

References

- Abhayasinghe, K. R. (2007). "Climate", In *The National Atlas of Sri Lanka. Survey Department of Sri Lanka, Colombo, Sri Lanka: 52-53.*
- Adeaga, O. (2006). *Multi-decadal variability of rainfall and water resources in Nigeria.*
- Ahmad, I., Tang, D., Wang, T., & Wagan, B. (2015). *Precipitation Trends over Time Using Mann-Kendall and Spearman's rho Tests in Swat River Basin, Pakistan.* <https://doi.org/10.1155/2015/431860>
- Ahmadi, I., Tang, D., Wang, T., Wang, M., & Wagan, B. (2017). *Spatiotemporal trend and abrupt change analysis of temperature in Iran.* 314–321. <https://doi.org/10.1002/met.1694>
- Ampitiyawatta, A. D., & Guo, S. (2009a). *Precipitation Trends in The Kalu Ganga River Basin in Sri Lanka. Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, Sri Lanka, 4.*
- Ampitiyawatta, A. D., & Guo, S. (2009b). *Precipitation Trends in The Kalu Ganga River Basin in Sri Lanka. Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, Sri Lanka, 4.*
- Araújo, W. dos S., & Brito, J. I. B. de. (2011). *Indices of trends of climatic changes for the states of the Bahia and Sergipe by means of daily precipitation indices and its relation with SST'S of the Pacific and Atlantic.* 26.
- Arnell, N., & Liu, C. (2001). *Hydrology and Water Resources. In Climate Change 2001: Impacts, Adaptation, and Vulnerability. Contribution of Working*

Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change, by M cCarthy J.J., O.F. Canziani, N.A. Leary, D.J., Dokken and K.S. White (eds.). *University Press, Cambridge*.

Arnell, N. W. (1995). *Implications for Water Supply and Management*, in Parry, M. L. and Duncan, R. (eds.), *The Economic Implications of Climate Change in Britain*, Earthscan, London,. 28–45.

Arnell, W. (1998). *CLIMATE CHANGE AND WATER RESOURCES IN BRITAIN*. 36, 83–110.

Barron, O. V., Crosbie, R. S., Charles, S. P., Dawes, W. R., Ali, R., Evans, W. R., Cresswell, R., Pollock, D., Hodgson, G., & Currie, D. (2011). *Climate change impact on groundwater resources in Australia: Summary report*.

Basnayake, B. R. S. B. (2007). *Climate Change*. In *The National Atlas of Sri Lanka*. Survey Department of Sri Lanka, Colombo, Sri Lanka: 54-55.

Basnayake, B. R. S. B. (2008). “*Climate Change: Present and Future Perspective of Sri Lanka*. Available at Meteorological Department of Sri Lanka.

Basnayake, B. R. S. B., & Vithanage, J. C. (2004). ‘*Future Climate Scenarios of Rainfall and Temperature for Sri Lanka*’, *Proceedings of the 60th Annual Session of Sri Lanka Association for the Advancement of Science (SLASS)*. Section E1. 222.

Bates, B.C, Kundzewicz, Z. W., & Palutikof, J. P. (2008). Eds. *Climate Change and Water*. Technical Paper of the Intergovernmental Panel on Climate Change.

Geneva. <https://www.ipcc.ch/pdf/technical-papers/climate-change-water-en.pdf>

Bennett, D. (2001). *How can I deal with missing data in my study? Aust N Z J Public Health.*

Blazejczyk, K., Wolowickz, W. K., Labedzki, L., & Kunert, A. (2005). Multi-annual fluctuations in precipitation and their hydrological and ecological consequences at regional scale. 296.
<http://iahs.info/uploads/dms/13195.13%2065-70%20Foz%20S6-2-1%20Blazejczyk.pdf>

Cap-net. (2011). *IWRM as a Tool for Adaptation to Climate Change.*
http://www.gwp.org/Global/GWP-CACENA_Files/en/pdf/capnet-adapt-to-climate-manual_en.pdf

CCS. (2016). *Sri Lanka Climate Profile.*
http://www.climatechange.lk/Climate_Profile.html

CEA. (2014). *Water Quality in Kelani River Introduction.*
<http://www.cea.lk/web/index.php/en/water?id=160>

Ceylon Electricity Board. (1989). *Master Plan for the Electricity Supply of Sri Lanka. Ceylon Electricity Board Publication: Colombo, Sri Lanka.*

Chandrapala, L. (2007b). *Rainfall. In The National Atlas of Sri Lanka. Survey Department of Sri Lanka, Colombo, Sri Lanka: 58-59.*

Chiew, F. H. S. (2006). *Estimation of rainfall elasticity of streamflow in Australia.*

- Chiew, F. H. S., Peel, M. C., McMahon, T. A., & Siriwardena, L. W. (2006).
Precipitation elasticity of streamflow in catchments across the world.
*Department of Civil and Environmental Engineering, University of
Melbourne, Victoria 3010, Australia.*
- Cruz, R. V., Harasawa, H., Lal, M., Anokhin, Y., Punsalmaa, B., Honda, Y., Jafari,
M., Li, C., & Huu, N. N. (2007). Asia. *Climate Change 2007: Impacts,
Adaptation and Vulnerability. Contribution of Working Group II to the
Fourth Assessment Report of the Intergovernmental Panel on Climate
Change* Parry M L, Canziani O F, Palutikof J P, van der Linden P J and
Hanson C E (eds). *Cambridge University Press*, 469–506.
- De Costa, W. A. J. M. (2008). *Climate change in Sri Lanka: Myth or reality?
Evidence from long-term meteorological data.* 36, 63–88.
- De Silva. (2006a). *Impacts of Climate Change on Potential Soil Moisture Defecit
and Its Use as a Climate Indicator to Forecast Irrigation Need in Sri Lanka.*
Symposium Proceedings of the Water Professionals' Day, 2006, ed. N. D. K.
Dayawansa.
- De Silva. (2006b). *Impacts of Climate Change on Potential Soil Moisture Defecit
and Its Use as a Climate Indicator to Forecast Irrigation Need in Sri Lanka.*
Symposium Proceedings of the Water Professionals' Day, 2006, ed. N. D. K.
Dayawansa.
- De Silva. (2006c). *Impacts of Climate Change on Water Resources in Sri Lanka.*
32nd WEDC International Conference, Colombo, Sri Lanka.

- De Silva, C. S., Weatherhead, E. K., Knox, J. W., & Roriguez, -Diaz. (2007). *Predicting the impacts of climate change—A case study of paddy irrigation water requirements in Sri Lanka.*
- De Silva, G. J., & Sonnadara, D. U. J. (2009). *Climate change in the hill country of Sri Lanka.*
- De Silva, M. M. G. T., Weerakon, S. B., Herath, S., Ratnayake, U. R., & Mahanama, S. (2012). Flood Inundation Mapping along the Lower Reach of Kelani River Basin under the Impact of Climatic Change, XXXXV, No. 02, 23–29. *The Institution of Engineers, Sri Lanka.*
- Domroes, M. (1971). *Wet Zone and Dry Zone. Möglichkeiten einer klimaökologischen Raumgliederung der Insel Ceylon.* 27, 205–232.
- Domroes, M. (1974). *The Agroclimate of Ceylon.* Franz Steiner Verlag: Wiesbaden.
- Dore, M. H. I. (2005). *Climate change and changes in global rainfall patterns: What do we know?* *Environment International.* 31 (8), 1167–1181.
- Elnesr, M. N., Yan, Z., & Ye, D. (2010). *Temperature trends and distribution in the arabian peninsula.* 6, 191–203. <https://doi.org/10.3844/ajessp.2010.191.203>
- Erigama, N., Smakhtin, Chandrapala, L., & Fernando, K. (2010). *Impacts of climate change on water resources and agriculture in Sri Lanka: A review and preliminary vulnerability mapping.* Colombo, Sri Lanka: International Water Management Institute. 51p. (IWMI Research Report 135).

- Eriyagama, N., & Smakhtin, V. (2010). *Observed and Projected Climatic Changes, Their Impacts and Adaptation Options for Sri Lanka: A Review.*
- Evans, T. E. (1996). The effects of changes in the world hydrological cycle on availability of water resources Eds. Fakhari Bazzaz, Wim Sombroek. In *Global climate change and agricultural production. Direct and indirect effects of changing hydrological, pedological and plant physiological processes.* FAO, Rome, Italy.
- Ghosh, S., & Mujumdar, P. P. (2008). *Assessment of impact of global climate change on precipitation at regional scales.*
- Gordon, C., Cooper, C. F., Senior, C. A., Banks, H., Gregory, J. M., Johns, T. C., Mitchell, J. F. B., & Wood, R. A. (2000). *The simulation of sea surface temperature, sea ice extents and ocean heat transports in a version of the Hadley Centre coupled model without flux adjustments.* 16, 147–168.
- Gosain, A. K., Rao, S., & Basuray, D. (2006). *Climate change impact assessment on hydrology of Indian river basins CURRENT SCIENCE, VOL. 90, NO. 3,.*
- Gregory, J. M., & Mitchell, J. F. B. (1995). *Simulation of daily variability of surface temperature and precipitation over Europe in the current and 22 climate using the UKMO climate model.*
- Griosman, P. A., & Kovyneva, N. P. (1989). *Preliminary estimates of climate change on Indian subcontinent during the global warming of limited scale.*

- Hegrel, G. C., Karl, T., R., Allen, M., Bindoff, N. L., Gillet, N., Karoly, D., Zhang, X., & Zwiers, F. (2004). *Climate Change Detection and Attribution: Beyond Mean Temperature Signals*. 19.
- Helfer, F., Lemckert, C., & Zhang, H. (2012). Impacts of climate change on temperature and evaporation from a large reservoir in Australia. *Griffith School of Engineering, Griffith University, Gold Coast, QLD, Australia*.
- Hennesy, K. J., Gregory, J. M., & Mitchell, J. F. B. (1997). *Changes in daily precipitation under enhanced greenhouse condition*. 13, 667–680.
- Herath, S., & Ratnayake, U. (2004). *Monitoring rainfall trends to predict adverse impacts—A case study from Sri Lanka (1964–1993)*.
- Hijioka, Y., Lasco, R., Surjan, A., & Pereira, J. (2014). *Climate Change 2014 Impacts, adaptation, and vulnerability. Part B Regional aspects. Contribution of Working Group II to the Fifth Assessment Report of the IPCC*.
- IPCC. (1995). *IPCC Second Assessment A REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE*.
- IPCC. (2001). *Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change. The University of Cambridge*.
http://www.ipcc.ch/ipccreports/tar/wg1/pdf/WG1_TAR-FRONT.PDF
- IPCC. (2007a). *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the*

Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)] (p. 104 pp).

IPCC. (2007b). *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)] (pp. 104-pp).*

IPCC. (2008). *Climate Change and Water Technical Paper of the Intergovernmental Panel on Climate Change,.*

IPCC. (2014). *Intergovernmental Panel on Climate Change. Working Group II. (2014). Climate change 2014: Impacts, adaptation, and vulnerability. IPCC Working Group II.*

IPS CLIMATEnet: Climate Change Policy Network of Sri Lanka: Policy Challenges in Climate Adaptation in Sri Lanka: Identifying Major Gaps. (2014, April 1). *IPS CLIMATEnet*. <http://climatenet.blogspot.com/2014/04/policy-challenges-in-climate-adaptation.html>

Jayatilake, Chandrapala, Basanayake, & Dharmaratne. (2005). *Water Resources and Climate Change. In (Eds.) S. Wijesekara, K.A.U.S. Imbulana and Bhanu Neupane. Proceedings of the preparatory workshop on Sri Lanka national water development report. Ministry of Irrigation, Mahaweli and Rajarata Development, Colombo, Sri Lanka: 62-87.*

Jayatillake, H. M., & Droogers, P. (2004). *Will there be Sufficient Water under Internal and External Changes? Walawe Basin (Sri Lanka). In: Climate*

Change in Contrasting River Basins, eds. J. C. J. H. Aerts and P. Droogers.

UK: CABI.

Kendall, M. (1975). Rank correlation measures. *Charles Griffin, London*.

Kothavala, Z., & Henderson-Sellers, A. (1997). Extreme precipitation events and the applicability of global climate models to study floods and droughts.

Macquarie University, Sydney, 43, 261–268.

Kruger, A. C., & Shongwe, S. (2004). *Temperature trends in South Africa: 1960–2003*. *International Journal of Climatology*, 24, 1929–1945.

Kumar, S., Merwade, V., Kam, J., & Thurner, K. (2009). *Streamflow trends in Indiana: Effects of long term persistence, precipitation and subsurface drains*. 171–183.

Labat, D., Godderis, Y., Probst, J. L., & Guyot, J. L. (2004). *Evidence for global runoff increase related to climate warming*.

Lee, A., Cho, S., Kang, D. K., & Kim, S. (2013). *Analysis of the effect of climate change on the Nakdong river stream flow using indicators of hydrological alteration*. 8, 234–247.

Loague, K. M. (1988). *Impact of rainfall and soil hydraulic property information on runoff predictions at the hillslope scale*.

<https://doi.org/10.1029/WR024i009p01501>

Malmgren, B. A., Hulugalla, R., Hayashi, Y., & Mikami, T. (2003). Precipitation trends in Sri Lanka since the 1870s and relationships to El Niño–southern

oscillation. *International Journal of Climatology*, 23(10), 1235–1252.

<https://doi.org/10.1002/joc.921>

Manawadu, L., & Fernando, N. (2008). *Climate changes in Sri Lanka*.

http://archive.cmb.ac.lk/research/bitstream/70130/1100/1/Manawadu_CLIMATE%20CHANGES%20IN%20SRI%20LANKA.pdf

Mann, H. B. (1945). *Nonparametric Tests against Trend*. 245–259.

<http://dx.doi.org/10.2307/1907187>

Marambe, B., Punyawardena, R., Silva, P., Premalal, S., Rathnabharathie, V.,

Kekulandala, B., Nidumolu, U., & Howden, S. (2015). *Climate, Climate Risk, and Food Security in Sri Lanka: Need for Strengthening Adaptation*

Strategies (pp. 1759–1789). https://doi.org/10.1007/978-3-642-38670-1_120

Milly, P. C. D., Dunne, K. A., & Vecchia, A. V. (2005). *Global pattern of trends in streamflow and water availability in a changing climate*. 438, 347–350.

Milly, P. C. D., & Eagleson, P. S. (1988). *Effect of Storm Scale on Surface Runoff* Volume. 24, 620–624.

Mimikou, M., Baltas, E., Varanou, E., & Pantazis. (2000). *Regional Impacts of Climate Change on Water Resources Quantity and Quality Indicators*. 234(1-2), 95–109. [https://doi.org/10.1016/S0022-1694\(00\)00244-4](https://doi.org/10.1016/S0022-1694(00)00244-4)

Min, S. K., Zhang, X., Zweirs, F. W., & Hegerl, G. C. (2011). *Human contribution to more-intense precipitation extremes*. 470, 378–381.

- Mondal, A., Kundu, S., & Mukhopadhyay, A. (2012). *Rainfall trend analysis by Mann- Kendall test: A case study of Nort-Eastern Part of Cuttack district, Orissa*,. 2(1), 70–78.
- Murphy, K. W., & Ellis, A. W. (2014). *An assessment of the stationarity of climate and stream flow in watersheds of the Colorado River Basin*.
- Nan, Y., hui, B., & Chunkun, L. (2011). *Impact Analysis of Climate Change on Water Resources*.
<http://www.sciencedirect.com/science/article/pii/S1877705811055627>
- Nandargi, S., & Mulye, S. S. (2014). *Spatio-temporal rainfall variability and rainstorm analysis over the Goa state, india*. 1, 8–23.
- Nash, L. L., & Gleick, P. H. (1993). *The Colorado River Basin and Climatic Change: The Sensitivity of Streamflow and Water Supply to Variations in Temperature and Precipitation EPA 230-R-93-009, U.S. Environmental Projection Agency, Washington, D.C.*
- National Science Foundation. (2000). *Water Resources of Sri Lanka*.
- New, M., Hewitson, B., Stephenson, D. B., Tsiga, A., Kruger, A., Manhique, A., Gomez, B., Coelho, C. A. S., Masisi, D. N., Kululanga, M. E., Adesina, F., Saleh, H., Kanyanga, J., Adosi, J., Bulane, L., Fortunata, L., Mdoka, M. L., & Lajoie, R. (2006). *Evidence of trends in daily climate extremes over Southern and West Africa*. 111, 1–11.
- Nicholls, N. (2004). *The changing nature of Australian droughts*.

- Nichols, D. S., & Verry, E. S. (2001). *Stream flow and ground water recharge from small forested watersheds in north central Minnesota*. 245, 89–103.
- Niroshinie, M. A. C., Babel, M. S., & Herath, S. (2016). *A methodology to analyze extreme flooding under future climate change scenarios for Colombo*.
- Panabokke, C. R., & Punyawardena, B. V. R. (2009). *Climate Change and Rain-fed Agriculture in the Dry Zone of Sri Lanka*. 2.
- Parry, M. L., Canziani, O. F., Palutikof, J. P., van der Linden, P. J., & Hanson, C. E. (2007). Intergovernmental Panel on Climate Change (IPCC), 2007. Climate change (2007). Impacts, adaptation and vulnerability. Contribution of working group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, edited by M. Parry et al.,. *Cambridge University Press, UK*.
- Piyasiri, C. H., Peiris, T. S. G., & Samita, S. (2004). *Change in Rainfall and Temperature of Low Country Wet Intermediate (IL1) Region of Sri Lanka*. 16, 271–281.
- Punyawardena, B. V. R., Mehmood, A. K., Hettiarachchi, A. K., Iqbal, M., Silva, S. H. S. A., & Goheer, A. (2013). *Future Climate of Sri Lanka: An approach through dynamic downscaling of ECHAM4 General Circulation Model (GCM)*. *Tropical Agriculturist* 161: 35-50.
- Rivas, B. L., & Lizama, I. (2005). *Influence of climate variability on water resources in the Bulgarian South Black Sea basin*.

- Rosenberg, N. J., Kimball, B. A., Martin, P., & Cooper, C. F. (1990). From Climate and CO² Enrichment to Evapotranspiration', in Waggoner, P.E., ed., *Climate Change and U.S. Water Resources*,. *John Wiley and Sons, New York*, 151–175.
- Rusticucci, M., & Penalba, O. (2000). *Precipitation seasonal cycle over southern South America*.
- Sankarasubramaniam, A., Vogel, R. M., & Limburner, J. F. (2001). *Climate elasticity of streamflow in the United States*. 37, 1771–1781.
- Schaake, J. (1990). 'From Climate to Flow', in Waggoner, P.E., ed., *Climate Change and U.S. Water Resources*, 177–206, *John Wiley and Sons, New York*.
- Schafer, J. L. (1999). *Multiple Imputation: A Primer* (Vol. 8).
<https://doi.org/10.1191/096228099671525676>
- Schneider, J. (2008).
Impacts of climate change on catchment storage, stream flow recession and summer low flow.
- Shantha, W. W. A., & Jayasundara, J. M. S. B. (2004). *Study on Changes in the Mahaweli Upper Watershed in Sri Lanka, Due to Climatic Changes and Develop a Correction Model for Global Warming*.
- Shiklomanov, I. (1991). *The World's water resources*. In. *Proc. Int. Symp. To Commemorates 25 Years of the IHP* (ed. By UNESCO). 93–126.
- Thambyahpillay, G. (1958). *The Kachchan—A foehn wind in Ceylon*. 13, 107-114.

- Tigkas, D., Vangelis, H., & Tsakiris, G. (2012). *Drought and climatic change impact on streamflow in small watersheds*.
- Trenberth, K. E., & Shea, D. J. (2005). *Relationships between precipitation and surface temperature*. <https://doi.org/10.1029/2005GL022760>
- Tsakiris, G., & Vangelis, H. (2005). *Establishing a drought index incorporating evapotranspiration*.
- Vehviläinen, B., & Lohvansuu, L. (1991). *The effect of climate change on discharges and snow cover in Finland*. *Hydrological*, 36, 101–121.
- Warburton, M. L., & Schulze, R. E. (2005). *Detection of climate change: A review of literature on changes in temperature, rainfall and streamflow, on detection methods and data problems*. In: Schulze, R.E. (Ed.), *Climate Change and Water Resources in Southern Africa: Studies on Scenarios, Impacts, Vulnerabilities and Adaptation*. Water Research Commission, Pretoria, RSA, WRC Report 1430/1/05, pp. 257–274 (Chapter 15).
- Wickramagamage, P. (2010). *Seasonality and spatial pattern of rainfall of Sri Lanka: Exploratory factor analysis*. *Wiley InterScience*, 30. <https://doi.org/10.1002/joc.1977>
- Wickramagamage, P. (2015). *Spatial and temporal variation of rainfall trends of Sri Lanka*. *Theoretical and Applied Climatology*, 125. [10.1007/s00704-015-1492-0](https://doi.org/10.1007/s00704-015-1492-0).
- Wijesekera, N. T. S. (2010). *Surface water resources and Climate Change*. *National Forum on Water Research 'Identification of Gaps and Priorities*.

- Wijesuriya, W., Sepalika, L. D., & Amarasekera, H. (2005). *Changes observed in occurrence of dry spells in different rubber growing areas of Sri Lanka: Journal of the National Institute of Plantation Management. 21(1), 15–30.*
- WMO. (2016, January 25). WMO confirms 2015 as hottest year on record. *United Nations Sustainable Development.*
<http://www.un.org/sustainabledevelopment/blog/2016/01/wmo-confirms-2015-as-hottest-year-on-record/>
- Xia, Y., Fabian, P., Winterhalter, M., & Zhao, M. (2001). *Forest climatology: Estimation and use of daily climatological data for Bavaria, Germany. 106, 87-103.*
- Xu, Z. X., Takeuchi, K., & Ishidaira, H. (2003). *Monotonic trend and step changes in Japanese precipitation. 279, 144–150.*
- Yang, D. W., Shao, W. W., Yeh, P. J. F., Yang, H. B., Kanae, S., & Oki, T. (2009). *Impact of vegetation coverage on regional water balance in the nonhumid regions of China.*
- Yang, Z., & Liu, Q. (2011). *Response of Streamflow to Climate Changes in the Yellow River Basin, China. 12, 1113–1126.*
- Yoshino, M. (1982). *A climatological study on wind conditions in Sri Lanka. 30, 111–125.*
- Yoshino, M., Urushibara, K., & Nomoto S. (1983). Kachchan, a local wind in Sri Lanka. In *Climate, Water and Agriculture in Sri Lanka*, Yoshino MM, Kayane I, Madduma Bandara CM (eds). *University of Tsukuba Printing Press.*

Zeng, Z. M., Yan, Z. W., & Ye, D. (2001). *The regions with the most significant temperature trends during the last century*. 6, 481–496.

Zubair, L. (2003). *Sensitivity of Kelani streamflow in Sri Lanka to ENSO*.

Zubair, L. M. (2002). El Niño-southern oscillation influences on rice production in Sri Lanka. *International Research Institute for Climate and Society*, 22.

<https://doi.org/10.7916/D8W382J5>