

FECT -MV

FOUNDATION FOR ENVIRONMENT, CLIMATE AND TECHNOLOGY -MALDIVES

Annual Progress Report 2019

Contents

HIGHLIGHTS	3
PUBLICATIONS AND CONFERENCES.....	3
PROJECTS AND PROPOSALS	3
INSTRUMENTS.....	3
WEBSITES	3
ADMINISTRATION	3
OPERATIONAL SERVICES.....	3
PUBLICATIONS.....	3
Papers in Progress:.....	3
PROJECTS	4
CHARITABLE ACTIVITIES AND EDUCATIONAL PROGRAMS	4
COMMUNICATION MATERIAL	4
Brochures/ Flyers:.....	4
DISCUSSIONS / MEETINGS	4
Internal Meetings:	4
External Meetings:.....	4
ONGOING GRANTS	4
Grant Reporting:	4
Concept Notes:	4
OPERATIONAL SERVICES (CLIMATE SERVICES)	5
MALDIVES - WEBSITES, SOCIAL MEDIA AND MAILING LISTS	5
INSTRUMENTATION	5
Soil Moisture Instruments.....	5
COLLABORATION	5
ACKNOWLEDGEMENTS	5

HIGHLIGHTS

We had an eventful and fruitful year at Foundation for Environment, Climate and Technology – Maldives in 2019 – a year of consolidation in our 10-year informal history. We have kept up to the rising demands, projects have been completed, proposals submitted and new directions established. Instrumentation for weather, air quality and soil moisture was installed and maintained in Sri Lanka and Maldives. We completed projects on Tea and STEM education.

PUBLICATIONS AND CONFERENCES

Our staff participated and presented at workshops in Sri Lanka and Maldives.

PROJECTS AND PROPOSALS

We had a portfolio of 3 projects. We completed a project on STEM education. We are undertaking projects on dengue and climate and air quality.

INSTRUMENTS

We installed and are maintaining automated web-enabled environmental observations systems for weather, soil moisture and air pollution in Sri Lanka and Maldives. New instrumentation was installed at Thinadhoo in the Maldives.

WEBSITES

Our websites have become richer. We setup a website to promote STEM education. We maintained operational climate services for Sri Lanka and Maldives, generating content, disseminating regularly, responding to queries, and enabling researchers both within and without.

ADMINISTRATION

Our administration is rising to the challenges of meeting regulatory challenges and reporting and on the new constituent organizations. We maintained filing systems, library catalogues, internal blogs, kanban boards and wiki pages.

OPERATIONAL SERVICES

We continued to disseminate our weekly and monthly climate reports for Sri Lanka and Maldives. Our website gave a running update on the current seasonal climate conditions. Data were continuously being obtained through our instruments and assimilated for climate analysis through the Data Library.

PUBLICATIONS

Papers in Progress:

- Zubair, L., Ahmed, N., Mohamed, M., Zahid. Climate Drives the Seasonal and Regional Variation in Dengue Incidence in the Maldives.

PROJECTS

- Completed projects on PEER – Science, Technology, Engineering and Mathematics (STEM).

CHARITABLE ACTIVITIES AND EDUCATIONAL PROGRAMS

- 2 STEM education workshops for middle school students of southern Maldives.

COMMUNICATION MATERIAL

Brochures/ Flyers:

- Updated FECT-MV brochure.
- Project flyers for our Disaster Services project and STEM education project were prepared.
- An informational flyer on the Thinadhoo Ambient Weather Station was prepared.

DISCUSSIONS / MEETINGS

Internal Meetings:

- July 2019 – Mid Year Review Meeting for FECT staff at the Akurana library with the participation of Dr. P.H.D. Kusumawathie and Prof. Wickramagama to mainly review the ongoing projects – STEM education in Maldives and Dengue project.

External Meetings:

- April 2019 – Dr. Lareef Zubair and Tuan Hadgie, STEM project planning meeting in Maldives.
- August 2019 – Lareef Zubair, meeting in Maldives regarding FECT-MV registration.
- September 2019 – Dr. Lareef Zubair, Science Fair and STEM workshops in Gaafu Dhaalu Atoll Education Centre and Huvaadhoo School, Maldives.

ONGOING GRANTS

- **PEER Cycle 4, Sup.:** STEM Education and Capacity Building for Resources and Risk Management in Remote Outposts capitalizing on PEER projects on water, drought and hazards: Gaafu Dhaalu Atoll in Southern Maldives (PI – P. Wickramagama Co PI - Lareef Zubair, July 2018 – June 2019)

Grant Reporting:

- 2 Quarterly Reports and one report for the extension were submitted to Partnerships for Enhanced Engagement in Research Science, on ‘Can drought, flood and landslide hazard be skillfully assessed at fine spatial resolution from combining constrained streams of observed, remotely sensed and model predicted data in Sri Lanka and Maldives?’
- One Quarterly Report and the Final Project Report were submitted to Partnerships for Enhanced Engagement in Research Science, on ‘STEM Education and Capacity Building for Resources and Risk Management in Remote Outposts.’

Concept Notes:

- Improved Planning, Design and Operations of Renewable Energy Systems through the use of Advanced Climate Science and Technology in Maldives and Sri Lanka. ISDB.

- Advancing Air Pollution Monitoring Systems and Communication in Sri Lanka and Maldives and Assessing Impacts on Health and Environment in North- Western Sri Lanka. Techcamp Kathmandu - Small Grant.

OPERATIONAL SERVICES (CLIMATE SERVICES)

Disseminated our weekly, monthly and annual climate assessments for Sri Lanka and Maldives by email and via social media. Dissemination of drought monitoring for Sri Lanka and Maldives and automated climate report generation for Maldives were continued.

- Climate Services for Sri Lanka: We continued to provide Climate Services for the Mahaweli Authority and Maldives. Archives of advisory reports are available at: <http://fectsl.blogspot.com>; Weekly expert input for Hydro-meteorological Assessment for Mahaweli Authority is made available via <http://fectsl.blogspot.com>; <http://www.climate.lk> and <http://fectsl.wordpress.com>
- Climate Services for Maldives: Collaboration with the Maldivian Meteorological Services Monthly Hydro-meteorological Advisory services to Maldives. via <http://fectmv.blogspot.com> and <http://www.tropicalclimate.org/maldives>

MALDIVES - WEBSITES, SOCIAL MEDIA AND MAILING LISTS

We have maintained websites, social media and mailing lists for Maldives. Subscriptions for Maldives is included in <http://www.climate.lk/subscribe.html>

- **Websites:** <http://www.tropicalclimate.org/maldives>
www.climate.mv/ was setup for representing our work in the Maldives.
stem.climate.mv/ was setup as a resource for middle school students and their educators.
- **Blogs:** <http://fectsl.blogspot.com> and fectmv.blogspot.com are being regularly updated.
<https://maldivesclimate.wordpress.com>
- **Twitter:** <https://twitter.com/fectmv>
- **Facebook:** <http://facebook.com/fectmv>
- **Mailing List:** Subscription: <http://www.climate.lk/subscribe.html>
Alternative short link: <http://eepurl.com/bPkohP>

INSTRUMENTATION

Soil Moisture Instruments

A Soil moisture instrument was installed in the Observatory of the Maldivian Meteorological Service.

COLLABORATION

We had productive collaborations with personnel attached with Maldives, we had productive collaborations with Maldives National University, Land and Marine Environment (LaMER) and the Small Island Research Group (SIRC/G).

ACKNOWLEDGEMENTS

In Maldives, we thank Dr. Shazla Mohamed (Dean/Science Faculty, MNU), Dr. Mizna Mohamed (MNU lecturer), Shaadiya (MNU lecturer), Dr. Naseer (MNU), Mr. Waheed (DG-MMS), Zahid (DDG -MMS), Muaz (Engineer - MMS) and Wahid (DG-MMS), Aslam (Director - LaMER), Hussein (Scientist – LaMER), Dr. Shiham Adam (Director Marine Research Center), Ms. Hudha Ahmed (Renewable Energy Maldives), Majeeda Mohamed (Ministry of Environment) and Nishan Ahmed (Ministry of Health).