of Rs. 24.30 million would not be used for intended purposes.

(d) **Ratmalana / Moratuwa and Ja- Ela / Ekala Wastewater Disposal Project**

The following observations are made.

(i) The contract on wastewater disposal system of Ratmalana / Moratuwa awarded in 2008 had been terminated in 2013 as the contractor was bankrupt and failed to continue the contract. The Project had not taken action to obtain confirmations on performance bond and guarantees on retention money from a foreign commercial bank. Further, a sum of Rs. 3.55 million had been spent to obtain legal opinion from an international firm. However, action had not been taken to commence legal proceeding against the contractor up to April 2016.

(ii) In addition to the above, action had not taken to recover the overpayment of US$ 6.74 million made to the contractor .Further a sum of Rs.18.39 million had been claimed by the Sri Lanka Telecom and the Board (NWSDB) on damages made to properties of the respective entities

(iii) It was further observed that the Project and the Board had spent a sum of Rs.23.75 million to restore the condition of roads based on complains made by the residents and road users who suffered on delay in completion of the construction works.

(vi) The expenditure aggregating Rs. 37.44 million had been incurred by the Project for construction of the wastewater treatment and disposal system for Madiwala Link Housing Scheme, design and building contract for the construction and completion of quarters of Soysapura for NWSDB employees and payment of Vasiri construction were identified as not related to the Project objectives.

(c) **Dry Zone Urban Water and Sanitation Project**

The following observations are made.

(i) A sum of Rs. 3.22 million released to the Department of Agrarian Development for revamped the lands. However, the money had misused by the than Assistant Commissioner of the Department. Therefore, the works to be completed by September 2014 had not been completed even up to March 2016. Due to delays in completion of the above works, the compensation amounting to Rs. 9.91 million had to be paid additionally, out of the contribution received from the Government of Sri Lanka for the payment of compensation to the farmers in respect of loss of paddy cultivation in 2014 and 2015.

(ii) It was observed that a contract at a cost of Rs. 13.27 million had been awarded for clearing and development of other infrastructure facilities in resettlement areas in Peru Aru and an additional payment of Rs 2.81 million had also been made under a variation order. Further, the costs on resettlement activities required to be met from the contribution of the Government of Sri Lanka had been incurred out of the proceeds of the Loan.

(iii) The water transmission and distribution system in Mannar and Vaunia districts awarded at a value of Rs.598.93 million in May 2013 had shown a slow progress of 66 per cent as at 31 December 2015. Further, the defects of the pipes laid on construction of water transmission and distribution system had been identified in September 2014 and directed the contractor to replace the pipes with inferior quality. However, the contractor had not taken action to replace the pipes even as at 31 May 2016.

(f) **Gampaha, Attanagalla and Minuwangoda, and Greater Dhambulla Integrated water supply project (Unsolicited)**

The following observations are made.

(i) The initial estimated cost of US $.172 million in 2012 had increased up to US $229.5 million in the year 2014 at the time of contract awarded. According to the company profile, the contractor is specialized in power sector not in the water supply sector. The institute of SEMA had advised to the Board that it should take into consideration before awarded the contract as the contractor was alleged various disputes at the construction of the phase 1 of the Norrochchole Power Station. However, without considering the above instructions, the contract was awarded to the same contractor on 15 May 2013 by the Board. It was further observed that the Contractor had been selected contrary to Guideline 3 of the Government Procurement Guidelines.

(ii) Contract activities valued at Rs.1500 million carried out up to December 2015, before confirming the financial availability in terms of Guideline 8.7.1 (a) of the Government Procurement Guidelines and the sub criteria 1.6(c) and 8.1(a) of the Contract Agreement. In the meantime, the principle contractor had been subcontracted the works valued at US $ 64 million to the Board. Further, before enforcement of the loan agreement 10 per cent advance of Rs.20.90 million had been given to the Board by the principle contractor in respect of sub contract activities.

(iii) A sum of Rs.96.2 million had been spent contrary to the objectives of the project and out of that a sum of Rs.77 million had been spent for the payment on Ratupaswala water pollution incident in contrary to the objective of the project. Further, an overhead of Rs.13.85 million had been paid in respect of expenditure which was incurred contrary to the objectives of the project. Although the activities of the project informed to suspend, the pipes stock valued at Rs. 2.04 million own to the Board given to the project.

(iv) A sum of Rs. 56.05 million had been spent for the procurement of four crew cabs for the purpose of Greater Dhambulla Water supply Project (Unsolicited). However, the invoice value of those cabs was Rs. 13.32 million. Hence, the additional cost of Rs. 42.73 million had been paid due to lack of properly defined specifications including country of origin. In addition to that the defect liability period of machine, equipment, pumps and accessories valued at US $ 4.24 million imported by the contractor before commencement of the project had been expired due to taking long period of time to commence the Project works.

(h) Local Bank Loan Water Supply Projects

The following observations are made.

(i) The contract of Laggala New Town Water Supply Project had been awarded in contrary to Guideline 1.2.1 of the Government Procurement Guidelines. According to the paper advertisement, the value of the contract was Rs.2,500 million. Nevertheless, it had been awarded for Rs.4,495,87 million or increasing the initial contract price by 80 per cent. The reasons for this increase had not been furnished to audit. The contract agreements and performance bond according to Guideline 5.4.9 of the Government Procurement Guidelines had not been furnished to audit. In addition to that the bid evaluations had been done prior to the technical and financial evaluations.

(ii) The contract of Madirigiriya Water Distribution – Phase 11 project had been awarded without calling competitive biddings in terms of Guideline 3.2.1 of

the Government Procurement Guidelines. The initial price of the contract increased by Rs.200.03 million or 15 per cent without changing scope and reasons for this increase had not been explained to audit.

(iii) The initial cost of the Galagedara Mawathagama Water Supply Project amounting to Rs.700 million had been increased up to Rs.3,064 million or 338 per cent at the time of awarding the contract and the reasons for this increase had not been furnished to audit. The competitive bidding procedure had not been followed for this contract as per Guideline 3.2.1 of the Government Procurement Guidelines. Further financial capability of the contractor had not been considered before awarding the contract in terms of Guideline 8.7.1 of the Procurement Guidelines.

(iv) Although the engineer's estimate of the Colombo city water supply improving project- phase 01 was Rs.2355.55 million, the contract had been awarded to the value of Rs.2792.06 million with 17 per cent increase. The competitive bidding procedure had not been followed as per Guideline 3.2.1 of the Government Procurement Guidelines. Although the Standard Cabinet Approved Procurement Committee (SCAPC) had recommended getting approval for revised engineer estimate from the Department of National Planning, information whether such an approval obtained or not had not been furnished. According to the interim payment Certificates (IPC) applications, a sum of Rs.49.31 million had been paid to the contractor for ten items before completion of the activities. Further, according to the contract agreement 10 per cent had not been deducted from the IPC as retention. Hence, it was observed that over payment of Rs. 35.20 million had been paid from IPC5 without comply with the above requirements.

4.3 Management Inefficiencies

The following observations are made.

(a) Actions had not been taken to correct the stocks deficit shown in stocks adjustment accounts amounting to Rs.2.42 million

(b) An additional cost of Rs. 1.25 million had to be incurred as vehicle rent for four vehicles used by the Dry Zone Water Supply and Sanitation Project due to non-using of agreed number of kilometers.

4.4 Idle and Underutilized Assets

The following observations are made.

(a) The water meters and brass items valued at Rs.10.63 million had been remained in stocks as slow moving items for a long period of time.

(b) The PE accessories, nut and bold, loud etc. valued at Rs.20.72 million received under Tsunami grant remained at C stores of the Head Office as non-moving items.

(c) The DI pipes valued at Rs.4.32 million, Rs. 26.28 million and Rs. 9.71 million had remained at C stores at the Head Office as non-moving, slow moving and obsolete stocks respectively.

(d) According to audit test check, non-moving stocks balance totaling Rs. 67.50 million in respect of the six water supply schemes had remained for a long period of time. It represents 11 to 60 per cent of the total stocks balance of those water supply schemes.

(e) It was observed that non-moving stocks valued at Rs.397.60 million and slow moving stocks valued at Rs. 346 million had remained in stocks as at 31 December 2015 and it represent 6.7 per cent and 6 per cent respectively of the total stocks value of the Board. Further, it was an increase of 8 per cent and 5 per cent respectively as compared with the previous year.

(f) The stocks valued at Rs. 9.5 million had remained at Adampan, Mannar and Vavuniya stores for a long period of time without being utilized for any purpose.

(g) The three water supply schemes valued at Rs.1.8 million had been abandoned without being achieved the objectives of the projects.

(h) Two Reverse Osmosis (RO) plant valued at Rs.2.67 million located at Karawddhi and Narandanee in Jaffna had been abandoned.

(i) Billing had not done for water consumption of 1,008,539 cum3 by the National Housing Authority during the year under review.

4.5 Matters of Contentious Nature

The following observations are made.

(a) A land had been purchased by the Board to construct the Wastewater Treatment plant under Galle Area Wastewater Disposal Project. The Department of Valuation valued this land as Rs .71.5 million, and 30 per cent advance of Rs.21.45 million had been given on April 2014 to the land owner. The land already occupied the some families and existing owner had removed the soil from the land after receiving the advance.

Without considering the ownership of the land, advance had been given to the seller. Proper actions had not been taken in this regard.

(b) Greater Galle Water Supply Project had acquired a land by incurring Rs. 16 million for the construction of Hapugala Water Refinery Plant in 2002, and the land was not utilized for the intended purpose to date due to large rock was found after the acquisition of the land while investigation for the constructions therein.

(c) The income of excavated rocks of the projects should be transfer to the Sri Lankan Government according to Section 26 of Mines and Mineral's Act No 33 of 1992 . The rocks valued at Rs.79.97 million excavated by two projects had not been transferred to the Government income.

(d) The stocks in transit balance amounting to Rs.7.3 million shown in the financial statements as at 31 December 2015 and out of those stocks valued at Rs.5.8 million had been remained over one to three years period without being investigated.

(e) The imported stocks in transit, balance amounting to Rs.140.41 million shown in the financial statements as at 31 December 2015 and out of that stocks valued at Rs.29.40 million had been remained over a period of two years without being investigated.

(f) Although stocks received and stocks issued should be adjusted to the stock balance prior to the stock verification period, the net debit balances totaling Rs.806.50 million and net credit balances totaling Rs. 538.95 million had been adjusted to the stocks balance after the stocks verification period due to non-updating the stocks books.

4.6 Human resource management

The following observations are made.

(a) The Board had not taken action to fill the vacancies during the year under review remained in the main operational level posts such as the Managers / Chief Engineer, Engineer (Civil) , Middle Level Technical (ML- T) Clerical and Allied Categories, Other Skilled Grade and Semi-Skilled etc.

(b) The Board had recruited 508 multi skills trainees on casual basis during the year under review without being obtained the approval from the Department of Management Services. The Director General of the Department of Public Enterprises and Committee on Public Enterprises held on 7 April 2016 directed to stop the recruitments. In contrary to the above directions the Board of Directors had decided on 19 April 2016 to permanent the said trainees.

(c) Action had not been taken to finalize the Scheme of Recruitments and Promotions from the Department of Management Services, as specified in the Management Services Department's Circular No 30 dated 22 September 2006.

4.7 Apparent Irregularities

The cash frauds of Rs. 246.66 million committed at Trincomalee, Kalaniya and Ampara Regions during the period of 1999 to 2006 had not been recovered from the persons responsible even up to 31 December 2015.

4.8 Operating Weaknesses

According to the Cabinet Decision No. 15/0243/614/004 dated 02 April 2015, before increasing the salaries of employees of the Board, it should be submitted a cost saving proposal with the concurrence of the Trade Unions and the higher management to recover the additional cost of the salary and as instructed, the Board had prepared a cost saving proposal including 12 expenditure items. Further, it had been agreed to submit the monthly progress reports of the cost saving proposal to the Secretary of the line Ministry. However, information had not been furnished to the Secretary of the line Ministry. Although it was estimated to save the cost of Rs. 1,483 million under above 12 items to recover the salary increase of the year under review, it had not been furnished details to confirm the achievements.

5. Accountability and Good governance

5.1 Internal Auditing

The following observations are made.

(a) According to the information made available for audit, the post of Internal Auditor and seven other internal audit staff had not been filled even in the year under review

(b) As per the Internal Audit Plan for the year under review, it was identified seven organizational objectives and the twenty four subject areas. However, adequate consideration had not been made in respect of ten subject areas and no single query issued in respect of seven subject areas.

(c) The adequate attention had not made in carrying out the internal audit activities in terms of Internal Audit Guide Circular No DMA/2009 (i) of 09 June 2009 issued by the Department of Management Audit of the General Treasury.

6. Systems and Controls

Weaknesses in systems and controls observed during the course of audit were brought to the notice of the Chairman of the Board from time to time. Special attention is needed in respect of following areas of control.

Control Area	Observation
(a) Accounting	Failure to reconcile the control accounts and work in progress balances.
(b) Assets Management	(i) Duplication of same fixed assets in different Regions. (ii) Not reviewing and reinstating the value of intangible assets. (ii) Un-capitalizing the fixed assets even though the projects had been completed. (iii) Failure to investigate about the work in progress balances remained unchanged for a long period of time.
(c) Stock Control	(i) Un-reconciled the physically verified balances along with the ledger balances (ii) Prevailing differences between the computerized system balances and physically verified balances (iii) Prevailing long outstanding stocks in transits balances. (iv) There were long unmoving and slow moving stocks item remained in the stores.
(d) Control over Journal Entries	(i) Non compatible in numbering the journal vouchers at ledger and journal vouchers. (ii) Not entered the narrations in some journal vouchers.
(e) Project Administration and Performance Review	(i) Failure to complete the projects in expected time period and extending the time period of most projects without valid reasons.

	(ii) Unable to correctly carried out the feasibility studies.
	(iii) Non-compliance with Government procurement guidelines
	(iv) Cost had highly escalated due to time extension and weaknesses in fund utilization.
(f) Accounting of Rechargeable scheme	Advance received for the rechargeable schemes remained in the custody for long a period without being set off relevant expenditure incurred.
(g) Personnel Management	(i) Releasing of human resources to other institutions without required authority.
	(ii) Recruitment of employees exceeding the approved cadre and without obtaining approvals from General Treasury.

H.M. Gamini Wijesinghe
Auditor General

Abbreviations

AAT	- Association of Accounting Technicians
ADB	- Asian Development Bank
ADSL	- Asymmetric Digital Subscriber Line
AFD	- Agency of French Development
AGM	- Assistant General Manager
ANZ	- Australia and New Zealand
BOC	- Bank of Ceylon
BOQ	- Bill of Quantity
BOI	- Board of Investment
BMICH	- Bandaranayaka Memorial International Conference Hall
CBI	- Community Based Instruction
CBO	- Community Based Organization
CCN	- Colombo City North
CCOEC	- China National Corporation for Overseas Economic Corporation
CCS	- Colombo City South
CCTV	- Closed Circuit Television
CD	- Compact Disc
CFL	- Compact Florescent Lamps
CIDA	- Construction Industry Development Authority
CKDu	- Chronic Kidney Disease of Unknown Etiology
CMC	- Colombo Municipal Council
CMEC	- China Machinery Engineering Corporation
CSI	- Customer Satisfaction Index
Cu.m	- Cubic meter
DEWATS	- Decentralized Wastewater Treatment and Disposal System
DFCC	- Development Finance Corporation of Ceylon
DGM	- Deputy General Manager
DI	- Ductile Iron
DMAs	- District Meter Arears
DMAS	- Department of Medical Assistance Services
DMC	- Disaster Management Center
DS	- Divisional Secretariat
DSD	- Divisional Secretariat Division
DZUWSP	- Dry Zone Urban Water and Sanitation Project
EDC	- Export Development Canada
EDCF	- Korea Economic Development Cooperation Fund
EFI	- Electric Fuel Injection
EFIC	- Export Finance and Insurance Corporation
EIA	- Energy Information Administration
ERD	- External Resource Department
GCS	- Greater Colombo Sewerage
GCWWMIIP	- Greater Colombo Water and Wastewater Management Improvement Investment Programme
GIS	- Geographic Information System
GM	- General Manager
GN	- Grama Niladari
GND	- Grama Niladari Division
GOSL	- Government of Sri Lanka
GPOBA	- Global Partnership on Output-Based Aid
GPS	- Global Positioning System
GR	- Ground Reservoir
GSE	- Golden State Environment
GW	- Ground Water
HDPE	- High Density Poly Ethelene
HH	- House Holds
HNDE	- High National Diploma in Technology
ICT	- Information and Communication Technology
ICTA	- Information & Communication Technology Agency
ICTAD	- Institute for Construction Training & Development
IEE	- Initial Environmental Examination
IESL	- Institution of Engineers Sri Lanka
IET	- Institute of Engineering Technology
IIESL	- Institute of Incorporated Engineers Sri Lanka
ISO	- International Organization for Standardization
IT	- Information Technology
ITEC	- Indian Technical Economic Cooperation

JBIC - Japan Bank for International Cooperation

JICA - Japan International Cooperation Agency

JPY - Japanese Yen

JWRM - Jaffna Water Resource Management

km - kilo meter

LA - Local Authorities

LED - Light Emitting Diode

LKR - Sri Lankan Rupee

M&E - Mechanical & Electrical

MC - Municipal Council

MCM - Million Cubic Meters

MDTD - Manpower Development and Training Division

MD&T - Manpower Development & Training

MICP - Manager's Internal Control Programme

MIS - Management Information System

MDTD - Manpower Development & Training Division

MOU - Memorandum of Understanding

MPC - Ministry Procurement Committee

MS - MicroSoft

NC - North Central

NAITA - National Apprentices & Industrial Training Authority

NDB - National Development Bank

NDT - National Diploma in Technology

NHDA - National Housing Development Authority

NICD - National Institute of Corporative Development

NPD - National Planning Department

NPD - National Planning Department

NRW - Non-Revenue Water

NSB - National Savings Bank

NUFFIC - Netherland Felloship Programme

NVQ - National Vocational Qualification

NW - North Western

NWSDB - National Water Supply & Drainage Board

ODA - Official Development Assistance

O&M - Operation & Maintenance

OIC - Officer in Charge

P&D - Planning & Designs

PAC - Project Appraisal Committee

PD - Project Director

PDMRC - Planning & Design Manual Review Committee

PE - Poly Ethelene

PRDA - Provincial Road Development Authority

PRDD - Provincial Road Development Department

PVC - Polyvinyl Chloride

PWD - Public Works Department

PWTP - Package Water Treatment Plants

R&D - Research & Development

RDA - Road Development Authority

RFP - Request for Proposal

RM - Regional Manager

RO - Reverse Osmosis

RPE - Rate of Perceived Survey

RSC - Regional Support Centre

RSC(WN) - Regional Support Centre - Western North

RSC (WS) - Regional Support Center Western South

RSC(NC) - Regional Support Centre - North Central

RSC (WC) - Regional Support Centre Western Central

RSC(N) - Regional Support Centre - North

RWS - Rural Water Supply

SCADA - Supervisory Control and Data Acquisition

S&D - Socialists and Democrats

SACOSAN - South Asian Conference on Sanitation

SCADA - Supervisory Control and Data Acquisition

SCAPC - Standing Cabinet Appointed Procurement Committee

SHIFT - Sanitation and Hygiene Initiative for Towns

SIA - Social Impact Assessment

SIDA - Swedish International Development Agency

SLS	- Sri Lanka Standards
SMS	- Short Message Service
SQL	- Structured Query Language
TCE	- Total Cost Estimate
TEC	- Towns East of Colombo
TFWLP	- Temasek Foundation Water Leadership Programme
UC	- Urban Council
UNICEF	- United Nations International Children's Education Fund
UoC	- University of Colombo
uPVC	- Unplasticised Poly Vinyl Chloride
USA	- United States of America
USD	- United States Dollar
USS	- Underserved Settlement Water Supply
VAT	- Value Added Tax
VSD	- Variable Speed Drive
WHO	- World Health Organization
WQS	- Water Quality Surveillance
WS	- Water Supply
WS&S	- Water Supply & Sanitation
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

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, R.W.R. Pemasiri - *Chairman (upto 12.01.2015)*

Eng, K. A. Ansar - *Chairman (since 05. 02. 2015)*
Mr. K. D. Gamini Gunaratne - *Vice Chairman (upto 21.01.2015)*
Mr. M. Shafeek Rajabdeen - *Vice Chairman (since 10.03.2015)*
Mr. N. P. Thibbutumunuwa - *Working Director (upto 21.01.2015)*
Mr. P. I. T. Mahilal Silva - *Working Director (Since 05.02.2015)*
Dr. P. G. Maheepala - *Director General of Health Services, Ministry of Health*
Mr. J. M. U. P. Jayamaha - *Additional Director General Department of Public Enterprises (since 02.04.2015)*
Mr. Shantha Rathnayake - *Board Memeber (since 12.02.2015)*
Mrs. K. A. Subadra Walpola - *Senior Assistant Secretary Ministry of Local Government & Provincial Councils (Since 13.02.2015)*

Secretary to the Board
Mrs. W. P. Sandamali De Silva

Senior Management

Eng. B. W. R. Balasuriya - General Manager
Eng. G. A. Kumararathna - Addl. GM (Sewerage)
Eng. D. S. D. Jayasiriwardene - Addl. GM (Southern/ Eastern)
Mr. D. Thotawatte - Addl. GM (Finance)
Mr. G.K. Iddamalgoda - Addl. GM (Human Resource Management)
Eng. D. U. Sumanasekara - Addl. GM (Water Supply Projects)
Eng. R. S. C. George - Addl. GM (Policy and Planning)
Eng. W. B. G. Fernando - Addl. GM (Corporate Services)
Eng. (Mrs. C. J. D. Perera - Addl. GM (Western)
Eng. J. R. B. Nedurana - Addl. GM (North/ Central)

Deputy General Managers of Divisions

Eng. (Mrs.) K. T. P. Fernando (Project Co-ordination)
Eng. Thilina S Wijethunga (ADB Projects)
Eng. S. G. Jayawardena (Sewerage)
Eng. R. H. Ruvinis (Planning & Design)
Eng. S. G. J. Rajkumar (Development)
Eng. C. R. Perera (Production - Western)
Eng. S. Sumanaweera (Corporate Planning)
Eng. M. Abeysekara (M&E)
Eng. S. G. G. Rajmumar (Commercial)
Eng. J. Chandradasa (Information Technology)
Eng. Dulip Gunawardena (RWS)
Ms. M. M. S. Peiris (Finance)
Ms. A. P. Sirima De Silva (Costing)
Mr. R. M. A. S. Weerasena (Internal Audit)
Ms. W. A. C. Sriyani (Human Resources)
Mrs. N. Y. S. Abeygunawardena (Industrial Relations)
Mr. R. M. A. Bandara (Supplies)

Deputy General Managers of Provinces/ RSCs

Eng. T. W. S. Perera (Western - South)
Eng. M. K. Hapuarachchi (Western - Central)
Eng. U. Rathnapala (East - Acting)
Eng. K. W. Premasiri (Western - North)
Eng. L. L. A. Peiris (Central)
Eng. M. I. A. Lathiff (Uva)
Eng. C. C. H. S Fernando (North Central)
Eng. N. E. M. S. B. Ekanayaka (North Western)
Eng. Barathithasan (North - Acting)
Eng. R. A. B. S. Mendis (Sabaragamuwa)
Eng. J. K. S. Pathirana (Southern)

Addl. GMs / DGMs working as Project Directors

Eng. (Mrs.) C. J. D. Perera - (Kalu Ganga WSP, Phase I - Stage II)
Eng. J. R. B. Nedurana - (ADB 5th project)
Eng. 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. M. K. Hapuarachchi (Colombo City Water Supply Improvement Project)