

DEPARTMENT OF METEOROLOGY

ANNUAL ADMINISTRATION REPORT FOR THE YEAR 2012

1. VISION

A centre of Excellence in Weather, Climate and Early warning related services.

2. MISSION

Provide services pertaining to Meteorology, Aeronautical Meteorology, Marine Meteorology, Hydro Meteorology, Agricultural Meteorology, Climatology, and Astronomy to government agencies, private sector and the general public in keeping with national interests and international standards.

3. OBJECTIVES

- To observe and collect weather elements in conformity with the World Meteorological Organization (WMO) standards, and maintenance of climatological databases.
- To provide Weather and Climatological services as the national authority.
- To issue early warnings and advisories on weather related hazards and Tsunami.
- To provide meteorological services to National and International Aviation in accordance with the technical regulations stipulated by World Meteorological Organization (WMO) and International Civil Aviation Organization (ICAO).
- To encourage study and research in Meteorology, Climatology, Climate Change and allied subjects, and to organize and contribute to public awareness programmes in these thematic areas.
- To provide limited Astronomical and Terrestrial Magnetism related services.

4. GENERAL

The Department functioned under the purview of the Ministry of Disaster Management and a Cabinet paper has been approved for the modernization of the Department for considering the increasing Meteorological and Climatological disasters and services demand at present. As per this cabinet approved project, steps are being taken to obtain the required funds for the project.

5. STAFF

The Department of Meteorology is administered by the Director General of Meteorology. Apart from the headquarters of the Department situated in Colombo, there are 21 outstation offices.

The Headquarters in Colombo houses the technical branches such as the National Meteorological Centre, Research, Climate, Rainfall, Agricultural Meteorology, Radar/Radiosonde, Computer and Climate Change divisions. Apart from those, divisions dealing with electronic instruments maintenance, meteorological instrument maintenance, finance, administration and supplies are also housed in the Headquarters. Meteorological offices at Katunayaka and Ratmalana Airports provide aviation meteorological services to international and domestic aviation respectively.

As per the letters of Management Services Department dated 29.03.2012 and 14.08.2012, the total cadre of the department has been increased to 459. According to the new approved staff, it consist with 52 Senior Level Officers, 29 Tertiary Level Officers, 238 Secondary level Officers and 140 Primary Level Officers. However by the end of the year 2012, 32 Senior Level Officers, 03 Tertiary Level Officers, 176 Secondary Level Officers and 72 Primary Level officers and 15 Primary Level substitute Officers were employed in the Department with the total staff of 283. The necessary steps have been taken to fill existing vacancies and new vacancies which were created by re-structuring proposal

Office Staff Revision in the year 2012

As per the letter from the Management Services Department with Ref no. DMS/C04/12-15 dated 29.03.2012, the Department total cadre has been increased from 357 to 449 and by the letter with Ref No.DMS/C04/12-15 & dated 14.08.2012, Management Services Department has approved new 10 post for Development Officers for the Department of Meteorology. Therefore, the total carder has been increased to 459 and necessary action has been taken to fill the vacancies.

Mr. G.B. Samarasinghe, who was the Director General of the Department, retired at compulsory retiring age of 60 years with effect from 23. 03. 2012 and Mr. S.H. Kariyawasam, who was the Director (Scientific and Admin), was appointed as the Director General of Department from 24.03.2012 by the cabinet paper with Ref no. අම/12/03/88/548/001 dated 05.04.2012.

By the approval of Public Service Commission, Mr. D.J.A.Weerawardhana,Deputy Director , was appointed to a Director post and Mr.A.K. Karunanayake , Meteorologist, was appointed as a Deputy Director with effect from 24.03.2012. According to the new re-structuring proposal, two Deputy directors Mr. S.J. Jayasekara and M.D. Dayananda were appointed for the Director post from 29.03.2012 with approval of Public Service Commission.

Mr. K.H.M.S. Premalal, Deputy Director, was released from the Department on 24.08.2012 for the post of Scientist in SAARC Meteorological Research Centre at Dhaka, Bangladesh for three years.

Meteorological Officer Ms.V.S. Dissanayake and Mr. P.G.A. Premarathna were released on secondment basis for two years for the Presidential Secretariat from. 26.10.2012 and 13.12.2012 respectively

In addition to the retirement of Director General of the Department, the following officers retired at compulsory retirement age of 60 years, during the year 2012.

No.	Name	Post	Retirement Date
01	Mr. J.A. Thilakarathna	Meteorologist	2012.12.28
02	Mr. K.K. Piyatissa	Meteorologist	2012.03.27
03	Mr. K.P.D.R.A. Karunanayake	Senior Meteorological Officer	2012.02.05

04	Mr. C. Hettiarachchi	Senior Meteorological Officer	2012.10.24
05	Mr. M.K.P.B.J.D. Perera	Senior Communication Officer	2012.03.16
06	Mr. V.Pushpanadan	Meteorological Observer	2012.01.26
10	Mr. D.A.R. Ranawaka	Meteorological Assistant	2012.06.13

The following officers were retired on their request during the year 2012.

.No.	Name	Post	Retirement age (years)	Retirement date
01	Mr. E.G. Upali	Meteorological Observer	51	2012.04.09
02	Mr. H.G.C.K Kariyawasam	Meteorological Observer	44	2012.04.01
03	Mr. J. Steewan	Management assistant	55	2012.08.12

Name of the officers who got new appointment or were transferred or resigned from the service or were transferred to other department by 2012 are given in the following tables.

Name of the officers who got new appointment in the Department

Name	Service	Post	Appointment Date
Miss U.P.A.T. D. Karunanayake	SLAS	Asst. Director (Admin)	2012.01.02
Mr. A.C.M. Rodrigo	SLSS	Meteorologist	2012.01.16
Miss A.H.P.P. Karunapala	SLSS	Meteorologist	2012.02.03

Name of the officers who transferred to the Department

Name	Service	Post	Reporting Date
Ms. W.G.K. Aruna Shanthi	SLAccS	Accountant	2012.09.10

Name of the officers who resigned from the service

Name	Service	Post	Date of Report
Mr. K.G.P.D.Y. Kulasekara	SLTS	Meteorological Observer (Trainee)	2012.03.13
Mr. R.W.D.W. Rajasekara	SLTS	Meteorological Observer (Trainee)	2012.03.13

Miss K.L.G.W. Gunathilaka	SLTS	Telecommunication & Radar Technician	2012.03.26
Miss S.M.D.D. Senarathna	SLTS	Telecommunication & Radar Technician	2012.03.26
Mr. D.U.A. Fernando	SLTS	Telecommunication & Radar Technician	2012.03.26
Mr. W.K.H. Sandaruwan	SLTS	Telecommunication & Radar Technician	2012.05.03
Miss H.M.E.L. Haluwana	Management Asst Service	Management Assistant	2012.03.19

Name of the officers who transferred from the Department

Name	Service	Post	Date of transferred
Miss D.U.A. Edirisinghe	SL Accountant Service	Accountant	2012.09.11
Mr. W.H.K.M. de Silva	Management Asst. Service	Management Assistant	2012.09.17
Miss P.Abenayake	Management Asst. Service	Management Assistant	2012.05.10

As Mr. U.L.B. Saaman, Management Assistant did not report for duty from 27.09.2012 he was vacated his post by Director General with effect from same date. Mr. W.P. Wicramarachchi, who was working as K.K.S., expired unexpectedly on 11.05.2012.

A class I officer belongs to the Management service was transferred from the Department and a class III officer assumed the duties on annual transfers. Under the 2012 annual transfers, one driver who belongs Drivers' Combine Service and two KKS officers transferred from the department and three officers of same service came from the other department. As per the decision to outsource the department cleaning service and sanitary service, another two KKS officers were released from the department.

The actual total cadre at the end of the year was 283 out of the sanctioned cadre of 459 by the end of the year.

6. DEVELOPMENT ACTIVITIES

Civil construction of the tower and associated building structures at Gongala (Deniyaya) mountain to install the Doppler Radar system was completed. While carrying the crane to raise the instrument to the tower, unexpectedly crane has fallen down, and therefore, the installation work has been delayed. However, the damaged portion of the road is being repairing and the installation of the system is expected to complete before end of the March 2013.

It was planned to construction of Jaffna new office building by two stages. For the first stage, i.e. construction of office building, funds were provided by the NECORD and this construction has been completed. For the second stage - construction of the instrument site, access road, security

fence around the premises were included, but due to unavailability of funds, it has not been started yet. The construction of new quarters building for Jaffna office was started utilizing the Department funds and about 90% work has been completed. However, it is planned to move the old office to the new office building at the beginning of year 2013.

Most of the technical problems associated with the automatic weather system received as a grant aid from Japan have been resolved.

A plot of land for Trincomalee Meteorological office was acquired. and office quarters construction was started utilizing Department funds. However, the construction to be suspended due to an objection raised about ownership and it is expected commence construction work once the problem is resolved. The necessary steps have been taken to resolve the ownership problem of the land.

The repair works at Nuwara-Eliya and Vauniya meteorological offices have been completed and the renovation works at Mannar office is still continuing. The construction of Circuit Bungalow keeper's house at Nuwara-Eliya was started and work is going on.

The training programme of installation **COMS** (Communication, Oceanic and Meteorological satellite) system and training programmes of analysing the COMS data was concluded. This is KOICA funded project and this satellite data and picture products are currently used for the forecasting.

Under a grant of Chinese Meteorological Administration, **CMACast** satellite receiving system was installed at the department.

7. SURFACE OBSERVATIONS

24-hour watch on the weather was maintained at Anuradhapura, Batticaloa, Colombo, Galle, Hambantota, Katugastota, Katunayake, Mannar, Nuwara Eliya, Puttalam, Ratmalana, Ratnapura, Polonnaruwa and Trincomalee meteorological stations. At Trincomalee meteorological office in the Naval Base the observation were continued by Sri Lanka Navy.

16-hour watch was maintained from 0530 hours to 2030 hours at Badulla, Bandarawela, Kurunegala, Maha Illuppallama, Monaragala, Pottuvil, Vavuniya and Jaffna. Meteorological parameters such as pressure, temperature, humidity, wind speed and direction, visibility, clouds were observed at the standard hours 0000,0300,0600,0900,1200,1500,1800 & 2100 UTC according to the technical guidelines stipulated by the World Meteorological Organization (WMO) and transmitted this information from meteorological stations to the National Meteorological Centre in Colombo immediately afterwards. Number of surface observations done during the year, was 56,925.

8. UPPER-AIR OBSERVATIONS

Radar wind observations were done at Colombo to determine the wind speed and direction at different heights in the lower atmosphere. These observations were done at 0600 hours UTC using 100g balloons and at 1200 hours UTC using 350g balloons.

Radiosonde Observations performed at Colombo at 1200 hours UTC for the determinations of pressure, temperature and humidity at different heights in the lower atmosphere thrice a week

Global Positioning System (GPS) based Radiosonde instrument donated by the Japanese government under the WMO volunteer cooperation programme were used for these observations.. The upper-air Radiosonde observations were not done for few months due to the instrument failure. Therefore, only 82 Radiosonde observations were done during the year 2012.

Pilot balloon observations were performed at Hambantota, Mannar and Polonnaruwa throughout the year at 0000, 0600, 1200 UTC to determine the lower atmospheric level wind velocity (Pilot balloon observations at Puttalam were shifted to Mannar from the beginning of the year 2012 as Mannar upper wind data more representative the northern area than Puttalam). To supplement the radar wind observations, pilot balloon observations were done at Colombo at 0000 hours UTC and when radar observations had to be cancelled due to technical and other reasons. The Total balloon observations (wind) were 921, 1038, 950 and 1019 respectively at Colombo, Hambantota, Polonnaruwa and Mannar. Some of the observations were unsuccessful due to bad weather situations and balloons covered by the obstructions.

9. NATIONAL METEOROLOGICAL CENTRE (NMC)

The National Meteorological Centre continued to supply weather forecasts and bad weather warnings to the public, fisheries community, shipping, and domestic aviation. As per the request of the Ministry of Fisheries, special daily weather bulletin for the Fisher folk Radio Programme was issued continuously. During the year 1,551 weather forecasts with 27 bad weather warnings and 03 Tsunami alert advisory have been issued through the media while 9,675 telephone queries were responded. Also, 5,730 aviation forecasts were issued for domestic flights of the SLAF, and other domestic flight operators from 01.01.2012 to 09.07.2012. (From 10.07.2012 aviation forecasts for domestic flights and for Air-force flights were issued from the Katunayaka Meteorological office at the Airport). The number of weather forecasts issued for shipping was 1456 while the number of weather bulletins issued for fishing was 732. The number of weather reports supplied to commercial establishments for various requirements was 1892 and 102 weather reports mainly related to insurance claims were issued during the year.

The National Meteorological Centre of the Department of Meteorology is responsible for reception of Tsunami information from Regional Tsunami Service Providers (RTSP) i.e. RTSP India, RTSP Indonesia & RTSP Australia and RIMES and issuing Tsunami Warnings to the general public when necessary. NMC carried out this duties successfully during the year.

10. METEOROLOGICAL TELECOMMUNICATION CENTRE

All national and regional meteorological data required at the NMC for weather forecasting purposes were received in this division. Meteorological data from a number of selected stations, within the island were transmitted to the New Delhi Regional Telecommunication Centre for re-transmission to other National, Regional and World Meteorological Centres by the communication centre.

Through the Colombo/New Delhi 256 kbps GTS line, Meteorological data and Tsunami related warning and advisories were received with least delay.

Cloud imageries and Numerical Weather Prediction (NWP) products from relevant websites for the forecasters are down loaded through internet by this division.

11. KATUNAYAKE AIRPORT METEOROLOGICAL OFFICE

Meteorological information and aviation weather forecasts are vital for the safety and viable air navigational operations. At least three hours prior to the departure time of the journey, a met-folder is to be provided by the Aeronautical Meteorological office. Weather information and forecasts of temperature, pressure & wind at the runway ends at the time of departure, en-route upper atmospheric wind / temperature charts, en-route weather (clouds and turbulences etc) and weather conditions at all en-route airports (for any emergency landing) are included with met-folder.

Accordingly, the meteorological office at the Bandaranaike International Airport-Katunayake supplied all meteorological information required (Met folder) for international flights, operating through Katunayake airport and required weather information for aircrafts those using the Colombo Flight Information Region (FIR). The services provided to the aviation were efficient with the upgraded communication system (Global Telecommunication System - GTS) and SADIS-2G system at the Meteorological office.

The number of international flights operating via Bandaranayake International Airport has been significantly increased during the year relatively to the previous years. 24,517 met-folders were supplied during the year for international flights including non-stop flights to European and Far Eastern destinations operated through the Colombo-airport. In addition, 1474 Terminal Aerodrome Forecasts (TAF), 17,306 half-hourly weather reports (METAR), 411 special weather reports (SPECI), 136 significant weather reports (SIGMET), and 40 Aerodrome Warnings were issued.

This Office was also assigned to issue necessary forecast (Area/ and Route) for domestic aviation purposes including parachute jumping exercises performed by the Air force with effect from 10.07.2012. The total number of forecasts issued for these purposes was 5080 by the end of the year.

Function of the office was successful in spite of having significantly shortage of staff in Scientific and Technical categories in the Department.

12. RATMALANA AIRPORT METEOROLOGICAL OFFICE

The main function of this office was to provide weather information required for domestic flights operating through this airport and conducting the routine meteorological observations. Route forecasts and area forecasts which include upper air wind velocity, temperature, weather and type of clouds & amount were issued by Colombo NMC. This airport office obtained the required Route/Area forecast from the NMC-Colombo (after 10.07.2012 from Katunayake) office and supplied to the SLAF and other domestic flight operators. During the year, 10,805 such weather forecasts were issued. In addition 4,989 hourly weather reports (METARS), 271 special weather reports (SPECI) were also supplied for aviation purposes.

13. CENTRE FOR CLIMATE CHANGE STUDIES (CCCS)

Resource persons for the awareness programmes or seminars (on climate change) for teachers, school children and lecturers of National Institute of Education, university students were organized by the department or other institutes were given by this centre..

Research activities conducted by the CCCS with the research division are given under item number 20.

14. AGROMETEOROLOGICAL STATIONS

There are 44 agro-meteorological data collecting centres located in some meteorological offices and in different institutes such as regional agriculture offices, Tea Research Institute, Rubber Research Institute etc. and these centres are supervised by Agro-Meteorological division of the department. However, only 37 centres were actively operated during 2012 and collecting, processing and computerizing these data were done by the agro-met division.

The parameters measured were maximum and minimum temperatures, minimum on grass temperature, rainfall, evaporation, sunshine duration, wind speed and direction and soil temperatures at 05cm, 10cm, 20cm and 30cm depths below the surface. Weekly rainfall and cumulative rainfall for the Yala and Maha seasons, together with percentage offsets for further processing were supplied to the Food and Agricultural Organization (FAO).

In order to improve the quality of agro-met data, a meeting for the heads of relevant institutes was organized at the Department of Meteorology. It was decided that when replacing the damaged instruments of these centres would be done with the coordination of Met-Department, and also decided to conduct training programmes for data collecting officers of different institutes. Accordingly, two training workshops were conducted by the Department, one was at Gannoruwa on 4th and 5th June 2012 and other one was held at Lunuwila on 10th October 2012. Basic facilities for these workshops were provided by the Agriculture Department and Coconut Research Institute.

Deniyaya agro-met station which was closed for 8 year due to land slide is expected re-open in January 2013. Some auxiliary parts of instruments for Middeniya agro-station which belongs to Coconut Research Institute were made at Department workshop and this station is scheduled to be established early next year.

15. RAINGAUGE STATIONS

The network of rain gauge stations comprising over 450 stations (regularly reports received from 342 stations), scattered throughout the island, and was maintained by the rainfall division in collaboration with a number of other governmental and non- governmental institutions and many voluntary observers. Rainfall was measured daily at 0830 hours at these stations and the reports were sent to the Department at the end of the month for processing. Among these stations about 190 stations' rainfall data have been obtained daily over the telephone for weather forecasting purposes. During the year 39 new rainfall measuring stations were installed and 77 stations were inspected & corrected their discrepancies.

16. COMPUTER DIVISION

The CLICOM and CLIMSOFT systems worked very satisfactorily during the year. Computerising the daily rainfall and temperature data of meteorological stations and daily rainfall data of all rain gauge stations continued using CLIMSOFT system and both systems were used for data issuing. Issue of meteorological data to users in digital as well as in printed formats continued

17. SUPPLY OF CLIMATOLOGICAL DATA

The Department continued to provide climatological data, which have been accumulated systematically over the years, for a large number of feasibility studies/planning of development projects in various sectors. Climatological data were also supplied to researchers and university students, Central Bank, Department of Census & Statistics and several District Secretariats for their planning/development work and publications free of charge or at concessionary rate.

18. SUPPLY OF ASTRONOMICAL DATA

Times of sunrise, sunset, moonrise, moonset, lighting up times, visibility of planets, visibility of new moon and phases of the moon and circumstances of eclipses were computed and supplied to the Government Printer, the press media and other users. Astronomical information was supplied to many users. A senior officer of the Department served as a member of the Poya and Public Holiday Committees.

19. SEISMOLOGICAL AND TSUNAMI INFORMATION

In cooperation with California Integrated Seismic Network (CISN), Regional Tsunami Service Provider (RTSP – Australia, India and Indonesia) and RIMES, regional and global seismic activities as well as tsunami information were monitored continuously and statements and advisories/warnings were issued to the general public and responsible institutions. One tsunami alert advisory was issued in the year. During the year, 03 tsunami warning were issued by the department. Troubled public in response to fault information were responded at large number of occasions during the year.

20. RESEARCH ACTIVITIES:

The following researches / Activities were conducted during the year.

1. WRF Daily & monthly Data Verification with AWS Rainfall & Temperature
2. Rainfall Analysis with WRF Variables (Considering variables with different levels & different ranges)
3. Linear Regression Analysis (Using WRF & AWS data) – Monthly ,Seasonal and According to Pressure Gradient
4. Rainfall & Temperature Trend Analysis - (1990-2010)
5. Synop data Decode & Display Program and AWS 10 minutes Data Display Program
6. Effect of moon phase with onset of Southwest Monsoon & Relationship between Southwest monsoon & Moon phase
7. Tuning up WRF model by changing the Physics and Preparation of 3 day & 7 day forecast by using WRF model(Changing resolution & domain)
8. Prepared presentation on Climate Change ,Natural Hazard and Hazard & Disaster Management.
9. Decadal Rainfall & Mean Temperature Analysis (1900-2010)
10. Calculation of Extraterrestrial radiation pattern over Sri Lanka
11. Identification of monsoon failures & extremes using -Standardize Precipitation Index - SPI (1951-2010)

21. LIGHTNING SAFETY ACTIVITIES

Awareness programmes for the public on lightning safety were carried out continuously. 8 awareness programmes were conducted during the year in Kalutara and Kegalle districts as those areas are more vulnerable for lightning. These awareness programmes are expected to extend to other districts too in future. In addition, department supported providing the resource persons for the lightning awareness programme organised by Disaster Management Centre, .

22. VISITS TO THE DEPARTMENT

As in the last year the visits of groups of school children were substantially high. During the year 19,112 school children in 188 groups, 641 in 15 groups from armed forces and 597 in 11 groups from Higher Education Institutes visited the Department.

23. Scholarships, Training and Seminars

(a) Training/ Seminars and Workshops

The following officers participated for Foreign Workshops/Training/Seminars – 2012

No	Name	Details	Funded Agency
1	Mr. M.M.P.Mendis	Technical Planning Workshop on Severe Weather Forecasting Demonstration Project (SWFDP) Development for the Bay of Bengal Region (RA II – South Asia) - India : 23-27 Jan 2012	WMO
2	Ms.A.R. Warnasooriya	2 nd Intn'l conference on Indian-Ocean Tropical Cyclone & Climate change – India : 14-17 Feb 2012	WMO
3	Mr. D.A. Jayasinghearachchi	Tropical Cyclone forecasting- India : 20 Feb- 2 Mar 2012	WMO
4	Mr. Lalith Chandrapala	Learning Disaster Resilience best practices B'desh experiences - Bangladesh : 25 Feb - 01 Mar 2012	Sri Lanka Government
5	Mr M.D.Dayananda	Seminar on “Meteorological services for disaster-prevention and Crisis-management Operations after the Great East Japan Earthquake - Japan : 4 -10 Mar 2012	JICA
6	Mr.D.J.A. Weerawardane	Workshop on “ Climate smart Agriculture in Asia : Research & development priorities - Thailand : 11-12 Apr 2012	WMO
7	Mr. S.R. Jayasekara	Training on COMS Satellite data analysis and interpretation - Korea : 10-23 June 2012	KOICA
8	Ms. D.G. Fernando	- do -	- do -
9	Mr. M.M.P.Mendis	- do -	- do -
10	Mr. J.A.Thilakarathna	- do -	- do -
11	Mr. K.H.M.S. Premalal	SAARC Meteorological Research Centre (SMRC) - Bangladesh : 10Aug 2012 – Aug 2014	SMRC
12	Mr. M.A.C. Dayantha	Training Prog on Community based Disaster Management Preparedness and Coping strategies – India : 22 Aug – 18 Sep 2012	Indian government

13	Mr. A.G.M.M. Wimalasooriya	Training programme on Korean COMS satellite data analysis - Korea : 02-22 Sep 2012	KOICA
14	Ms. A.R. Warnasooriya	Reinforcement of Meteorological services - Japan : 10 Sep - 08 Dec 2012	JICA
15	Ms. D.G. Fernando	International Training Course for Weather Forecasters - China : 17 - 26 Sep 2012	CMA
16	Ms. I.M.S.P. Jayawardane	SW Indian Ocean Climate Outlook Forum - SWIOCOF - La reunion : 24 Sep - 03 Oct 2012	WMO
17	Mr.A.L.K. Wijemanna	ADPC Training Workshop on WRF - Vietnam : 24-28 Sep 2012	ADPC
18	Mr.T.M.N. Peiris	- do -	- do -
19	Ms. H.A.S. Hapuarachchi	- do -	- do -
20	Mr.A.L.K. Wijemanna	JMA Workshop on Weather information system (WIS) Implementation – Japan : 22 - 24 Oct 2012	JMA
21	Mr. A.K. Karunanayake	Competence Assessment of Aviation Forecasters and Observers - Israel : 29 Oct - 02 Nov 2012	WMO
22	Mr.K.G.M.L.D. Sucharitharathna	Ocean Observation and instrument calibration – India : 19 - 21 Nov 2012	WMO
23	Mr. A.K. Karunanayake	TCC Training seminar on climate analysis Information - Japan : 26 - 30 Nov 2012	JMA
24	Mr. T.M.N. Peiris	International Training Workshop on use and Interpretation of Numerical Weather Prediction (NWP) model - Hong Kong : 03 - 07 Dec 2012	WMO
25	Mr. Lalith Chandrapala	Scaling Up Climate Services for Farmers in Africa & South Asia - Senegal : 9 – 12 Dec 2012	WMO / USAID
26	Mr. S.R. Jayasekara	Training on Storm Surge Experts with IIT, Delhi 10-21 Dec 2012 - India : 10 - 21 Dec 2012	WMO
27	Mr. A.G.M.M. Wimalasooriya	Training on Tropical Cyclone analysis - Oman : 17 - 19 Dec 2012	WMO

(b). International Regional Meetings-

Following officers attended for Foreign Meetings and Conference – 2012

01	Mr. D.A. Jayasinghearachchi	3 rd APN South Asia Sub Regional Co-operation Meeting & Proposal Development Training workshop - Bhutan : 16 – 19 Jan 2012	APN
02	Ms. A.R. Warnasooriya	2 nd International conference on Indian-Ocean Tropical Cyclone & Climate change – India : 14 -17 Feb 2012	WMO
03	Mr. S.H.Kariyawasam	39 th Session on WMO/ESCAP panel on Tropical Cyclones - Myanmar : 5 - 9 Mar, 2012	Sri Lanka Government
04	Mr. D.J.A. Weerawardhana	Workshop on Commemoration of WMO Day 2012 - Korea : 20 - 24 Mar 2012	KMA
05	Ms. I.M.S.P. Jayawardhana	SASCOF-3 meeting and Workshop on seasonal prediction of southwest monsoon rainfall - India : 16 - 20 Apr 2012	WMO/ Indian Government

06	Mr. S.H.Kariyawasam	Leader Engagement Program on Disaster Management - USA : 21 - 28 Apr 2012	USA Government
07	Mr. S.H. Kariyawasam	5 th Council meeting 18-20 June 2012 & First Ministers Conference on 21 June 2012 of RIMES - India : 18 - 21 June 2012	RIMES and Indian Government
08	Mr. S.H.Kariyawasam	5 th SAARC IPC meeting 3-4 Sep and SAARC Scientific seminar on STORM field Experiment - Pakistan : 5 - 6 Sep 2012	SMRC
09	Mr. D.J.A. Weerawardhana	18 th Meeting of the Governing Board of SAARC Meteorological Research Centre (SMRC) - Bangladesh : 12 - 13 Sep 2012	SMRC
10	Mr. S.H Kariyawasam	UNESCAP Project Consultation Meeting, Round Table Discussion & Brain Ward Lecture series - Thailand : 4 -5 Oct 2012	ADPC
11	Mr. S.H.Kariyawasam	Planning Meeting on Establishment of a Regional Flash Flood Guidance system - Nepal : 26-28 Nov 2012	ICIMOD

WMO - World Meteorological Organization

KOICA- Korea International Cooperation Agency

JICA - Japan International Cooperation Agency

ADPC - Asian Disaster Preparedness Centre

SMRC - SAARC Meteorological Research Centre

RIMES - Regional Integrated Multi-Hazards Early Warning System

JMA - Japan Meteorological Agency

KMA - Korean Meteorological Agency

APN - Asia Pacific Network

CMA - China Meteorological Agency

ICIMOD – International Centre for Integrated Mountain Development

(c) Local Training

04 Meteorologists, Accountant, 28 Management Service Assistants, 01 KKS officer and 06 Drivers attended for capacity building programmes, conducted by SLIDA, Sri Lanka Foundation Institute and other institutes. Two officers have attended to Tamil language training programme conducted by state language training programme. The training course for the Meteorological Observers (trainee) who were recruited last year was completed by August. Under Continuing Education and Training (CET) programme two-day residential training programme was held for 37 Sri Lanka Technical Service (SLTS) officers (at Gannoruwa agriculture training centre) and second training programme was held for 55 SLTS officers (at Colombo Head office). Basic training for newly recruited three meteorologists was given by the senior meteorologists at the Department.

(d) Seminars/Workshops/Awareness Programmes Conducted:

4-day International Training Workshop on Quality Management system (QMS) for Aviation Meteorology was conducted in Colombo by the Department with World Meteorological Organization.

Resource persons were provided for more than 20 workshops/seminars related to weather, climate change or natural disasters conducted by various institutes.

Two Monsoon Forums, one for South-west monsoon and other one for North-east monsoon, were conducted with the financial assistance from RIMES with the participation of major stake holder agencies of which are using meteorological information.

A press conferences were conducted before the commencement of Southwest and North-east monsoons to aware the expected weather conditions and hazards expected during the monsoon. Another mass media press conference was held related to the tropical cyclone Neelam which was formed off east coast of Trincomalee in last week of October 2012.

Department was supported to enhance the meteorological knowledge of the public, by providing the exhibits or resource persons. During the year Department supported for 19 exhibitions organized by schools or other institutes.

24. OTHER ACTIVITIES

The Department actively participated in "Deyata Kirula" exhibition in Oyamaduwa, Anuradhapura and 10 rain-gauge were installed at different places in Anuradhapura district under the Deyata Kirula program.

World Meteorological Day was commemorated on 23rd March, with the participation of school children, stakeholders, mass media and retired meteorological officers. The theme of the World Meteorological Day of year 2012 was "Powering our future with weather, climate and water".

Two pilot projects to strengthen the coastal community of two Gramaniladhari divisions in Potuwil and Kalutara launched by RIMES and Department provided technical support such as providing resource persons for these projects.

25. REVENUE

The total revenue earned during the year mainly by supplying climatological data and past weather information amounted to Rs. 6,147,077.00.

26. EXPENDITURE

Expenditures under various projects are given in the following annexes:

Recurrent Expenditure against provision 2012	
Project 1 – Meteorological services	Annex 1
Capital Expenditure against Provisions 2012	
Project 1 – Meteorological services	Annex 2
Project 1 – Donor Assisted Project	
Actual against forecast in case of Revenue Accounts 2012	Annex 3
Summary of Revenue and Advance Accounts 2012	Annex 4

27. PROCUMENT

- To purchase computers and relevant equipments - Rs. 1,667,625.00
- To purchase meteorological equipments - Rs. 7,250,342.86
- To purchase spare parts for the Automatic weather systems - Rs. 2,876,430.35
- Expenses in connection with the Doppler Radar System - Rs. 10,249,394.83

28. PUBLICATIONS

Following publications were issued during the year 2012

- Annual administrative report of the Department
- Monthly weather synopsis
- Times of rising/setting of the sun, times of rising/setting of the moon and the lighting up times
- Weekly weather review – through website
- Monthly tables of high and low tides for Colombo, Galle and Trincomalee

29. ACKNOWLEDGEMENTS

I wish to place on record my gratitude to all governmental and non-governmental organizations and individuals who collaborated with officers of the Department in various projects, programmes and meetings. My thanks are also due to the media for readily conveying the weather information to the general public. Finally I wish to express my personal gratitude to all employees of the Department for their ready cooperation and their loyal service.

S.H. Kariyawasam
Director General,
Department of Meteorology, Baudhaloka Mawatha, Colombo 7.

Recurrent Expenditure (Rs.) against Provisions 2012

Department of Meteorology

Head: 304

Programme: 02

Project: 01

Category	Project 01	
	Provision Rs.	Expenditure Rs.
Personal Emoluments	118,900,000	118,388,570
Other Recurrent	67,350,000	58,193,147
Travelling Expenses	3,050,000	2,382,759
Supplies	16,375,000	13,119,602
Maintenance Expenditure	10,025,000	8,846,198
Services	29,864,000	26,233,937
Transfers	8,036,000	7,610,651
Total Expenditure	186,250,000	176,581,717

Capital Expenditure against Provisions 2012

Department of Meteorology

Head: 304

Programme: 02

Project: 01

Object Code	Object Title	Net Provision 2012 Rs.	Expenditure 2012 Rs.
Project 01	TOTAL (PROJECT 01)	348,119,395	157,716,051
	Meteorological services		
	Total	348,119,395	157,716,051
	Rehabilitation and Improvements	5,500,000	1,861,162
	2001 Buildings and Structures	5,500,000	1,861,162
	Acquisition of Fixed Assets	340,999,395	154,601,183
	2102 Furniture & Office Equipments	3,100,000	2,750,441
	2103 Machinery	325,549,395	144,073,432
	2104 Buildings and Structures	12,000,000	7,675,280
	2105 Land & Land Improvements	350,000	102,030
	Capacity Building	400,000	367,842
	2401 Training & Capacity Building	400,000	367,842
	Other Capital Expenditure	1,220,000	885,864
2502	Investments	1,220,000	885,864

	<u>Donor Assisted Projects</u>		
	Total	296,300,000	123,599,550
	Acquisition of Fixed Assets	296,300,000	123,599,550
2103	Machinery		
	13. Foreign Aid Grant	221,000,000	117,560,638
	17. Foreign Aid Related Domestic Fund	75,300,000	6,038,912

Annex 3

Actual against forecast in case of Revenue Accounts 2012

Department of Meteorology

Head: 304

Programme: 02

Project: 01

Revenue Code	Description	Revenue 2012	
		Estimate (Rs.)	Actual (Rs.)
20.02.01.01	Return on Government Assets Rent	500,000	501,133
	Rent on government buildings and housing		
20.02.01.99	Return on Government Assets Rent	12,600	12,600
	Other rental		
20.02.02.99	Interest	1,600,000	1,409,757
	Other		
20.03.02.99	Sales Proceeds and Charges	6,300,000	5,933,490
	Administration fees and charges		
	Sundries		
20.03.99.00	Sales Proceeds and Charges	400,000	213,587
	Other receipt		
Total		8,812,600	8,070,567

Summary of Advance Accounts 2012

Department of Meteorology

Head: 304

Programme: 02

Project: 01

Item	2012 Estimate Rs.	2012 Actual Rs.
Public Officer's Advance Accounts		
Maximum Limit of Expenditure	15,000,000	3,572,989
Minimum Limit of Receipts	5,500,000	8,301,283
Maximum Limit of Debit Balance	60,000,000	31,441,436