



DAFTAR PUSTAKA

- Acharjee, T.K., Ludwig, F., van Halsema, G., Hellegers, P., Supit, I. 2017. Future changes in water requirements of Boro rice in the face of climate change in North-West Bangladesh. *Agricultural Water Management*, 194; 172-183.
- Adams, R.M., Hurd, B.H., Lenhart, S., Leary, N. 1998. Effects of global climate change on agriculture: An interpretative review. *Climate Resources*, 11(1); 19-30.
- Adger, W.N., Agrawala, S., Mirza, M.M.Q., Conde, C., O'Brien, K., Pulhin, J., Pulwarty, R., Smit, B., Takahashi, K. 2007. *Assessment of adaptation practices, options, constraints and capacity*. In *climate change 2007*; Parry, M.L., Canziani, O.F., Palutikof, J.P., Hanson, C.E., van der Linden, P.J., Eds. Cambridge, UK: Cambridge University Press.
- Agustin, G., Inayati, R. 2015. Analisis perubahan iklim bagi pertanian di Indonesia. *Ekonomi dan Studi Pembangunan*, 7(2); 85–89.
- Akinsanola, A.A., Kooperman, G.J., Pendergrass, A.G. 2020. Seasonal representation of extreme precipitation indices over the United States in CMIP6 present-day simulations. *Environ Res Lett*, 15(9); 4003.
- Akmalia, H.S. 2022. The impact of climate change on agriculture in Indonesia and its strategies: A systematic review. *Agritepa*, 9(1); 145-160.
- Alam, M.M., Toriman, M.E.B., Siwar, C., Molla, R.I. 2011. Impact of agricultural supports for climate change adaptation: a farm level assessment. *Am. J. Environ. Sci*, 7(2); 178.
- Aldrian, E., Karmini, M., Budiman. 2011. *Adaptasi dan mitigasi perubahan iklim di Indonesia*. Jakarta: Pusat Perubahan Iklim dan Kualitas Udara Kedeputian Bidang Klimatologi Badan Meteorologi, Klimatologi, dan Geofisika (BMKG).
- Allen, R.G., Pereira, L.S., Raes, D., Smith, M., 1998. *Crop evapotranspiration - guidelines for computing crop water requirements*. Rome: FAO Irrigation and Drainage Paper 56.
- Allen, R.G., Pruitt, W.O., Wright, J.L., Howell, T.A., Ventura, V., Snyder, R., Itenfisu, D., Steduto, P., Berengena, J., Yrisarry, J.B., Smith, M., Pereira, L.S., Raes, D., Perrier, A., Alves, I., Walter, I., Elliott, R. 2016. A recommendation on standardized surface resistance for hourly calculation of reference ETo by the FAO56 Penman-Monteith method. *Agricultural Water Management*, 81; 1-22.
- Bappenas. 2018, *Kaji ulang RAN API: Kajian basis ilmiah proyeksi iklim atmosferik*. Jakarta: Bappenas.
- Batang Hari. 2012. *Letak dan Wilayah Administrasi* [online]. <https://batangharikab.go.id/bat/statis-6-letakdanwilayahadministrasi.html> [diakses oleh Mulia Nasution, tanggal 2 September 2022].



- BMKG. 2022. Data online pusat database - BMKG [online].
<https://dataonline.bmkg.go.id/home> [diakses oleh Mulia Nasution, tanggal 18 November 2022].
- BPS Provinsi Jambi. 2022. *Luas wilayah dan persentase 2019-2021* [online].
<https://jambi.bps.go.id/indicator/153/275/1/luas-wilayah-dan-persentase.html> [diakses oleh Mulia Nasution, tanggal 8 September 2022].
- Brouwer, C., Heibloem, M., Division, D. 1986. *Irrigation water management: Irrigation water needs*. Rome: Training Manual, Food and Agriculture Organization of the United Nations.
- Buol, S.W., Hole, F.D., McCracken, R.J. 1980. *Soil genesis and Classification. Second edition*. Southard: The Iowa State University Press.
- Chen, J., Brissette, F.P., Leconte, R. 2011. Uncertainty of downscaling method in quantifying the impact of climate change on hydrology. *Journal of Hydrology*, 401(3-4); 190-202.
- CMIP6. 2022. *WCRP Coupled Model Intercomparison Project (Phase 6)* [online].
<https://esgf-node.llnl.gov/projects/cmip6/> [diakses oleh Mulia Nasution, tanggal 2 September 2022].
- Collins, M., Knutti, R., Arblaster, J., Dufresne, J.L., Fichefet, T., Friedlingstein, P., Gao, X., Gutowski, W.X., Johns, T., Krinner, G., Shongwe, M., Tebaldi, C., Weaver, A.J., Wehner, M. 2013. *Long-term climate change: projections, commitments and irreversibility*. In: *climate change 2013: the physical science basis. Contribution of working group I to the fifth assessment report of the Intergovernmental Panel on Climate Change*. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.
- Dantas, L. G., dos Santos, C. A. C., Santos, C. A. G., Martins, E. S. P. R., & Alves, L. M. 2022. Future changes in temperature and precipitation over Northeastern Brazil by CMIP6 Model. *Water*, 14(24); 4118.
- Dickie, A., Streck, C., Roe, S., Zurek, M., Haupt, F., Dolginow, A. 2014. *Strategies for mitigating climate change in agriculture: Recommendations for philanthropy – Executive summary*. Climate Focus and California Environmental Associates.
- Espelanda, E.K., Kettenring, K.M. 2018. Strategic plant choices can alleviate climate change impacts: A review. *Journal of Environmental Management*, 222; 316-324.
- Ewaid, S.H., Abed, S.A., Al-Ansari, N. 2019. Crop water requirements and irrigation schedules for some major crops in Southern Iraq. *Water*, 11; 756.
- Eyring, F., Bony, S., Meehl, G.A., Senior, C.A., Stevens, B., Stouffer, R.J., Taylor, K.E. 2016. Overview of the Coupled Model Intercomparison Project Phase 6 (CMIP6) experimental design and organization. *Geosci. Model Dev.*, 9; 1937-1958.



- FAO. 2007. *Adaptation to climate change in agriculture, forestry and fisheries: Perspective, framework and priorities*. Rome: Food and Agriculture Organization.
- FAO. 2008. *Crop evapotranspiration – Guidelines for computing crop water requirements*. FAO Irrigation and Drainage.
- FAO. 2009. *Cropwat software, food and agriculture organization, land and water division* [online]. http://www.fao.org/nr/water/infore_data-bases_cropwat.html [diakses oleh Mulia Nasution, tanggal 18 November 2022].
- Febrianti, N. 2009. *Hubungan pemanasan global dengan kondisi suhu udara dan curah hujan di Indonesia: Prosiding Seminar Nasional Matematika, UNPAR*, 4; 299-305. Bandung: Seminar Nasional Matematika UNPAR.
- Gidden, M.J., Riahi, K, Smith, S.J. 2019. Global emissions pathways under different socioeconomic scenarios for use in CMIP6: A dataset of harmonized emissions trajectories through the end of the century. *Geosci Mod Dev*, 12; 1443-1475.
- Golmohammadi, G., Prasher, S., Madani, A., Rudra, R. 2014. Evaluating three hydrological distributed watershed models: MIKE-SHE, APEX, SWAT. *Hydrology*, 1(1); 20-39.
- Hausfather, Z. 2019. CMIP6: *The next generation of climate models explained* [online]. <https://www.carbonbrief.org/cmip6-the-next-generation-of-climate-models-explained> [diakses oleh Mulia Nasution, tanggal 13 September 2022].
- Hermawan, E. 2010. Pengelompokan pola curah hujan yang terjadi di beberapa kawasan P. Sumatera berbasis hasil analisis teknik spektral. *Jurnal Meteorologi dan Geofisika*, 11(2); 75-85.
- IPCC. 2007. *Impacts, adaptation and vulnerability. In working group II contribution to the fourth assessment report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- IPCC. 2014: *Climate Change 2014: Impacts, adaptation, and vulnerability. Part A: Global and sectoral aspects. Contribution of working group II to the fifth assessment report of the Intergovernmental Panel on Climate Change*. [Field, C.B., Baros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Bilir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., White, L.L. (eds.)]. Cambridge: Cambridge University Press.
- IPCC. 2021. *Summary for policymakers in climate change 2021. The Physical Science Basis. Contribution of working group I to the sixth assessment report of the intergovernmental panel on climate change* [Masso Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu & B. Zhou (eds.)]. Cambridge University Press.



- Iqbal, Z., Shahid, S., Ahmed, K., Ismail, T., Ziarh, G.F., Chung, E., Wang, X. 2021. Evaluation of CMIP6 GCM rainfall in mainland Southeast Asia. *Atmospheric Research*, 254(10); 5525.
- Jamshidi, O., Asadi, A., Kalantari, K., Azadi, H., Scheffran, J. 2019. Vulnerability to climate change of smallholder farmers in the Hamadan province, Iran. *Clim. Risk Manag*, 23; 146-159.
- Khanal, U., Wilson, C., Hoang, V.N., Lee, B. 2018. Farmers' adaptation to climate change, its determinants and impacts on rice yield in Nepal. *Ecol. Econ.*, 144; 139-147.
- Khattak, M.S., Barkatullah, Aziz, A., Sharif, M., Babel, M.S. 2017. Impacts of climate change on crop water requirement under multi-representative concentration pathways during mid-century: A case study of D.I. Khan. *J. Engg. and Appl. Sci.*, 36(1); 1-14.
- KLHK. 2020. *Roadmap nationally determined contribution (NDC) adaptasi perubahan iklim*. Jakarta: Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia.
- Least Developed Countries Expert Group. 2012. *National adaptation plans*. Technical guidelines for the national adaptation plan process. Bonn: UNFCCC secretariat.
- Malhi, G.S., Kaur, M., Kaushik, P. 2021. Impact of climate change on agriculture and its mitigation strategies: A review. *Sustainability*, 13(3); 1318.
- Mall, R. K., Gupta, A., Sonkar, G. 2017. Effect of climate change on agricultural crops. *Current Developments in Biotechnology and Bioengineering*, 23-46.
- Marfai, M.A., King, L. 2008. Potential vulnerability implications of coastal inundation due to sea level rise for the coastal zone of Semarang city, Indonesia. *Environ. Geol*, 54; 1235-1245.
- Mendelsohn, R. 2009. The impact of climate change on agriculture in developing countries. *Natural Resources*, 1; 5-19.
- Moriasi, D.N., Arnold, J.G., Van Liew, M.W., Bingner, R.L., Harmel, R.D., Veith, T.L. 2007. Model evaluation guidelines for systematic quantification of accuracy in watershed simulations. *American Society of Agricultural and Biological Engineers*, 50(3); 885-900.
- Mustafa, G., Latif, I.A., Bashir, M.K., Shamsudin, M.N., Daud, W.M.N.W. 2018. Determinants of farmers' awareness of climate change. *Appl. Environ. Educ. Commun.*, 1-15.
- Naylor, R.L., Battisti, D.S., Vimont, D.J., Falcon, W.P., Burke, M.B. 2007. Assessing risks of climate variability and climate change for Indonesian rice agriculture. *Proc. Natl. Acad. Sci.*, 104; 7752-7757.



- Nurwanda, A., Zain, A.F.M., Rustiadi, E. 2016. Analysis of land cover changes and landscape fragmentation in Batanghari Regency, Jambi Province. *Procedia - Social and Behavioral Sciences*, 227; 87-94.
- O'Neill, B.C., Tebaldi, C., van Vuuren, D.P., Eyring, V., Friedlingstein, P., Hurtt, G., Knutti, R., Kriegler, E., Lamarque, J., Lowe, J., Meeh, G.A., Moss, R., Riahi, K., Sanderson, B.M. 2016. The Scenario Model Intercomparison Project (ScenarioMIP) for CMIP6. *Geosci. Model Dev.*, 9(9); 3461-3482.
- OECD. 2014. *Climate change, water and agriculture: Towards resilient systems, OECD studies on water*. OECD Publishing.
- Perez, C., Jones, E.M., Kristjanson, P., Cramer, L., Thornton, P.K., Förch, W., Barahona, C. 2015. How resilient are farming households and communities to a changing climate in Africa? A-based perspective. *Glob. Environ. Chang.*, 34; 95-107.
- Putra, E.T.S., Indradewa, D. 2011. Perubahan iklim dan ketahanan pangan nasional [online]. (diupdate 2 September 2011). http://www.faperta.ugm.ac.id/dies/eka_prof_didik.php [diakses oleh Mulia Nasution, tanggal 31 Agustus 2022].
- Rao, V.U.M., Rao, A.V.M. S., Rao, G.G.S.N., Satyanarayana, T., Manikandan, N., Venkateshwarlu, B. 2011. Impact of climate change on crop water requirements and adaptation strategies. *Challenges and Opportunities in Agrometeorology*, 311-319.
- Riahi, K., Vuuren, D. P., Kriegler, E., Edmonds, J., O'Neill, B. C., Fujimori, S., Bauer, N., Calvin, K., Dellink, R., Fricko, O., Lutz, W., Popp, A., Crespo Cuaresma, J., KC, S., Leimbach, M., Jiang, L., Kram, T., Rao, S., Emmerling, J., Ebi, K., Hasegawa, T., Havlik, P., Humpenöder, F., Aleluia Da Silva, L., Smith, S., Stehfest, E., Bosetti, V., Eom, J., Gernaat, D., Masui, T., Rogelj, J., Strefler, J., Drouet, L., Krey, V., Luderer, G., Harmsen, M., Takahashi, K., Baumstark, L., Doelman, J., Kainuma, M., Klimont, Z., Marangoni, G., Lotze-Campen, H., Obersteiner, M., Tabeau, A., Tavoni, M. 2017. The shared socioeconomic pathways and their energy, land use, and greenhouse gas emissions implications: An overview. *Global Environmental Change*, 42; 153-168.
- Rondhi, M., Khasan, A.F., Mori, Y., Kondo, T. 2019. Assessing the role of the perceived impact of climate change on national adaptation policy: The case of rice farming in Indonesia. *Land*, 8(5); 81.
- Rosenzweig, C., Tubiello, F.N. 2007. Adaptation and mitigation strategies in agriculture: an analysis of potential synergies. *Mitigation Adaptation Strategy Global Change*, 12; 855-873.
- Ruminta. 2016. Analisis penurunan produksi tanaman padi akibat perubahan iklim di Kabupaten Bandung Jawa Barat. *Kultivasi*, 15(1); 37-45.
- Sekaranom, A.B., Nurjani, E., Nucifera, F. 2021. Agricultural climate change adaptation in Kebumen, Central Java, Indonesia. *Sustainability*, 13; 7069.



- Seo, S.N. 2011. An analysis of public adaptation to climate change using agricultural water schemes in South America. *Ecol. Econ.*, 70; 825-834.
- Sharmake, M.A., Sultan, K., Zaman, Q.u., Rehman, R., Hussain, A. 2023. Decadal impacts of climate change on rainfed agriculture community in Western Somaliland, Africa. *Sustainability*, 15; 421.
- Soriano, E., Mediero, L., & Garijo, C. 2019. Selection of bias correction methods to assess the impact of climate change on flood frequency curves. *Water*, 11(11); 2266.
- Sreedhar, B. R., Muthyalappa, K. 2020. Rainfall forecast through root mean squared error using double exponential & Log-Pearson III probability distributions. *European Journal of Molecular & Clinical Medicine*, 7(8); 5266-5272.
- Stage, J. 2010. Economic valuation of climate change adaptation. *Ann. N. Y. Acad. Sci.*, 1185; 150-163.
- Surmaini, E., Runtunuwu, E., Las, I. 2010. Upaya sektor pertanian dalam menghadapi perubahan iklim. *Jurnal Litbang Pertanian*, 30(1); 1-7.
- Suryadi, E., Ruswandi, D., Dwiratna, S., Prawiranegara, B.M.P. 2019. Crop water requirements analysis using Cropwat 8.0 software in maize intercropping with rice and soybean. *International Journal on Advanced Science Engineering Information Technology*, 9(4); 1364-1370.
- 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.
- Trinh, T.A. 2017. The impact of climate change on agriculture: findings from households in Vietnam. *Environ Resource Econ*, 71; 897-921.
- Tuwu, A. 1993. *Pengantar metode penelitian*. Jakarta: UI Press.
- Yaghoubi, B., Hosseini, S.A., Nazif, S. 2016. Evaluation of climate change impact on runoff: A case study. *Indian Journal of Science and Technology*, 9(7); 1-7.
- Yang, Jianchang, Zhang, J., Wang, Z., Xu, G., Zhu, Q. 2004. Activities of key enzymes in sucrose-to-starch conversion in wheat grains subjected to water deficit during grain filling. *Plant Physiology*, 135(3); 1621–1629.
- Yaseen, Z. M., Ali, M., Sharafati, A., Al-Ansari, N., & Shahid, S. 2021. Forecasting standardized precipitation index using data intelligence models: regional investigation of Bangladesh. *Scientific Reports*, 11(1); 34-35.
- Yasutomi, N., Hamada, A., Yatagai, A. 2011. Development of a long-term daily gridded temperature dataset and its application to rain/snow discrimination of daily precipitation. *Global Environ. Res.*, 15; 165-172.
- Yatagai, A., Kamiguchi, K., Arakawa, O., Hamada, A., Yasutomi, N., Kitoh, A. 2012. APHRODITE: Constructing a long-term daily gridded precipitation



dataset for Asia based on a dense network of rain gauges. *Bull. Amer. Meteor. Soc.*, 93; 1401-1415.

Zheng, X., Li, Q., Zhou, T., Tang, Q., Van Roekel, L.P., Golaz, J-C., Wang, H.,
Cameron-Smith, P. 2022. Description of historical and future projection
simulations by the global coupled E3SMv1.0 model as used in CMIP6. *Geosci.
Model Dev.*, 15; 3941-3967.