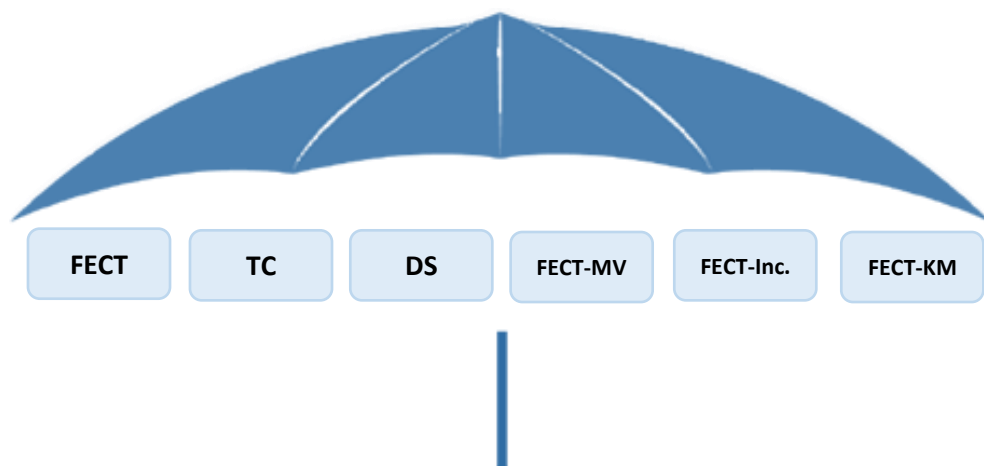


# FECT

**FEDERATION FOR ENVIRONMENT, CLIMATE AND TECHNOLOGY**

## *Annual Progress Report 2018*



Federation for Environment, Climate and Technology is a Federation comprising Foundation for Environment , Climate and Technology - FECT (Reg. No. – N (A) 1148, GA 56), Tropical Climate Guarantee Ltd. – TC (Reg. No. – GL 2438), Disaster Services – DS (Reg. No. – GA 00209570), FECT– Maldives - FECT-MV, FECT – Inc. which is registered in New York, USA (DOS ID No. – 3976120) and FECT – Comoros - FECT-Km.

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**Federation for Environment, Climate and Technology**  
*Comprises*  
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## HIGHLIGHTS

We had an eventful and fruitful year at Federation for Environment, Climate and Technology in 2018 – one with major initiatives in our 19-year informal history. Our new constituent organizations, Tropical Climate, Disaster Services and FECT Maldives came into their own. FECT-Comoros has not been active. The administration has kept up to the rising demands, projects have been completed, proposals submitted and new directions established. Staffing has adapted in numbers, skillsets and teamwork. IT systems are being maintained and the IRI data library installed on FECT servers are being made functional. Significant publications have been generated. New instrumentation was installed at Nawalapitiya, Norochcholai, Colombo, Kandy and Puttalam in Sri Lanka and Maathoda and Thinadhoo in the Maldives. We are completing a major project on hazards and initiated projects on dengue and climate and social sciences.

## PUBLICATIONS AND DISSEMINATION

There were adequate publications although there could have been more journal articles. Our staff contributed to conferences - 5th Research Symposium, Central Province Health Ministry and American Geophysical Union Fall Conference, Washington DC, meetings and workshop.

## PROJECTS AND PROPOSALS

We had a portfolio of 4 projects. We are completing a major project on hazards. We pivoted to new projects on dengue and climate and social sciences. We developed eight proposals, and three of these were supported, three are in review and two were declined.

## 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 Nawalapitiya, Norochcholai, Colombo, Kandy and Puttalam in Sri Lanka and Maathoda and Thinadhoo in the Maldives.

## WEBSITES

Our websites have become richer. We maintained operational climate services for Sri Lanka and Maldives, generating content, disseminating regularly, responding to queries, and enabling researchers both within and without. Our library holdings and catalogues were modestly updated and our supporters ensure access to journals.

## ADMINISTRATION

Our administration is rising to the challenges of meeting regulatory challenges and reporting and in establishing new constituent organizations. We updated the internal documentation and the use of online management tools. We maintained filing systems, library catalogues, internal blogs, kanban boards and wiki pages. Digital archiving remains a weakness along with Disaster Risk Management. To monitor physical security, we maintained CCTV in our offices.

## STRATEGIC REVIEW

We have had staff brainstorming - review meetings with a few eminent researchers. Last year's reviews identified critical areas for improvement as 1) Digital Archiving, 2) Disaster Risk Management for IT, 3) Ensuring legal and regulatory compliance, 4) Identity staffing needs in Communication, Visual Communication, IT, Legal, Research, Writing and Project Management, 5) Improved Project Monitoring, Data Management and Performance Management and 6) Better securing our Physical Infrastructure, 7) Obtaining recognition for Charitable Activities, through registration with the Ministry of Social Services 8) setting up a sister organizations, 9) instrumentation and 10) Social cohesion/ social science research. We have indeed taken modest steps in items 1-6 above – in some areas such as staffing, our recruitment was

followed by staff departure. We were unable to register Tropical Climate as a Voluntary Service Organization in Kundasale but took steps to set up Disasters Services and FECT-Maldives. We picked up on our work in instrumentation and in research in social cohesion and social science research.

We have updated strategic plan. We have completed the 15th Anniversary retrospective, and updated the staff handbook and the outline of our charitable activities. We are developing a management guidebook.

## **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. We did only one issue of the Newsletter- Climate smart.

## **SOCIAL AND EDUCATIONAL SERVICE PROJECTS**

We are maintaining a website that we developed for a local women's welfare group with the support of staff and at our cost. A seminar on Children's Response to Mob Violence was conducted at Mowbray College, Kandy.

## **CHALLENGES AND RESPONSE**

- The most significant challenges that we faced this year was turnover of staff which led to some knowledge and experience gaps.
- In the Maldives, unsettled political conditions gave way to optimism after the change in government after elections that were accepted as fair.
- In Sri Lanka, there was unsettled political condition in the last 10 weeks which delayed many activities
- We are trying to manage data acquisition which is expensive in Sri Lanka by setting up instruments and finding ways to acquire data.

## **MEMORIAM**

We remember 2 of our collaborators Prof. S. Hasbullah and Eng. Mohamed Rasheed from Maldives who supported our work.

## **CODA**

The need for improved climate risk management, understanding of climate (change at least) and better disaster risk management means is being recognized as more important than ever. Nature reinforces this from time to time. Having built up our capacities, we can be more ambitious in helping vulnerable people around the Indian Ocean meet these threats as best in the coming years. We learned this year that not only the naturally induced but human induced risk needs to be taken account of.

## PUBLICATIONS

### Peer Reviewed Journal Publications:

Maldives Dengue Paper (which is in progress.)

### Technical Reports:

Najimuddin, N., Zubair L., Lokuhetti, R., Nijamdeen, A., Visvanathan, J. *Climate Change and Polgolla Barrage Did Not Cause Recent Floods in the Pinga Oya Tributary of the Mahaweli*. FECT Technical Report 2018. Foundation for Environment, Climate and Technology, Digana.

Lokuhetti, R., Zubair, L., Visvanathan, J., Nijamdeen, A. *Drought Monitoring for Sri Lanka: Spatial Extent and Temporal Evolution during the 2016-17 Drought*. FECT Technical Report 2018. Foundation for Environment, Climate and Technology, Digana.

Banuka Wijerathne, (2018) Industrial Project Report, *Quantifying Climate Impacts on Dengue in Maldives*, Supervisor, Zubair, L. FECT Technical Report. Foundation for Environment, Climate and Technology, Digana.

Himeshi Piyarathne, (2018) Industrial Project Report, *Initiation of the Hazard Evaluation of Dengue, Air Quality, Water Quality and Fire Risk Management*, Supervisor, Zubair, L. FECT Technical Report. Foundation for Environment, Climate and Technology, Digana.

### Conference Abstracts:

1. Nijamdeen, L. Zubair, R. Salih, R. Lokuhetti, T. Hadgie, M. Randiwela. Seasonal climate variability impacts Tea production across Tea regions of Sri Lanka. Foundation for Environment Climate and Technology. American Geophysical union fall meeting. Washington DC. December 2018.
2. L. Zubair, R. Salih, A. Nijamdeen. Climate drives the seasonal and regional variation in seasonality and epidemics across the scattered islands of the Maldives. Foundation for Environment Climate and Technology. American Geophysical union fall meeting, Washington DC. December 2018.
3. L. Zubair, R. Lokuhetti, J. Visvanathan, T. Hadgie. Sensors used to detect transport of particulates from Sri Lanka's Coal Power plant to its central highlands. American Geophysical union fall meeting, Washington DC. December 2018.
4. Salih R., Zubair L., Nijamdeen A., Randiwela M., Kusumawathie P.H.D. Climate Sensitivity Of Dengue In Central Sri Lanka. 5th Research Symposium, Central Province, 2018.

## CONFERENCES

1. Dilmah Climate Reality Conference, BMICH, Colombo, July 2018.
2. International Conference entitled Africa-Asia 'A New Axis of Knowledge' Second Edition, University of Dar Es Salaam, Tanzania, September 2018. Sponsored by the Social Science Research Council, New York.
3. 5th Research Symposium, Central Province Health Ministry, Kadugannawa, November 2018.
4. American Geophysical Union Fall Conference, Washington DC, December 2018.

## PROJECTS

- Partnership for Enhanced Engagement in Research (PEER) - Hazards Project continued.
- Our work on PEER – Science, Technology, Engineering and Mathematics (STEM), PEER – Dengue, Tea and Disaster Services projects picked up this year.

## OPERATIONAL WORK

- Disseminated our weekly, monthly and annual climate assessments for Sri Lanka and Maldives by email and via social media.
- Weather observations were continued in Digana and Akurana.
- Continued dissemination of drought monitoring for Sri Lanka and Maldives.
- Automated climate report generation for Maldives

- Purple Air instruments were installed in US Embassy, Law and Society Trust (LST)
- Air visual instruments were installed in Norochcholai, US Embassy, LST, Queensbury Estate, Akurana, Puttalam and in Kandy.
- 2 Ambient Weather Stations were installed in Norochcholai and in Digana
- 2 Davis Weather Stations were installed in Queensbury Estate.
- A Soil moisture instrument was installed in Queensbury Estate

## CHARITABLE ACTIVITIES AND EDUCATIONAL PROGRAMS

- Seminar for students and teachers of Mowbray College, Kandy
- We continued updating the website of Akurana Women's Welfare Association
- We rehabilitated a building which was damaged due to the mob violence and was in disrepair and used it as our office for six months before handing it back to a family who moved back in from rented premises in Madawala.
- Dr. Lareef Zubair gave 2 talks on the Pinga Oya floods in Akurana.

## ADMINISTRATION AND IT

- Our accounting systems, audits and company reporting were reviewed well.
- Inventories of books, files, journals and reports were made more accessible.
- IT systems have kept up to the demands of additional staff and have been upgraded.
- We are working on cloud based accessibility to information resources.
- We keep complaint with the labour, financial and company law.

## COMMUNICATION MATERIAL

### Institutional Documents:

- A 15th Anniversary Review, a Review of our Charitable Activities, the Annual Progress report for 2017 and the Climate Smart newsletter were prepared.

### Brochures/ Flyers:

- Updated and translated the two-page FECT brochure to Sinhala and Tamil languages.
- Flyer for TC was prepared and translated to Sinhala and Tamil languages.
- Hazards flyer was updated.
- Flyers for Disaster Services Centre and Disaster Services Network were prepared and translated to Sinhala and Tamil languages.
- A project flyer for our work on tea was prepared.

## DISCUSSIONS / MEETINGS

### Internal Meetings:

February 2018 – Review meeting at Akurana for FECT staff, to review past projects, understand the key/goals of the FECT and also orient the new staff members of the FECT.

March 2018 - Workshop & Brainstorming Session for FECT staff, to discuss about the mob violence which took place in and around Digana.

August 2018 - Mid Year 1st Review Meeting for FECT staff at the St. Paul's church with the participation of Dr. P.H.D. Kusumawathie and Prof. Wickramagama to mainly review the ongoing projects – Tea project, STEM education in Maldives, Dengue project and Hazards project.

August 2018 - Mid Year 2nd Review Meeting for FECT staff at the Trinity College chapel to discuss the organizational themes and future plans of projects.

October 2018 – Review meeting in Akurana for the staff of FECT, to review the progress of the projects.

October 2018 – Follow up of the review meeting at the Akurana library.

December 2018 – Year end review meeting for FECT staff at the conference hall of Satyodaya. Dr. P.H.D. Kusumawathie and Prof. Wickramagama also participated.

## External Meetings:

January 2018 – *Tea project meeting with collaborators* at the University of Peradeniya.

March 2018 - Keynote address by Dr. Lareef Zubair at a community event for river basin restoration - Save Pinga Oya, organized by News View.

March 2018 – Workshop, Brainstorming and Internal Review Session.

Workshop: the mob violence which took place in and around Digana with Rev. Keerthisiri Fernando - Bishop of Kurunegala, Prof. Jude Fernando - Clark University, Massachusetts USA, Afrah Niwas - Instructor, University of Peradeniya.

Brainstorming: Prof. Mowjood - Agriculture Engineering Peradeniya, M. Raza, Department of Agriculture, M. Nawas, Senior Lecturer, South Eastern University, Prof. Sumathy Sivamohan, University of Peradeniya, Nadha Akram – Undergraduate, Kandy, Irfan Cader - Editor, NewsView Monthly, Contributor Al-Jazeera & Prof. S.H. Hasbullah - University of Peradeniya, at Mowbray College, Kandy.

May 2018 – Mahasen Randiwela and Janan Visvanathan, Geospatial Application & Mapping with Open Street map workshop, Postgraduate Institute of Humanities & Social Science at the University of Peradeniya.

July 2018 – Dr. Lareef Zubair and Prof. Wickramagamage, ‘Climate Reality’ conference, Dilmah, held at BMICH, Colombo, 31<sup>st</sup> of July, 2018.

September 2018 – Lareef Zubair visited Maldives to provide water quality instruments and a microscope for 2 schools in Thinadhoo and Maathoda.

September 2018 – Lareef Zubair, International Conference entitled Africa-Asia ‘A New Axis of Knowledge’ Second Edition, University of Dar Es Salaam, Tanzania.

September 2018 – Dr. Lareef Zubair, Dr. P.H.D. Kusumawathie, Prof. Wickramagamage, Ashara Nijamdeen, Mahasen Randiwela and Tharani Kailaivasan, Faculty of Science Industry Day (FOSID) 2018 – held at the Faculty of Science, University of Peradeniya, on September 28<sup>th</sup>, 2018.

October 2018 – Rimza Zacky and Tuan Hadgie, workshop on data risk management, Strategic Inspirations (Pvt) Ltd, held at the Thampa Hotel, Vavuniya.

November 2018 – Ashara Nijamdeen, Rushdha Salih, Himeshi Piyarathne, Tharani Kailaivasan and Mahasen Randiwela, 5th Research Symposium, Regional Health Training Centre, Kadugannawa. Rushdha Salih presented on ‘Climate Sensitivity of Dengue in Central Sri Lanka.’

December 2018 – Dr. Lareef Zubair and Ashara Nijamdeen, American Geophysical Union conference held in Washington where they presented 3 posters.

## FEATURE ARTICLES

1. June 2018: L. Zubair, C. Malge, F. Shakira, T. Hadgie, S. Rameez & A. Nijamdeen, ‘Is the State grossly underestimating damage from the Kandy Mob Violence?’  
Groundviews (24<sup>th</sup> June, 2018, 1613 words)  
Sunday Observer (24<sup>th</sup> June, 2018, p. 20)  
News View (p. 7, 1541 words)
2. June 2018: Lareef Zubair, Chalani Malge, Samsudeen Fazal, Fathima Shakira and Shifna Rameez, ‘Timeline of Kandy Mob Violence’ (News View, 2073 words)
3. June 2018, Lareef Zubair, ‘கண்டி வன்முறை குறித்த தகவல் காப்பகம் ஒன்றை நிறுவவுள்ளோம்’ (News View, p. 1, 148 words)
4. June 2018, Prof. Jude Fernando, ‘ஆசிரியர்களும் மாணவர்களும் சமூக ஒற்றுமையை மேலோங்கச் செய்யலாம்’ (News View, p. 2, 240 words)
5. August 2018, Zahra Thaha, Niranjalee Jayatissa, Samsudeen Fazal, Lareef Zubair and Fazniya Fayaz, ‘இன வன்முறைகளும் அது தொடர்பான சட்டங்களும்’ (News View, p. 4)



6. August 2018, Niranjalee Jayatissa, Rafi Sharifdeen, Zahra Thaha, Mohamed Mafaz, Lareef Zubair, Mohamed Issath and Samsudeen Fazal, 'வன்முறைகளின் போது ஒரு இனம் அல்ல முழு நாடே பாதிக்கிறது'(News View p. 7)
7. August 2018, Zahra Thaha, Niranjalee Jayatissa, Samsudeen Fazal and Lareef Zubair 'கண்டி வன்முறை சேதங்களை அரசு குறைத்து மதிப்பீடு செய்துள்ளதா?' (News View, p. 9, 1082 words)
8. January 17, 2019, Thilani Bandara, Sandamali Ranasinghe, Samsudeen Fazal and Lareef Zubair, 'ඉහලාර්ථික රටක ජාතික සමාජීය ගොඩනැගීමේදී අපට වැරදුණේ කොතන ද?' (Ada, p. 16, 1510 words)

## MEDIA CITATIONS

January 14, 2018: Climate change comes home to Sri Lankans. By Dimuthu Attanayake and Vimukthi Fernando. <http://www.sundayobserver.lk/2018/01/14/features/climate-change-comes-home-sri-lankans>

## Invited Presentations:

Special address by Dr. Lareef Zubair at a community event for river basin restoration - Save Pinga Oya, organized by News View, on 3rd March, 2018.

Keynote address by Dr. Lareef Zubair, Inaugural Meeting of the Colombo Chapter of the Peradeniya Engineering Alumni, on 27<sup>th</sup> September, 2018.

Special address by Dr. Lareef Zubair on Pinga Oya Floods (at the Akurana mosque), on 8<sup>th</sup> October, 2018.

## ONGOING GRANTS

**PEER Cycle 4:** 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? From the US National Academy of Sciences (PI – P. Wickramagamage, L. Zubair, Zahir, 2015 –2018).

**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. Wickramagamage Co PI - Lareef Zubair, July 2018 – June 2019)

**DS-FPOS:** Documenting the March 2018 Mob Violence in Kandy Sri Lanka: a Pilot Project towards Assessment of Risk of Sectarian Violence (PI - Lareef Zubair, July - December 2018)

**Dilmah Conservation:** A Proposed Program of Research on Weather/Climate, Environment in Tea Ecosystems in Sri Lanka. (PI - Dr. Lareef Zubair)

**PEER Cycle 7:** Developing Dengue Risk Predictions from Environmental, Entomological and societal information to aid public health management in Sri Lanka. From the US National Academy of Sciences (PI – P. H. D. Kusumawathie, 2019 – 2021)

## Grant Reporting:

2 Quarterly Reports, one Annual Report (in October) and another Quarterly 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?'

The first Quarterly Report was submitted to Partnerships for Enhanced Engagement in Research Science, on 'STEM Education and Capacity Building for Resources and Risk Management in Remote Outposts.'

2 Quarterly Reports were submitted to Dilmah Conservation, on 'Program of Research on Weather/Climate, Environment in Tea Ecosystems in Sri Lanka.'

## Proposals, Concept notes and Expression of Interest:

### Funded Proposals

- Documenting the March 2018 mob violence. Foundation for the Promotion of Open Sciences, July 2018.
- 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, to PEER, National Academy of Sciences, July 2018.
- Developing Dengue Risk Predictions from Environmental, Entomological and societal information to aid public health management in Sri Lanka, US National Academy of Sciences, September 2018.

### Concept Notes

- Project concept note for Japan's Grant Assistant for Grassroots Human Security Projects (GGP) on Documenting the Kandy Mob violence. (only the concept note was developed)
- Impact of temperature on dengue epidemics in Kandy district of Sri Lanka – was formulated by Dr. Kusumawathie in consultation with Dr. Hasitha Tissera

## OPERATIONAL SERVICES (CLIMATE SERVICES)

- 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>
- Climate Services for the Comoros: <http://www.tropicalclimate.org/comoros> provides updated information for the Comoros.

## WEBSITES, BLOGS, SOCIAL MEDIA AND MAILING LISTS FOR SRI LANKA

### Websites

- We updated our website: <http://www.climate.lk>
- [www.tropicalclimate.org](http://www.tropicalclimate.org) was made serviceable.
- [www.tropicalclimateguarantee.org](http://www.tropicalclimateguarantee.org) was setup.
- [www.recoverlanka.net](http://www.recoverlanka.net) and [www.geolanka.net](http://www.geolanka.net) are not being maintained any longer and their contents shall be recovered in the future.

### Blogs

#### 1. Project Blogs (External):

Our projects each have a webpage which is accessible via [www.climate.lk](http://www.climate.lk) or [www.tropicalclimate.org](http://www.tropicalclimate.org) In addition, we maintained blogs for the following projects at

- MDP: <https://mdpsl.wordpress.com>
- AgMIP project: <https://agmipsl.wordpress.com>
- PEER: <https://peersl.wordpress.com>

#### 2. Institutional Blogs (Internal):

- Blogs on Sri Lankan climate at: <http://srilankaclimate.wordpress.com> and <http://fectlk.blogspot.com>
- <http://fectsl.blogspot.com> is archived at [www.kottu.org](http://www.kottu.org), a blog aggregator.
- <http://fectsl.wordpress.com/> has been updated regularly
- Tea & Climate in Sri Lanka: <https://teaclimate.blogspot.com>

#### 3. Internal Blogs:

- FECT HR - <https://fecthr.blogspot.com>
- FECT Organizational Notes - <https://fectorg.blogspot.com>
- FECT Projects - <https://fectprojects.blogspot.com>

- Tropical Climate - <http://tropclim.blogspot.com>
- FECT IT - <https://fectit.blogspot.com>
- FECT Standard Operating Procedure - <https://fectsop.blogspot.com>
- FECT Publishing - <https://fectpub.blogspot.com>
- FECT Communication - <https://fectpub.blogspot.com>
- FECT Data Management -
- Data Library - <https://fectdl.blogspot.com>
- Disaster Services – Sri Lanka - <https://disasterlk.blogspot.com>
- Disaster Services Internal - <https://fectds.blogspot.com>
- Air Pollution and Atmospheric Chemistry -

## Social Media

### Twitter:

Our 3 Sri Lanka related twitter accounts have been somewhat active

- <https://twitter.com/fectlk>
- <https://twitter.com/climatelk>

**Facebook:** The visual presentation has been improved. However, we have not been active except for automatic postings

- <https://www.facebook.com/FACTSL>

**Mailing Lists:** Our mailing system has been maintained and we are sending our weekly climate newsletter.

Subscription: Link is now listed at

<http://www.climate.lk/subscribe.html> Alternative short link: <http://eepurl.com/bPlixn>

## 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>
- **Blogs:** <http://fectsl.blogspot.com> and [fectmv.blogspot.com](http://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>

## COMOROS - WEBSITES, SOCIAL MEDIA AND MAILING LISTS

Our websites, blog and twitter account for Comoros have been updated. Our main partner Hairu Fisheries in Comoros pulled out in large measure and as result we were stymied. We hope to work with Comorian partners.

- **Websites:** <http://www.tropicalclimate.org/comoros>
- **Blog:** <http://fectcomoros.blogspot.com>
- **Twitter:** <http://twitter.com/fectkm>

## CHAGOS - WEBSITE, SOCIAL MEDIA AND MAILING LISTS

Our website and social media accounts for our work in Chagos have been updated. In the coming years, we shall make contact with Chagossians and those interested.

- **Website:** <http://tropicalclimate.org/chagos>
- **Blog:** <http://chagosclimate.wordpress.com>

## ZANZIBAR - WEBSITE, SOCIAL MEDIA AND MAILING LISTS

We have set up a website and social media accounts for Zanzibar. In the future, we hope to work with our partners in Zanzibar.

- **Website:** <http://www.tropicalclimate.org/zanzibar>
- **Blog:** <http://fectza.blogspot.com>
- **Twitter:** <https://twitter.com/fectza>

## DISASTER SERVICES – WEBSITE AND SOCIAL MEDIA

We have also set up a website and social media accounts for our work on Disaster Services.

- **Website** - <https://disaster.lk>
- **Twitter** - <https://twitter.com/disasterlk>
- **Facebook** - <https://www.facebook.com/disasterlk>
- **YouTube** - [https://www.youtube.com/channel/UCvBg5N-R\\_Q7ksoHMP9Wp5dQ](https://www.youtube.com/channel/UCvBg5N-R_Q7ksoHMP9Wp5dQ)

## WEATHER AND SOIL MOISTURE INSTRUMENTS

We operated two automated weather stations (AWS) and made data available online. Weather data at our offices is taken every half an hour and uploaded automatically to the Internet for public access.

- For Digana: [http://tropicalclimate.org/digana\\_weather](http://tropicalclimate.org/digana_weather)
- For Akurana: <http://tropicalclimate.org/akuranaweather>  
Soil Moisture and Temperature Measurement Instruments from Davis Instruments at 4 depths along with transmission and automated data-logging were installed and are now operational.
- 2 Automated Weather Stations were installed in Norochcholai and in Digana.
- Purple Air instruments were installed in US Embassy, Law and Society Trust (LST)
- Air visual instruments were installed in Norochcholai, US Embassy, LST, Queensbury Estate, Akurana, Puttalam and in Kandy.
- 2 Davis Weather Stations and a soil moisture instrument were installed in Queensbury tea estate.
- For Southern Maldives: AWS operated by LaMER at Small Island Research Centre, Southern Maldives  
Soil Moisture and Temperature Measurement Instruments at 4 depths along with transmission and automated data-logging were provided for the Maldives.

## ADMINISTRATION AND IT (EXTENDED)

Financial management at Peoples Bank, Hatton National Bank and Commercial Bank has been without any issues. Our auditors, Anzari and Co. have once again certified our accounts to be up to standard and our Annual Reports has been submitted to the Registrar of Companies by Ralapanawe Associates, Colombo.

- Our libraries have been catalogued and are available digitally.
- Our paper holdings have been organized into a filing system to a large extent.
- These catalogues and other information are being made available via a staff internal website.
- Computer systems were maintained and upgraded to keep up with the additional staff. We have set up communication systems for remote interaction between our offices.
- FECT is registered in Comoros, Sri Lanka and New York.
- Our application to register FECT in Maldives is pending at the Ministry of Home Affairs.

## COLLABORATION

We had productive collaborations with personnel attached to the Mahaweli Authority of Sri Lanka (MASL), Ministry of Mahaweli Development and Environment, University of Peradeniya (UOP), Akurana Pradeshiya Sabhawa, Akurana Divisional Secretary, Akurana Womens Welfare Association, Anti Malaria Campaign, Open University of Sri Lanka (OUSL), Environment Committee of the Public Utilities Commission, Law and Society Trust and Newsview.

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

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Our affiliate scientists, Neil Devadasan, Vidhura Ralapanawe, Ajith Gunaratne, Nalin Wickramanayake, Herath Manthirithillake, Madhura Weerasekera and Manjula Siriwardhana continued to support us in numerous ways. Our alumni too have helped us from time to time. Raashid Zubair has been advising on managing our audio and video content.

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), Mohamed Musthafa (Director, Ministry of Environment), Majeeda Mohamed (Ministry of Environment) and Nishan Ahmed (Ministry of Health). We mourn the loss of a long time partner and supporter in Eng. Mohamed Raashid.

At Columbia University, we thank Profs. Adam Sobel, Upmanu Lall, Dr. Bradfield Lyon for supporting us in various ways.

We thank Michael Bell, Benno Blumenthal and Remi Cousins of the IRI for their support in numerous ways. We thank Randall Koster of NASA Goddard Space Flight Center.

We mourn the loss of Benno Blumenthal to the end of 2018. He was the driver behind developing the IRI/LDEO Data Library. He was instrumental in setting up and supporting our work on Sri Lanka in the Data Library.

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We mourn the untimely passing of Prof. S. Hasbullah. His departure is a national loss as he had unique irreplaceable knowledge and his research was one driven by excellence and service – this apart from his service on various national bodies such as the Delimitation Commission and the Council of the University of Jaffna. Dr. Hasbullah took part actively in our programs including visiting us over 7 times during 2018 – the Mowbray program, a separate visit to our office, field trips to Ambagaha and Kengalla, Enderethenne, Uguressapitiya, and Kurundugolla. He had provided us with data and ideas for further work and we planned to work actively on overlapping interests in geography, history and society.