REFERENCES

Ali, M. H. (2010). Crop Water Requirement and Irrigation Scheduling. In *Fundamentals of Irrigation and On-farm Water Management: Volume 1* (pp. 399–452). Springer New York. https://doi.org/10.1007/978-1-4419-6335-2_9

Allen, R. G. (2017). *FAO Irrigation and Drainage Paper No.56 Crop Evapotranspiration (guidelines for computing crop water requirements)*.

Allen, R. G., & Pereira, L. S. (1998). *Regional water balance View project*. https://www.researchgate.net/publication/284300773

Arachchige, H., Jayasena, H., & Chandrajith, R. (n.d.). *Water Management in Ancient Tank Cascade Systems (TCS) in Sri Lanka: Evidence for Systematic Tank Distribution Value Addition of Gemstones View project Hydrothermal extraction of metal oxide from Sri Lankan mineral Sands View project*. https://www.researchgate.net/publication/258109597

Banihabib, M. E., Hasani, K., Bavani, A. R. M., & Asgari, K. (2016). A framework for the assessment of reservoir operation adaptation to climate change in an arid region. *International Journal of Global Warming*, *9*(3), 286–305. https://doi.org/10.1504/IJGW.2016.075446

Bekele, D. M., Ayana, M. T., Mohammed, A. K., Lohani, T. K., & Shabaz, M. (2021). Prophesying the stream flow and perpetrating the performance of Halele-Werabessa reservoirs of Ethiopia using HEC-HMS and HEC-ResSim. *World Journal of Engineering*, *18*(5), 692–700. https://doi.org/10.1108/WJE-11-2020-0573

Brekke, L. D., Maurer, E. P., Anderson, J. D., Dettinger, M. D., Townsley, E. S., Harrison, A., & Pruitt, T. (2009). Assessing reservoir operations risk under climate change. *Water Resources Research*, *45*(4), 1–16. https://doi.org/10.1029/2008WR006941

Cannon, A. J., Sobie, S. R., & Murdock, T. Q. (2015). Bias correction of GCM precipitation by quantile mapping: How well do methods preserve changes in quantiles and extremes? *Journal of Climate*, *28*(17), 6938–6959. https://doi.org/10.1175/JCLI-D-14-00754.1

Chandel, A., Shankar, V., & Jaswal, S. (2023). Employing HEC-ResSim 3.1 for Reservoir Operation and Decision Making. In *Boundary Layer Flows - Modelling, Computation, and Applications of Laminar, Turbulent Incompressible and Compressible Flows*. IntechOpen. https://doi.org/10.5772/intechopen.101673

Crow, W. T., Chen, F., Reichle, R. H., Xia, Y., & Liu, Q. (2018). Exploiting Soil Moisture, Precipitation, and Streamflow Observations to Evaluate Soil

Moisture/Runoff Coupling in Land Surface Models. *Geophysical Research Letters*, *45*(10), 4869–4878. https://doi.org/10.1029/2018GL077193

Dash, S. S., Sahoo, B., & Raghuwanshi, N. S. (2022). An adaptive multi-objective reservoir operation scheme for improved supply-demand management. *Journal of Hydrology*, *615*. https://doi.org/10.1016/j.jhydrol.2022.128718

Eccles, R., Zhang, H., & Hamilton, D. (2019). A review of the effects of climate change on riverine flooding in subtropical and tropical regions. In *Journal of Water and Climate Change* (Vol. 10, Issue 4, pp. 687–707). IWA Publishing. https://doi.org/10.2166/wcc.2019.175

Farr, T. G., Rosen, P. A., Caro, E., Crippen, R., Duren, R., Hensley, S., Kobrick, M., Paller, M., Rodriguez, E., Roth, L., Seal, D., Shaffer, S., Shimada, J., Umland, J., Werner, M., Oskin, M., Burbank, D., & Alsdorf, D. (2007). *The Shuttle Radar Topography Mission*. *2005*, 1–33. https://doi.org/10.1029/2005RG000183.1.INTRODUCTION

Fleming, M., & Neary, V. (2004). Continuous Hydrologic Modeling Study with the Hydrologic Modeling System. *Journal of Hydrologic Engineering*, *9*(3), 175–183. https://doi.org/10.1061/(asce)1084-0699(2004)9:3(175)

Fors, A. (2022). *Improved Understanding of Water Balance in the Malwathu Oya River Basin Using SWAT and Remote Sensing*.

Gosain, A. K., Rao, S., Srinivasan, R., & Gopal Reddy, N. (2005). Return-flow assessment for irrigation command in the Palleru river basin using SWAT model. *Hydrological Processes*, *19*(3), 673–682. https://doi.org/10.1002/hyp.5622

Gu, Z., Qi, Z., Burghate, R., Yuan, S., Jiao, X., & Xu, J. (2020). Irrigation Scheduling Approaches and Applications: A Review. *Journal of Irrigation and Drainage Engineering*, *146*(6). https://doi.org/10.1061/(asce)ir.1943-4774.0001464

Guo, Y., Fang, G., Wen, X., Lei, X., Yuan, Y., & Fu, X. (2019). Hydrological responses and adaptive potential of cascaded reservoirs under climate change in Yuan River Basin. *Hydrology Research*, *50*(1), 358–378. https://doi.org/10.2166/nh.2018.165

Hagemann, S., Chen, C., Clark, D. B., Folwell, S., Gosling, S. N., Haddeland, I., Hanasaki, N., Heinke, J., Ludwig, F., Voß, F., & Wiltshire, A. J. (2012). Earth System Dynamics Discussions Climate change impact on available water resources obtained using multiple global climate and hydrology models. *Earth Syst. Dynam. Discuss*, *3*, 1321–1345. https://doi.org/10.5194/esdd-3-1321-2012

Hagemann, S., Chen, C., Clark, D. B., Folwell, S., Gosling, S. N., Haddeland, I., Hanasaki, N., Heinke, J., Ludwig, F., Voss, F., & Wiltshire, A. J. (2013). Climate change impact on available water resources obtained using multiple global climate and hydrology models. *Earth System Dynamics*, *4*(1), 129–144. https://doi.org/10.5194/esd-4-129-2013

Hakala, K., Addor, N., Teutschbein, C., Vis, M., Dakhlaoui, H., & Seibert, J. (2019). Hydrological Modeling of Climate Change Impacts. *Encyclopedia of Water*, *February*, 1–20. https://doi.org/10.1002/9781119300762.wsts0062

Halwatura, D., & Najim, M. M. M. (2013). Application of the HEC-HMS model for runoff simulation in a tropical catchment. *Environmental Modelling and Software*, *46*(August), 155–162. https://doi.org/10.1016/j.envsoft.2013.03.006

Harboe, R., Ratnayake, U., Harboe, R., & Ratnayake, U. (1993). *Simulation of a reservoir with standard operating rule* (Issue 213). IAHS Pubf. https://www.researchgate.net/publication/237770781

Heng, L. K., Moutonnet, P., Smith, M., & Food and Agriculture Organization of the United Nations. (2002). *Deficit irrigation practices*. Food and Agriculture Organization of the United Nations.

Hydrologic Engineering Center. (2000). Hydrologic Modeling System Technical Reference Manual. *Hydrologic Modeling System HEC-HMS Technical Reference Manual*, *March*, 148.

Intergovernmental Panel on Climate Change (IPCC). (2022). Climate Change 2022: Mitigation of Climate Change, Working Group III Contribution to the Sixth Assessment Report (AR6). *Intergovernmental Panel on Climate Change (IPCC)*, *139*, 219–276. https://doi.org/10.1017/9781009157926

Jayatilaka, C. J., Sakthivadivel, R., Shinogi, Y., Makin, I. W., & Witharana, P. (2003). *A simple water balance modelling approach for determining water availability in an irrigation tank cascade system*. www.elsevier.com/locate/jhydrol

Jebbo, B., & Awchi, T. (2019). Simulation of Mosul Dam Reservoir Operation for Irrigation and Hydropower Generation. *Engineering and Technology Journal*, *37*(1C), 64–69. https://doi.org/10.30684/etj.37.1c.10

Kamran, M., & Rajapakse, L. (2018). *Effect of Watershed Subdivision and Antecedent Moisture Condition on HEC- Effect of Watershed Subdivision and Antecedent Moisture Condition on HEC-HMS Model Performance in the Maha Oya Basin , Sri Lanka*. *August*. https://doi.org/10.15282/ijets.5.2.2018.1004

Keller, A. A., & Keller, J. (1995). Effective Efficiency: A Water Use Efficiency Concept for Allocating Freshwater Resources. 22. *Winrock International*, *January 1995*, 20.

Khan, W. A., Rahman, J. U., Mohammed, M., Alhussain, Z. A., & Elbashir, M. K. (2021). Topological Sustainability of Crop Water Requirements and Irrigation Scheduling of Some Main Crops Based on the Penman-Monteith Method. *Journal of Chemistry*, *2021*. https://doi.org/10.1155/2021/8552547

Klipsch and Hurst. (2021). HEC-ResSim_33_UsersManual.pdf. In *US Army Corps of Engineers Institute for Water Resources Hydrologic Engineering Center (HEC)* (Vol. 82, Issue Fab, p. 670).

Kottek, M., Grieser, J., Beck, C., Rudolf, B., & Rubel, F. (2006). World map of the Köppen-Geiger climate classification updated. *Meteorologische Zeitschrift*, *15*(3), 259–263. https://doi.org/10.1127/0941-2948/2006/0130

Kriegler, E., O'Neill, B. C., Hallegatte, S., Kram, T., Lempert, R. J., Moss, R. H., & Wilbanks, T. (2012). The need for and use of socio-economic scenarios for climate change analysis: A new approach based on shared socio-economic pathways. *Global Environmental Change*, *22*(4), 807–822. https://doi.org/10.1016/j.gloenvcha.2012.05.005

Kumari, A., Upadhyaya, A., Jeet, P., Al-Ansari, N., Rajput, J., Sundaram, P. K., Saurabh, K., Prakash, V., Singh, A. K., Raman, R. K., Gaddikeri, V., & Kuriqi, A. (2022). Estimation of Actual Evapotranspiration and Crop Coefficient of Transplanted Puddled Rice Using a Modified Non-Weighing Paddy Lysimeter. *Agronomy*, *12*(11), 2850. https://doi.org/10.3390/agronomy12112850

Mesgari, E., Hosseini, S. A., Partoo, L. G., Hemmesy, M. S., & Houshyar, M. (2022). Assessment of CMIP6 models' performances and projection of precipitation based on SSP scenarios over the MENAP region. *Journal of Water and Climate Change*, *13*(10), 3607–3619. https://doi.org/10.2166/wcc.2022.195

Mishra, V., Bhatia, U., & Tiwari, A. D. (2020). Bias-corrected climate projections for South Asia from Coupled Model Intercomparison Project-6. *Scientific Data*, *7*(1). https://doi.org/10.1038/s41597-020-00681-1

Mujumdar, P. P., & Ramesh, T. S. V. (1997a). Real-time reservoir operation for irrigation. *Water Resources Research*, *33*(5), 1157–1164. https://doi.org/10.1029/96WR03907

Mujumdar, P. P., & Ramesh, T. S. V. (1997b). Real-time reservoir operation for irrigation. *Water Resources Research*, *33*(5), 1157–1164. https://doi.org/10.1029/96WR03907

Murray, F. J. (2000). *The lowland dry zone of Sri Lanka: site for study of aquaculture development within farmer-managed irrigation systems and methodology for participatory situation appraisal*. https://www.researchgate.net/publication/277047625

Muthuwatta, L., Perera, H. P. T. W., Eriyagama, N., Upamali Surangika, K. B. N., & Premachandra, W. W. (2017). Trend and variability of rainfall in two river basins in Sri Lanka: an analysis of meteorological data and farmers' perceptions. *Water International*, *42*(8), 981–999. https://doi.org/10.1080/02508060.2017.1406784

Myuran, M. (2009). *Development of Effective Water Usage Plan for Dry Zone of Sri Lanka: Case Study in Malwathu Oya Basin*.

Narmilan, A., & Sugirtharan, M. (2020). Application of FAO-CROPWAT Modelling on Estimation of Irrigation Scheduling for Paddy Cultivation in Batticaloa District, Sri Lanka. *Agricultural Reviews*, *Of*. https://doi.org/10.18805/ag.r-152

Neelakantan, T., & Sasireka, K. (2013). *Hydropower Reservoir Operation using Standard Operating and Standard Hedging Policies*.

Nijssen, B., O'donnell, G. M., Hamlet, A. F., & Lettenmaier, D. P. (2001). Hydrologic sensitivity of global rivers to climate change. *Climatic Change*, *50*(1–2), 143–175. https://doi.org/10.1023/A:1010616428763

Odhiambo, L., & Kranz, W. L. (2011). *Irrigation Efficiency and Uniformity, and Crop Water Use Efficiency*. https://digitalcommons.unl.edu/biosysengfacpub

O'Neill, B. C., Kriegler, E., Ebi, K. L., Kemp-Benedict, E., Riahi, K., Rothman, D. S., van Ruijven, B. J., van Vuuren, D. P., Birkmann, J., Kok, K., Levy, M., & Solecki, W. (2017). The roads ahead: Narratives for shared socioeconomic pathways describing world futures in the 21st century. *Global Environmental Change*, *42*, 169–180. https://doi.org/10.1016/j.gloenvcha.2015.01.004

O'Neill, B. C., Kriegler, E., Riahi, K., Ebi, K. L., Hallegatte, S., Carter, T. R., Mathur, R., & van Vuuren, D. P. (2014). A new scenario framework for climate change research: The concept of shared socioeconomic pathways. *Climatic Change*, *122*(3), 387–400. https://doi.org/10.1007/s10584-013-0905-2

Pastén-Zapata, E., Jones, J. M., Moggridge, H., & Widmann, M. (2020). Evaluation of the performance of Euro-CORDEX Regional Climate Models for assessing hydrological climate change impacts in Great Britain: A comparison of different spatial resolutions and quantile mapping bias correction methods. *Journal of Hydrology*, *584*. https://doi.org/10.1016/j.jhydrol.2020.124653

Peng, L., & Li, Z. (2021). Ensemble flood risk assessment in the yangtze river economic belt under cmip6 ssp-rcp scenarios. *Sustainability (Switzerland)*, *13*(21). https://doi.org/10.3390/su132112097

Pereira, L. S. (1998). *Crop evapotranspiration-Guidelines for computing crop water requirements-FAO Irrigation and drainage paper 56 PHDROUGHT-Predictability assessment and hybridization of seasonal drought forecasts in Western Europe View project H2Olive3s View project* (Vol. 18). https://www.researchgate.net/publication/235704197

Rosenberg, N. J., Brown, R. A., Izaurralde, R. C., & Thomson, A. M. (2003). Integrated assessment of Hadley Centre (HadCM2) climate change projections on agricultural productivity and irrigation water supply in the conterminous United States I. Climate change scenarios and impacts on irrigation water supply simulated with the HUMUS model. *Agricultural and Forest Meteorology*, *117*(1–2), 73–96. https://doi.org/10.1016/S0168-1923(03)00025-X

Saase, R., Schütt, B., & Bebermeier, W. (2020). Analyzing the dependence of major tanks in the headwaters of the aruvi aru catchment on precipitation. Applying drought indices to meteorological and hydrological data. *Water (Switzerland)*, *12*(10), 1–20. https://doi.org/10.3390/w12102941

Sardoii, E. R., Rostami, N., Sigaroudi, S. K., & Taheri, S. (2012). Calibration of loss estimation methods in HEC-HMS for simulation of surface runoff (case study: Amirkabir dam watershed, Iran). *Advances in Environmental Biology*, *6*(1), 343–348.

Shen, Y., Oki, T., Kanae, S., Hanasaki, N., Utsumi, N., & Kiguchi, M. (2014). Evaluation intégrée des projection des ressources en eau mondiales selon les scénarios SRES. *Hydrological Sciences Journal*, *59*(10), 1775–1793. https://doi.org/10.1080/02626667.2013.862338

Shibuo, Y., Jarsjö, J., & Destouni, G. (2007). Hydrological responses to climate change and irrigation in the Aral Sea drainage basin. *Geophysical Research Letters*, *34*(21). https://doi.org/10.1029/2007GL031465

Smith M. (1992). *CROPWAT: a computer program for irrigation planning and management*. Food and Agriculture Organization of the United Nations.

Song, J.-H., Kang, M. S., Song, I., & Jun, S. M. (2016). Water Balance in Irrigation Reservoirs Considering Flood Control and Irrigation Efficiency Variation. *Journal of Irrigation and Drainage Engineering*, *142*(4). https://doi.org/10.1061/(asce)ir.1943-4774.0000989

Srinivasan, K., & Kumar, K. (2018). Multi-Objective Simulation-Optimization Model for Long-term Reservoir Operation using Piecewise Linear Hedging Rule. *Water Resources Management*, *32*(5), 1901–1911. https://doi.org/10.1007/s11269-018-1911-y

Subramaniam Sivakumar, S. (2019). *OPERATIONAL POLICY OF THE RESERVOIRS IN MALWATHU OYA RIVER BASIN TO MINIMIZE FLOOD DAMAGES IN ANURADHAPURA, VAVUNIYA AND MANNAR DISTRICTS IN NORTHERN SRI LANKA Climate Change and Drinking Water View project Cultivating fresh water from salt water Elephantpass lagoon View project*. https://www.researchgate.net/publication/334876088

Surendran, U., Sushanth, C. M., Mammen, G., & Joseph, E. J. (2015). Modelling the Crop Water Requirement Using FAO-CROPWAT and Assessment of Water Resources for Sustainable Water Resource Management: A Case Study in Palakkad District of Humid Tropical Kerala, India. *Aquatic Procedia*, *4*(Icwrcoe), 1211–1219. https://doi.org/10.1016/j.aqpro.2015.02.154

Swamee, B. P. K. (2009). *Sluice-gate discharge equations*. *118*(1), 56–60.

Taghian, M., Rosbjerg, D., Haghighi, A., & Madsen, H. (2014). Optimization of Conventional Rule Curves Coupled with Hedging Rules for Reservoir Operation. *Journal of Water Resources Planning and Management*, *140*(5), 693–698. https://doi.org/10.1061/(ASCE)wr.1943-5452.0000355

Teutschbein, C., & Seibert, J. (2012). Bias correction of regional climate model simulations for hydrological climate-change impact studies: Review and evaluation of different methods. *Journal of Hydrology*, *456–457*, 12–29. https://doi.org/10.1016/j.jhydrol.2012.05.052

Touzé-Peiffer, L., Barberousse, A., & Le Treut, H. (2020). The Coupled Model Intercomparison Project: History, uses, and structural effects on climate research. In *Wiley Interdisciplinary Reviews: Climate Change* (Vol. 11, Issue 4). Wiley-Blackwell. https://doi.org/10.1002/wcc.648

Uysal, G., Akkol, B., Topcu, M. I., Sensoy, A., & Schwanenberg, D. (2016). Comparison of Different Reservoir Models for Short-Term Operation of Flood Management. *Procedia Engineering*, *154*, 1385–1392. https://doi.org/10.1016/j.proeng.2016.07.506

van Vuuren, D. P., Edmonds, J., Kainuma, M., Riahi, K., Thomson, A., Hibbard, K., Hurtt, G. C., Kram, T., Krey, V., Lamarque, J. F., Masui, T., Meinshausen, M., Nakicenovic, N., Smith, S. J., & Rose, S. K. (2011). The representative concentration pathways: An overview. *Climatic Change*, *109*(1), 5–31. https://doi.org/10.1007/s10584-011-0148-z

Vano, J. A., Scott, M. J., Voisin, N., Stöckle, C. O., Hamlet, A. F., Mickelson, K. E. B., Elsner, M. M. G., & Lettenmaier, D. P. (2010). Climate change impacts on water management and irrigated agriculture in the Yakima River Basin, Washington, USA. *Climatic Change*, *102*(1–2), 287–317. https://doi.org/10.1007/s10584-010-9856-z

Voldoire, & Aurore. (2019). *CNRM-CERFACS CNRM-CM6-1-HR model output prepared for CMIP6 CMIP*. Earth System Grid Federation.

Whitehead, P. G., Barbour, E., Futter, M. N., Sarkar, S., Rodda, H., Caesar, J., Butterfield, D., Jin, L., Sinha, R., Nicholls, R., & Salehin, M. (2015). Impacts of climate change and socio-economic scenarios on flow and water quality of the Ganges, Brahmaputra and Meghna (GBM) river systems: Low flow and flood statistics. *Environmental Science: Processes and Impacts*, *17*(6), 1057–1069. https://doi.org/10.1039/c4em00619d

Xiong, R., Zheng, Y., Han, F., & Tian, Y. (2021). Improving the Scientific Understanding of the Paradox of Irrigation Efficiency: An Integrated Modeling Approach to Assessing Basin-Scale Irrigation Efficiency. *Water Resources Research*, *57*(11). https://doi.org/10.1029/2020WR029397

Yoshikawa, S., Cho, J., Yamada, H. G., Hanasaki, N., & Kanae, S. (2014). An assessment of global net irrigation water requirements from various water supply sources to sustain irrigation: Rivers and reservoirs (1960–2050). *Hydrology and Earth System Sciences*, *18*(10), 4289–4310. https://doi.org/10.5194/hess-18-4289-2014

Zhang, Z., Jiang, H., Liu, J. X., Zhou, G. M., Liu, S. R., & Zhang, X. Y. (2012). *Procedia Environmental Assessment on water use efficiency under climate change and heterogeneous carbon dioxide in China terrestrial ecosystems*. *13*(2011), 2031–2044. https://doi.org/10.1016/j.proenv.2012.01.194