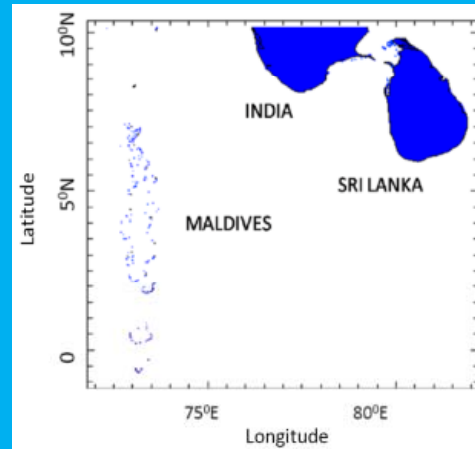


Building International Bridges and Taking on Global Challenges Through Science: Lessons Learned from PEER and related Projects in Sri Lanka and Maldives



Lareef Zubair

Foundation for Environment, Climate and Technology,
Sri Lanka

PEER Science Participants Conference, Bangkok

Outline

Consider the example of Climate Adaptation and Risk Management related to Water in Sri Lanka and Maldives

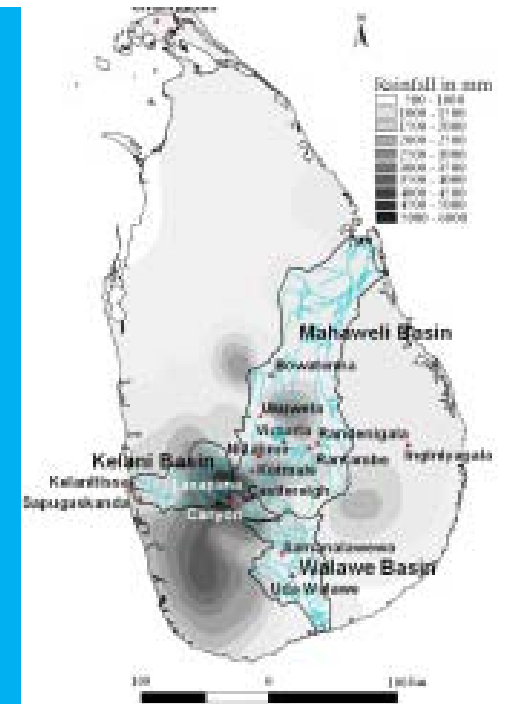
Through this address, lessons learned regarding

- Local character of Global Challenges
- International Inputs and Partnerships
- In-Country and Regional Partnerships
- Data
- Staffing
- Institutional and Political Variability
- Developing Research Capacity
- Dissemination

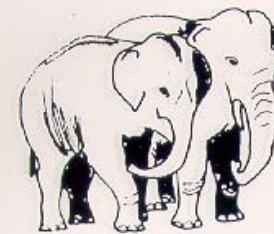
Environmental Challenges in the Mahaweli River Basin as Seen by a Director of the Mahaweli Authority

Manthrithillake 2001

- Average annual rainfall has decreased (by nearly 20%) from 1880 to 1940's and by 7% decline from (1931-1960) to and (1961-1990)
- Mahaweli Reservoirs have filled only thrice in 20 years.
- Siltation is taking up a significant fraction of reservoir storage
- Human-Elephant Conflict is Increasing
- Grasslands (Villus) which rely on seasonal flooding have badly affected
- Vector Borne Diseases is rising



Democratic Socialist Republic of Sri Lanka
Ministry of Mahaweli Development



ENVIRONMENTAL ASSESSMENT
ACCELERATED MAHAWELI DEVELOPMENT PROGRAM

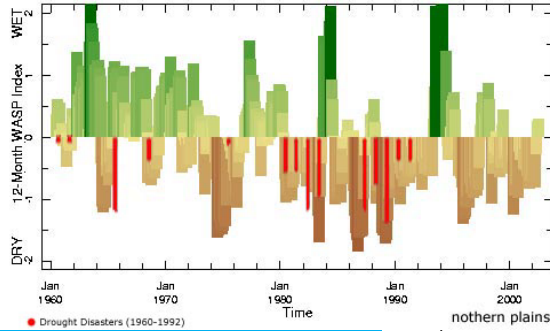
Funded by United States Agency for International Development

OCTOBER 1980

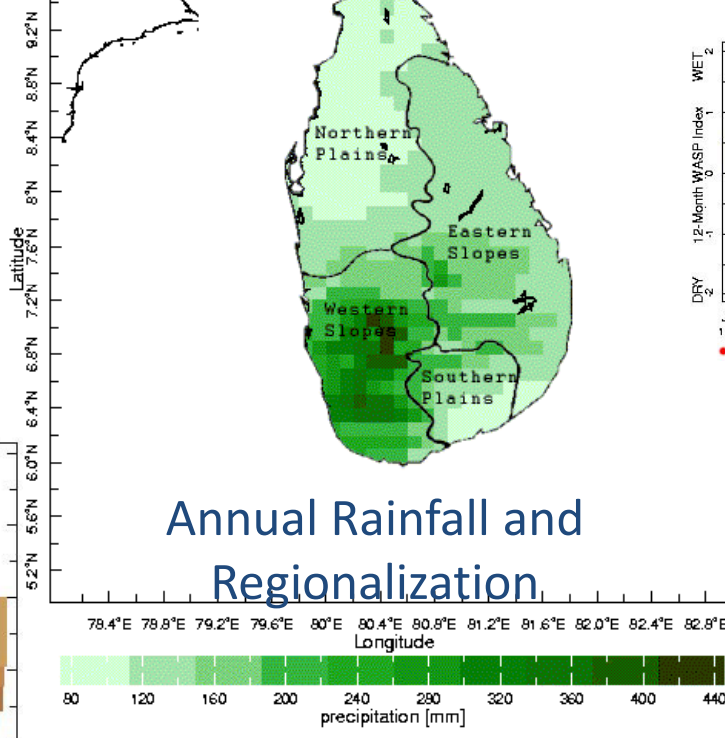
Victoria Reservoir



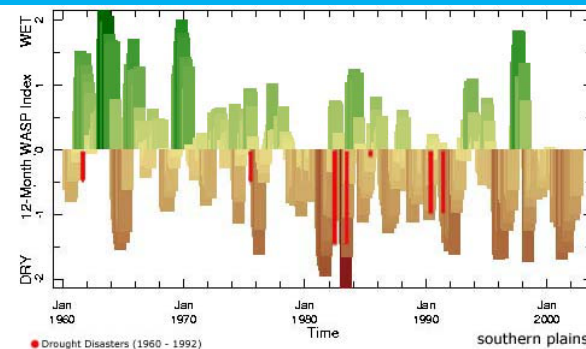
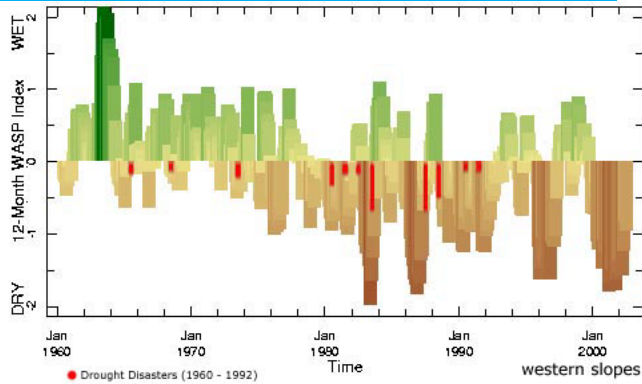
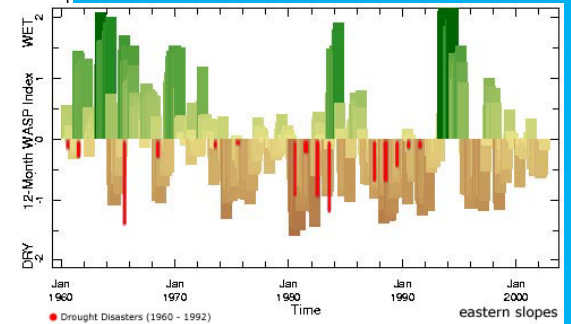
Drought Tendency in the Last 50 years in North, East, South and West



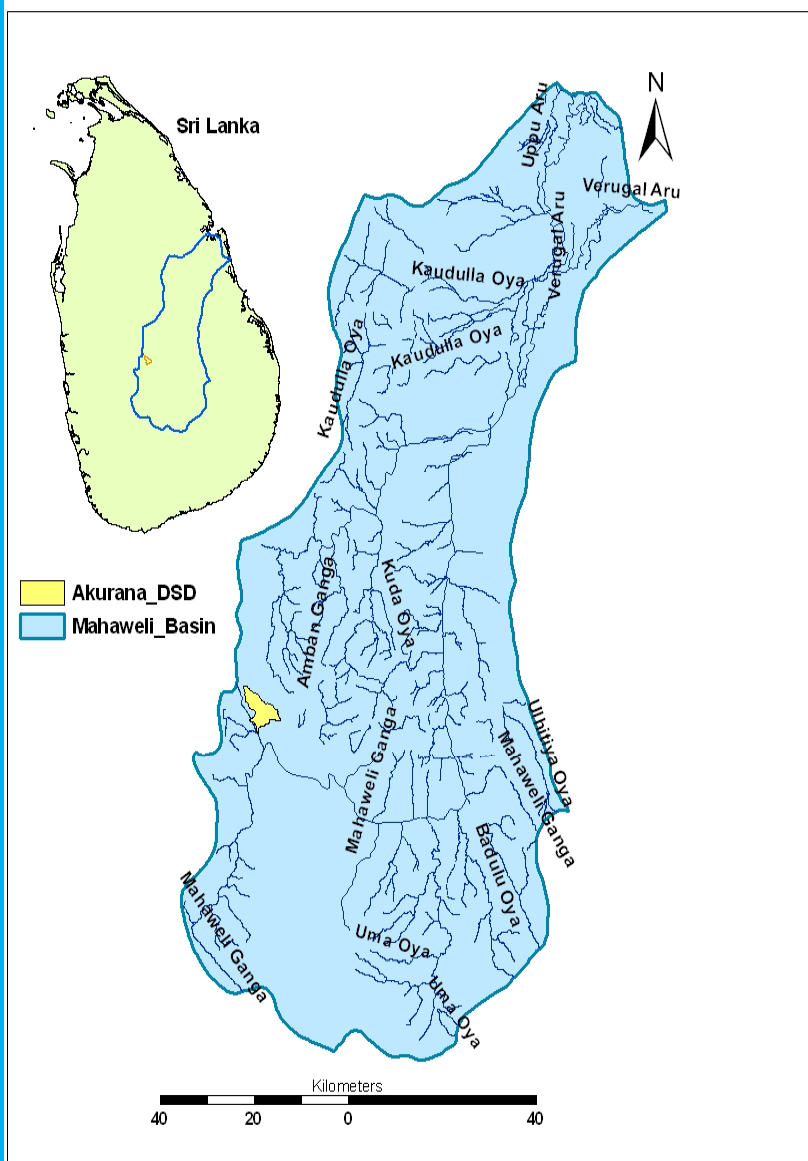
northern plains



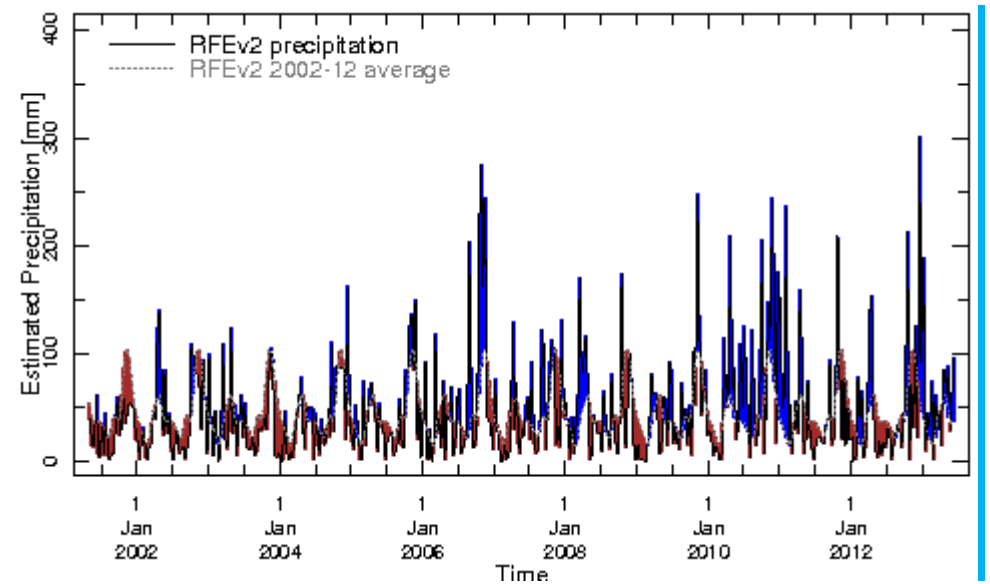
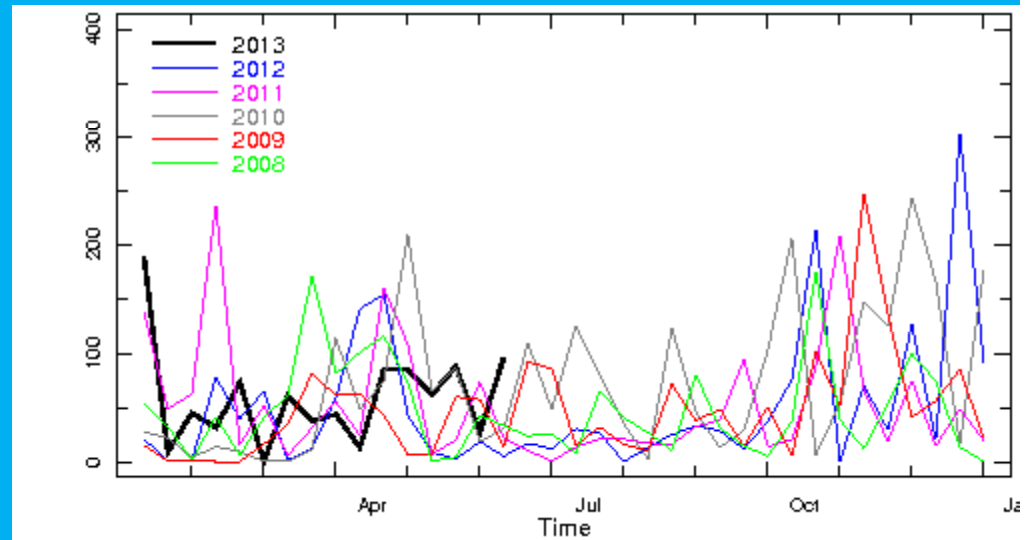
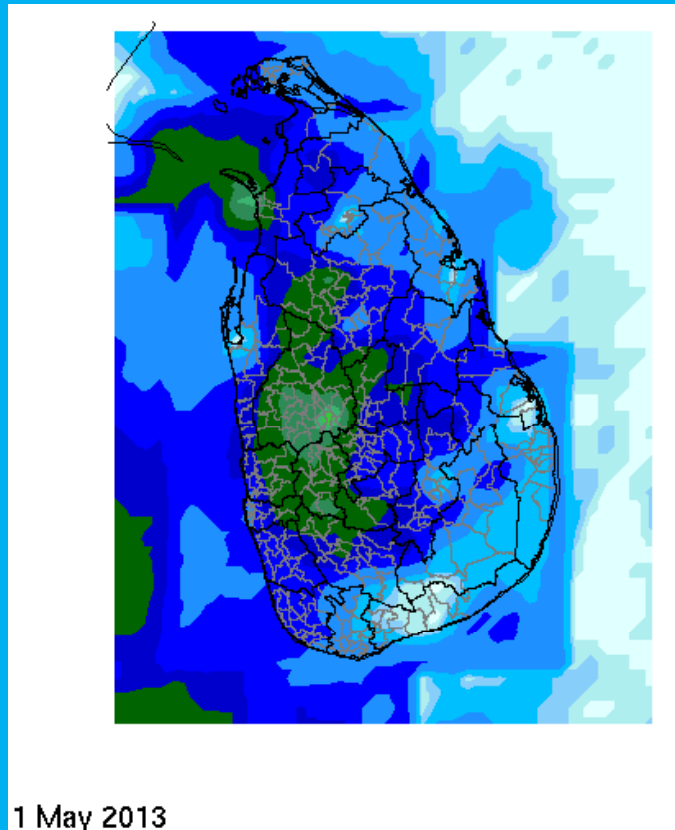
Annual Rainfall and Regionalization



Climate and Flooding



Rainfall over Sri Lanka from May to June 9, 2013 (picture) and rainfall over Akurana sub-district (Graphs)



Engagement with Other Researchers and Students

Symposium on Pinga Oya



Organized by:
Foundation for Environment, Climate and Technology,
Digana &
Department of Geography,
Faculty of Arts, University of Peradeniya.



Date : 19th Tuesday, February 2013
Time : Technical Sessions: 9.30 a.m. – 12 noon (English)
Public Discussion : 1.30 p.m. – 3.00 p.m.
(Sinhala and Tamil)
Vanue : Department of Geography, Faculty of Arts,
University of Peradeniya

This symposium brings together researchers from multiple disciplines for interaction, to help build a compendium of relevant research and identify avenues for research and collaboration on Pinga Oya. Work on other river basins relevant for Pinga Oya are also welcome. The afternoon public discussion is for interested researchers, relevant authorities and concerned citizens.

TECHNICAL Session

The technical sessions brings together researchers from multiple disciplines for interaction, to help build a compendium of relevant research and identify avenues for research and collaboration on Pinga Oya."

PUBLIC Discussion

In collaboration with



The afternoon public discussion is for interested researchers, relevant authorities and concerned citizens. The technical sessions shall be summarized for this audience.

Tentative Speakers for now

Prof. P Wickramagamage (Head - Department of Geography, University of Peradeniya)
Dr. MTM Mahees (Senior Lecturer, Sociology, University of Colombo)
Dr. Gemunu Herath (Senior Lecturer, Environmental Engineering, University of Peradeniya)
Ms. Lalitha Dissanayake (Lecturer, Geography, University of Peradeniya and Doctoral Candidate, University of Salzburg, Austria)
Ms. Sewwandhi Chandrasekara (Scientist, FECT, Digana Village)
Mr. Farook Nawas (Senior Lecturer, Chemistry, South-Eastern University)
Dr. Lareef Zubair (Principal Scientist, FECT, Digana Village)

Registration for Technical Sessions

Ms. Sewwandhi Chandrasekara

E | sewwandhichandrasekara@yahoo.com T | 081 2376746

Information and Resevration for Public Discussion

Mr. Rizan Gaffoor (Co-ordinator - The Young Friends)

E | theyoungfriends@gmail.com T | 077-3619770

www.tropicalclimate.org/pingaoya



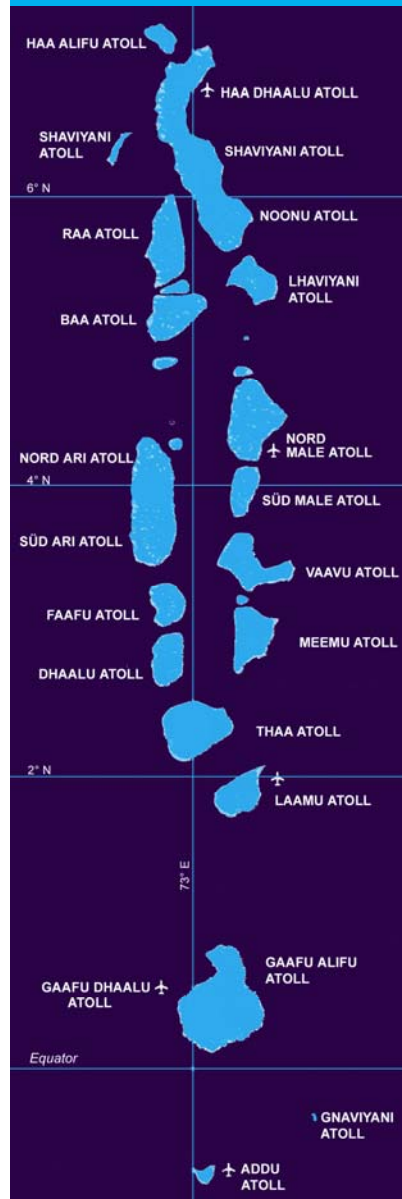
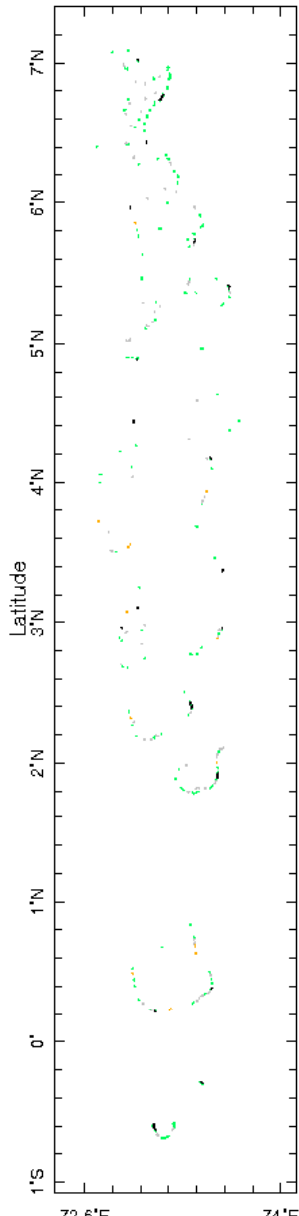
Sustainability Challenges in the Maldives



- Maldives Faces Multiple Threats
 - Sea Level Rise
 - Ocean Acidification
 - Sea Warming and Coral Bleaching
 - Water Pollution and Scarcity
 - High Vulnerability
 - Drop in Fisheries Harvest



Water Sustainability in Maldives



- Partners
 - Ministry of Environment,
 - Maldives Meteorological Service,
 - Renewable Energy Maldives
 - Maldives National University
 - Male Water Supply Company
- Monthly Climate Advisory
- Water Scarcity in Last Year
- Ongoing USAID project on Climate Change and Water Security
- Political Instability
- Website: www.tropicalclimate.org/maldives

Work in the Maldives

- Monthly Climate Advisory is being produced
- Develop Advisories for Water Management
- Focused work on Water Scarcity in Male including



Lessons on Project Management

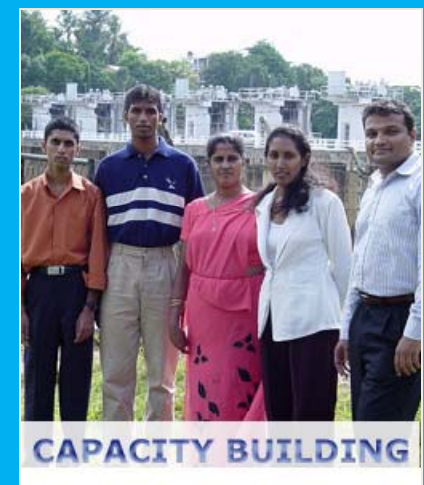
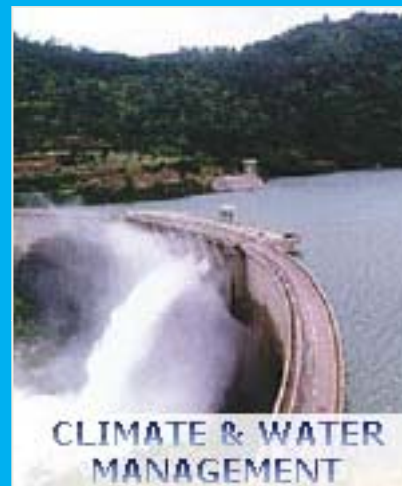
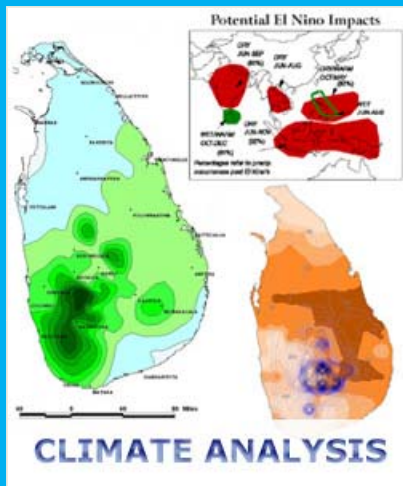
- Local character of Global Challenges
 - Scientific information has to be contextualized
 - Trans-disciplinary work is needed
- In-Country Partnerships
 - Best to work with technical experts
 - Multiple partnership help keep the relationships resilient
- Data
 - time and energy is needed to build resources
 - Capacity building helps with access to data
- Staffing
 - Younger scientists are motivated and capable
 - Supporting multiple younger scientists makes for project resilience
- Institutional and Political Variability
 - Working with technical personnel helps
 - Working with multiple institutions builds resilience
- Developing Research Capacity
 - Communication has to be undertaken to technically competent persons
 - ICT can help in alternative modes of dissemination
- International Inputs and Partnerships
 - A way to access advances in sciences rapidly
 - Much resources are available through scientist to scientist contact

Lessons Learned About Climate Adaptation

- Much that can be done with basic science is not being done.
- Local perspective brings out different character for Adaptation
- Advances in Climate Science are low cost in comparison to Investments in Adaptation
- Advanced Climate Science alone not enough
 - address barriers to uptake
 - Need Context and Synthesis
 - Need to engage with traditional knowledge
- Operational climate services needed
- International Science collaboration help
 - Help address immediate information needs,
 - Build research and service capacity
 - Influence International Agencies

FECT Mahaweli River Basin Projects

January 2000 onwards



<http://www.tropicalclimate.org>

lareefzubair@gmail.com

<http://www.climate.lk>