

INDUSTRIAL TRAINING EXECUTIVE SUMMARY



Foundation for Environment, Climate and Technology
C/o Mahaweli Authority of Sri Lanka, Digana Village, Rajawella,
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Citation

Manusha Lakmali, (2016) “*Industrial Training Executive Summary*”, Supervisor, Zubair, L. FECT Technical Report 2016-08. Foundation for Environment, Climate and Technology, Digana.

ABSTRACT

This report was done in partial fulfillment of the Statistics and Operations Research Degree at the Faculty of Science, University of Peradeniya. During my 3 months industrial training period at FECT I was a part of projects such as, Monitoring and weather forecasting, Satellite data comparison, Rainfall & Climate in Maldives and using the into NetCDF software.

FECT publishes Weekly Management Secretariat report every week which is an experimental climate monitoring and prediction on the climate of Sri Lanka. This report is then given to the Mahaweli Authority and they utilize this report to determine water supply from the reservoirs to the farming lands. I was a part of the WMS team and contributed to the efforts of monitoring and weather forecasting.

Monitoring and weather forecasting involved data collection and comparison with satellite rainfall weekly data in Hambantota and Kandy. The reliability of the rainfall estimate from satellite sources was assessed by comparing the observed data with satellite rainfall products. It was observed that the satellite data showed more errors in mountain areas and at times the results were misleading, due to technical, reading, writing and instrumental errors. To avoid these errors it is best get data on more years and more stations of all the regions in Sri Lanka to maintain accuracy.

Under Rainfall & Climate in Maldives I was able to find the relationship between the rainfall and dengue disease. Through the analysis of data it was evident that rainfall does not directly affect the spread of dengue disease. Calculation of water availability using the evaporation and comparison shows that interpolated dengue cases have much variability with the real world.

More consistent data on dengue can be used to predict relationships among variables.