# Intra-Seasonal Climate Predictions for Sri Lanka and Maldives for Water Resources Management

Duration: May 1, 2013 - April 30, 2014

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#### Summary:

During the second year, we have progressed largely as anticipated on research reporting, training, awareness programs, and operational climate monitoring and predictions for Sri Lanka and Maldives. These are described in the sections that follow under Operational Work, Dissemination, Staffing, Field Work, and Infrastructure. Further Information on Research, Meetings, Conferences and Workshops, Interactions with US partners and USAID is provided in the relevant subsequent sections.

### **Conferences and Workshops:**

- Nilwala River Community Based Adaptation: The PI and four of the junior researchers participated in a program on Community Based Adaptation in the Nilwala river basin in the South of Sri Lanka.
- Lareef Zubair, and Ms. Sewwandhi Chandraskera were invited speakers at the conference on "Workshop on Mainstreaming Climate Information Application for Enhancement of Agro – ecosystem Services and Functions in the Nilwala Basin".
- Pinga Oya Symposium: The PI and Co-Pi worked with all the staff to compile the research reports from the Research Symposium on the Pinga Oya catchment.
- Schools Environment Program: The full team participated in the follow up to the Schools Environment
- Programs PEER PI Conference at RDMA Bangkok: The PI participated at the PEER PI's conference at the USAID offices in Bangkok, and presented on the project's outputs and on lessons learned in project administration along with a poster on the technical and development implications.
- Sewwandhi Chandraskera participated at the conference on "Sri Lanka Program on Improved Technologies for Agricultural professionals" at the Institute of Fundamental Studies, Kandy.

#### Meetings

- Climate, Water and Crop Modeling. PI contributed as a Resource Person, 7th -9th of May 2013 University of Ruhuna, Sri Lanka
- Workshop on Mainstreaming Climate Information Application for Enhancement of Agro ecosystem Services and Functions in the Nilwala Basin, Matara District Secretariat, 10 May 2013.
- PEER PI's conference, USAID Bangkok, September 2013
- Water Management Secretariat, Sri Lanka, Panel Meeting of Water Management Secretariat, October 2013
- National Symposium on Climate Change, Colombo, Sri Lanka Association for the Advancement of Science, December 2013.
- Internship Reporting by Masters in Development Practice Students, University of Peradeniya, December 2013
- Meeting at Killinochchi Rural Hospital in Northern Province, L. Zubair, December 2013

- Training for Master Fishermen from across Comoros (PI contribution on weather related risk management, Hairu Fisheries/ Ministry of Fisheries, Moroni, Comoros, February 2014
- L. Zubair provided guidance on Developing a Research Program to the Dean and Heads of Department, Faculty of Engineering, South Eastern University of Sri Lanka, February 2014.

# Publications

# In International Books:

- Rosenzweig, C., J.W. Jones, J.L. Hatfield, C.Z. Mutter, S.G.K. Adiku, A. Ahmad, Y. Beletse, B. Gangwar, D. Guntuku, J. Kihara, P. Masikati, P. Paramasivan, K.P.C. Rao, and L. Zubair, (2013).
- The Agricultural Model Intercomparison and Improvement Project (AgMIP): Integrated regional assessment projects. In Handbook of Climate Change and Agroecosystems: Global and Regional Aspects and Implications.
- D. Hillel, and C. Rosenzweig, Eds., ICP Series on Climate Change Impacts, Adaptation, and Mitigation Vol. 2. Imperial College Press, 263-280. 2. L. Zubair, et al. (2013).
- Climate Change Impacts on Rice Farming Systems in North Western Sri Lanka, In Handbook of Climate Change and Agroecosystems: Global and Regional Aspects and Implications.
- D. Hillel, and C. Rosenzweig, Eds., ICP Series on Climate Change Impacts, Adaptation, and Mitigation, Imperial College Press, forthcoming.

# Abstracts/Meetings:

- Zubair, L. Characterizing Climate Variability and Climate Change over Sri Lanka for Adaptation. SLAAS

   Theme Seminar "Adaptation and Mitigation Strategies for Climate Change, Ensuring Sustainable Socioeconomic Development". 3rd December 2013.
- Chandrasekara, S.S.K., Yahiya, Z., Agalawatte, P., Weerasekera, M., Zubair, L., Nawaratna, B. and Bell, M. (2013). Experimental climate services for water management in Sri Lanka and Maldives. Sri Lanka Water Convention 2013. Conference Proceedings. National Water Supply & Drainage Board, Sri Lanka. ISBN 978-955-4731-00-4. P 37-41.
- Zubair, L, Intraseasonal Climate Prediction for Water Management in Sri Lanka and Maldives, PEER PI conference, Bangkok, September 30, 2013.
- Zubair, L, Building International Bridges and Taking on Global Challenges through Science: Lessons Learned from PEER and related Projects in Sri Lanka and Maldives, PEER PI conference, Bangkok, September 30, 2013.

## **Technical Research Presentations:**

- Potential for Using Climate, Oceanic and Environmental Information for Fisheries Hazard Risk Management and Fisheries Prospecting in Comoros, for Master Fishermen and Officials, Ministry of Fisheries – Hairu Engineering Company. Moroni, February 7, 2014.
- Climate Change Impacts on Rice Farming Systems in North Western Sri Lanka, Concluding Workshop of the Agriculture Model Inter-Comparison Program, Arusha, Tanzania. January 30-February 4, 2014.
- Impact Assessment and Adaptation to Climate Change in North-West Sri Lanka, American Agronomy Association Annual Meeting, Tampa, Florida, 3-6, November 2013.
- Climate Change Impacts on Rice Farming Systems in North Western Sri Lanka, Global Meeting of the Agriculture Model Inter-Comparison Program, Columbia University, New York, October 28-30, 2013

- Intra-seasonal climate predictions for Sri Lanka and Maldives and its application for Water Resources Management, USAID/National Academy of Science conference for Principal Investigators, USAID/RDMA, Bangkok, September 30-October 5, Bangkok, Thailand.
- Chandrasekara S.S.K. Experimental Climate Services for Water Management in Sri Lanka and Maldives. Workshop on Mainstreaming Climate Information Application for Enhancement of Agro ecosystem Services and functions In Nilwala Basin. University of Ruhuna. Matara, 2013.



Agro-climatic data application in the Nilwala Basin – Prospects" Presentation by Dr. Lareef Zubair



Resource Persons, Officials and School Children at Schools Environment Program