

## DAFTAR PUSTAKA

- Ahmad, W. A. A. W., Sulaiman, N. M. N., & Mahmood, N. Z. (2017). Review of water footprint components of grain. *IOP Conference Series: Materials Science and Engineering*, volume 210 (1), 012010. <https://doi.org/10.1088/1757-899X/210/1/012010>
- Allen, R. G., Pereira, L. S., Raes, D., & Smith, M. (1998). *Crop evapotranspiration : Guidelines for computing crop water requirements*. Rome : FAO. <https://www.fao.org/3/X0490E/x0490e00.htm>
- Arunrat, N., Pumijumng, N., & Hatano, R. (2018). Predicting local-scale impact of climate change on rice yield and soil organic carbon sequestration: A case study in Roi Et Province, Northeast Thailand. *Agricultural systems*, volume 164, 58-70. <https://doi.org/10.1016/j.agsy.2018.04.001>
- Asri, B. (2016). Evaluasi Pertumbuhan dan Produksi Dua Varietas Gandum (*Triticum aestivum* L.) pada Tiga Ketinggian Tempat yang Berbeda. *Agrominansia*, volume 1 (1), 35-46. <https://doi.org/10.34003/271876>
- Badan Pusat Statistik. (2023). Impor Beras Menurut Negara Asal Utama 2000-2021. <https://www.bps.go.id/id/statistics-table/1/MTA0MyMx/impor-beras-menurut-negara-asal-utama-2000-2022.html>
- Badan Pusat Statistik. (2023). Impor Biji Gandum dan Meslin Menurut Negara Asal Utama, 2017-2021. <https://www.bps.go.id/id/statistics-table/1/MjAxNiMx/impor-biji-gandum-dan-meslin-menurut-negara-asal-utama-2017-2022.html>
- Bulsink, F., Hoekstra, A. Y., & Booij, M. J. (2010). The water footprint of Indonesian provinces related to the consumption of crop products. *Hydrology and Earth System Sciences*, volume 14 (1), 119-128. <https://doi.org/10.5194/hess-14-119-2010>
- Chandio, A. A., Magsi, H., & Ozturk, I. (2020). Examining the effects of climate change on rice production: case study of Pakistan. *Environmental Science and Pollution Research*, volume 27 (8), 7812-7822. <https://doi.org/10.1007/s11356-019-07486-9>
- Chapagain, A. K., & Hoekstra, A. Y. (2010). *The green, blue and grey water footprint of rice from both a production and consumption perspective* (Value of Water Research Report Series

No. 40). Delft, Netherlands : UNESCO-IHE Institute for Water Education.  
<https://research.utwente.nl/files/5146957/Report40-WaterFootprintRice.pdf>

Chapagain, A. K., & Hoekstra, A. Y. (2011). The blue, green and grey water footprint of rice from production and consumption perspectives. *Ecological Economics*, volume 70 (4), 749-758. <https://doi.org/10.1016/j.ecolecon.2010.11.012>

Chukalla, A.D., Krol, M.S., Hoekstra, A.Y., (2015). Green and blue water footprint reduction in irrigated agriculture: effect of irrigation techniques, irrigation strategies and mulching. *Hydrol. Earth Syst. Sci*, volume 19 (12), 4877–4891. <https://doi.org/10.5194/hess-19-4877-2015>

Cuong, T. T., Le, H. A., Khai, N. M., Hung, P. A., Linh, L. T., Thanh, N. V., Tri, N. D., & Huan, N. X. (2021). Renewable energy from biomass surplus resource: potential of power generation from rice straw in Vietnam. *Scientific Reports*, volume 11 (1), 792. <https://www.nature.com/articles/s41598-020-80678-3>

Deng, X. P., Shan, L., Inanaga, S., & Inoue, M. (2005). Water-saving approaches for improving wheat production. *Journal of the Science of Food and Agriculture*, volume 85 (8), 1379-1388. <http://dx.doi.org/10.1002/jsfa.2101>

Devkota, K. P., Pasuquin, E., Elmido-Mabilangan, A., Dikitanan, R., Singleton, G. R., Stuart, A. M., Vithoonjit, D., Vidiyangkura, L., Pustika, A. B., Afriani, R., Listyowati, C. L., Keerthisena, R. S. K., Kieu, N. T., Malabayabas, A. J., Hu, R., Pan, J., & Beebout, S. E. (2019). Economic and environmental indicators of sustainable rice cultivation: A comparison across intensive irrigated rice cropping systems in six Asian countries. *Ecological Indicators*, volume 105, 199-214. <https://doi.org/10.1016/j.ecolind.2019.05.029>

Ding, D., Zhao, Y., Guo, H., Li, X., Schoenau, J., & Si, B. (2018). Water footprint for pulse, cereal, and oilseed crops in Saskatchewan, Canada. *Water*, volume 10 (11), 1609. <https://doi.org/10.3390/w10111609>

Ding, R., Tong, L., Li, F., Zhang, Y., Hao, X., & Kang, S. (2015). Variations of crop coefficient and its influencing factors in an arid advective cropland of northwest China. *Hydrological Processes*, volume 29 (2), 239-249. <https://doi.org/10.1002/hyp.10146>

FAOSTAT. (2023). Food and Agriculture Organization of the United Nations Statistics. Rome, Italy. <http://www.fao.org/faostat/en/>

Fărcaș, A., Drețcanu, G., Pop, T. D., Enaru, B., Socaci, S., & Diaconeasa, Z. (2021). Cereal processing by-products as rich sources of phenolic compounds and their potential bioactivities. *Nutrients*, volume 13 (11), 3934. <https://doi.org/10.3390/nu13113934>

Franch, B., Vermote, E. F., Skakun, S., Roger, J. C., Becker-Reshef, I., Murphy, E., & Justice, C. (2019). Remote sensing based yield monitoring: Application to winter wheat in United States and Ukraine. *International Journal of Applied Earth Observation and Geoinformation*, volume 76, 112-127. <https://doi.org/10.1016/j.jag.2018.11.012>

García, G. A., Miralles, D. J., Serrago, R. A., Alzueta, I., Huth, N., & Dreccer, M. F. (2018). Warm nights in the Argentine Pampas: Modelling its impact on wheat and barley shows yield reductions. *Agricultural Systems*, volume 162, 259-268. <https://doi.org/10.1016/j.agsy.2017.12.009>

Garofalo, P., Ventrella, D., Kersebaum, K. C., Gobin, A., Trnka, M., Giglio, L., Dubrovský, M., & Castellini, M. (2019). Water footprint of winter wheat under climate change: Trends and uncertainties associated to the ensemble of crop models. *Science of the Total Environment*, volume 658, 1186-1208. <https://doi.org/10.1016/j.scitotenv.2018.12.279>

Gerbens-Leenes, W., & Hoekstra, A. Y. (2011). The water footprint of biofuel-based transport. *Energy & Environmental Science*, volume 4 (8), 2658-2668. <https://doi.org/10.1039/C1EE01187A>

Gheewala, S. H., Silalertruksa, T., Nilsalab, P., Mungkung, R., Perret, S. R., & Chaiyawannakarn, N. (2014). Water footprint and impact of water consumption for food, feed, fuel crops production in Thailand. *Water*, volume 6 (6), 1698-1718. <https://doi.org/10.3390/w6061698>

Ghufran, M. A., Batool, A., Irfan, M. F., Butt, M. A., & Farooqi, A. (2015). Water footprint of major cereals and some selected minor crops of Pakistan. *Journal of Water Resource and Hydraulic Engineering*, volume 4 (4), 358-366. [https://www.researchgate.net/publication/281998529\\_Water\\_Footprint\\_of\\_Major\\_Cereals\\_and\\_Some\\_Selected\\_Minor\\_Crops\\_of\\_Pakistan](https://www.researchgate.net/publication/281998529_Water_Footprint_of_Major_Cereals_and_Some_Selected_Minor_Crops_of_Pakistan)

Hanasaki, N., Inuzuka, T., Kanae, S., & Oki, T. (2010). An estimation of global virtual water flow and sources of water withdrawal for major crops and livestock products using a global hydrological model. *Journal of Hydrology*, volume 384 (3-4), 232-244. <https://doi.org/10.1016/j.jhydrol.2009.09.028>

Hoekstra, A. Y., & Chapagain, A. K. (2007). *Globalization of water: Sharing the planet's freshwater resources*. John Wiley & Sons. <https://doi.org/10.1002/9780470696224>

Hoekstra, A. Y., Chapagain, A. K., Aldaya, M. M., & Mekonnen, M. M. (2011). *The water footprint assessment manual: Setting the global standard*. London : Earthscan. [https://waterfootprint.org/resources/TheWaterFootprintAssessmentManual\\_English.pdf](https://waterfootprint.org/resources/TheWaterFootprintAssessmentManual_English.pdf)

Hoekstra, A.Y. & Mekonnen, M.M. (2012). The water footprint of humanity. *Proc. Natl. Acad. Sci*, volume 109 (9), 3232–3237. <https://doi.org/10.1073/pnas.1109936109>

FAO Database. (2023). <https://www.fao.org/land-water/databases-and-software/crop-information/wheat/en/#:~:text=Wheat%20is%20grown%20under%20irrigation,is%20grown%20under%20supplemental%20irrigation>

Jayaram, K., & Mathur, V. C. (2015). Valuing water used for food production in India. *Economic Affairs*, volume 60 (3), 409. <http://dx.doi.org/10.5958/0976-4666.2015.00058.3>

Jiuhardi, J. (2023). Analisis kebijakan impor beras terhadap peningkatan kesejahteraan petani di Indonesia. *Inovasi*, volume 19 (1), 98-110. <https://doi.org/10.30872/jinv.v19i1.12661>

Kashyap, D., & Agarwal, T. (2021). Carbon footprint and water footprint of rice and wheat production in Punjab, India. *Agricultural Systems*, volume 186 (11), 102959. <https://doi.org/10.1016/j.agsy.2020.102959>

Kumar, P., Yadava, R. K., Gollen, B., Kumar, S., Verma, R. K., & Yadav, S. (2011). Nutritional contents and medicinal properties of wheat: a review. *Life Sciences and Medicine Research*, volume 22 (1), 1-10. [https://www.researchgate.net/publication/280920597\\_Nutritional\\_Contents\\_and\\_Medicinal\\_Properties\\_of\\_Wheat\\_A\\_Review](https://www.researchgate.net/publication/280920597_Nutritional_Contents_and_Medicinal_Properties_of_Wheat_A_Review)



Li, H., Qin, L., & He, H. (2018). Characteristics of the water footprint of rice production under different rainfall years in Jilin Province, China. *Journal of the Science of Food and Agriculture*, volume 98 (8), 3001-3013. <https://doi.org/10.1002/jsfa.8799>

Mali, S. S., Shirsath, P. B., & Islam, A. (2021). A high-resolution assessment of climate change impact on water footprints of cereal production in India. *Scientific Reports*, volume 11 (1), 8715. <https://doi.org/10.1038/s41598-021-88223-6>

Maneepitak, S., Ullah, H., Datta, A., Shrestha, R. P., Shrestha, S., & Kachenchart, B. (2019). Effects of water and rice straw management practices on water savings and greenhouse gas emissions from a double-rice paddy field in the Central Plain of Thailand. *European Journal of Agronomy*, volume 107, 18-29. <https://doi.org/10.1016/J.EJA.2019.04.002>

Matohlang Mohlotsane, P., Owusu-Sekyere, E., Jordaan, H., Barnard, J. H., & Van Rensburg, L. D. (2018). Water footprint accounting along the wheat-bread value chain: Implications for sustainable and productive water use benchmarks. *Water*, volume 10 (9), 1167. <https://doi.org/10.3390/w10091167>

McKevith, B. (2004). Nutritional aspects of cereals. *Nutrition Bulletin*, volume 29 (2), 111-142. <https://doi.org/10.1111/j.1467-3010.2004.00418.x>

Mekonnen, M. M., & Hoekstra, A. Y. (2010). A global and high-resolution assessment of the green, blue and grey water footprint of wheat. *Hydrology and Earth System Sciences*, volume 14 (7), 1259-1276. <https://doi.org/10.5194/hess-14-1259-2010>

Mubako, S. T., & Lant, C. L. (2013). Agricultural virtual water trade and water footprint of US states. *Annals of the Association of American Geographers*, volume 103 (2), 385-396. <https://doi.org/10.1080/00045608.2013.756267>

Mulya, M. R., Haryadi, H., & Nurjanah, R. (2020). Analisis determinan impor beras di Indonesia. *e-Journal Perdagangan Industri dan Moneter*, volume 8 (3), 135-142. <https://doi.org/10.22437/pim.v8i3.13091>

Mungkung, R., Gheewala, S. H., Silalertruksa, T., & Dangsi, S. (2019). Water footprint inventory database of Thai rice farming for water policy decisions and water scarcity footprint label. *The International Journal of Life Cycle Assessment*, volume 24 (2), 2128-2139. <https://doi.org/10.1007/s11367-019-01648-0>

Muratoglu, A. (2020). Assessment of wheat's water footprint and virtual water trade: a case study for Turkey. *Ecological processes*, volume 9 (1), 1-16. <https://doi.org/10.1186/s13717-020-0217-1>

Muthayya, S., Sugimoto, J.D., Montgomery, S. & Maberly, G.F. (2014). An overview of global rice production, supply, trade, and consumption. *Annals of the New York Academy of Sciences*, volume 1324 (1), 7–14. <https://doi.org/10.1111/nyas.12540>

Muzammil, M., Zahid, A., & Breuer, L. (2020). Water resources management strategies for irrigated agriculture in the Indus Basin of Pakistan. *Water*, volume 12 (5), 1429. <https://doi.org/10.3390/w12051429>

Naing, T. A. A., Kingsbury, A. J., Buerkert, A., & Finckh, M. R. (2008). A survey of Myanmar rice production and constraints. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, volume 109 (2), 151-168. <https://www.jarts.info/index.php/jarts/article/view/66/60>

Newlands, N. K., Zamar, D. S., Kouadio, L. A., Zhang, Y., Chipanshi, A., Potgieter, A., Toure, S., & Hill, H. S. (2014). An integrated, probabilistic model for improved seasonal forecasting of agricultural crop yield under environmental uncertainty. *Frontiers in Environmental Science*, volume 2, 17. <https://doi.org/10.3389/fenvs.2014.00017>

Palmatier, R. W., Houston, M. B., & Hulland, J. (2018). Review articles: purpose, process, and structure. *Journal of the Academy of Marketing Science*, volume 46, 1-5. <https://doi.org/10.1007/s11747-017-0563-4>

Rao, A. N., Wani, S. P., Ramesha, M. S., & Ladha, J. K. (2017). Rice production systems : in Rice production worldwide p 185-205. New York : Springer. <https://doi.org/10.1007/978-3-319-47516-5>

Richards, R. A., Hunt, J. R., Kirkegaard, J. A., & Passioura, J. B. (2014). Yield improvement and adaptation of wheat to water-limited environments in Australia—a case study. *Crop and Pasture Science*, volume 65 (7), 676-689. <http://dx.doi.org/10.1071/CP13426>

Robertson, M., Kirkegaard, J., Rebetzke, G., Llewellyn, R., & Wark, T. (2016). Prospects for yield improvement in the Australian wheat industry: a perspective. *Food and Energy Security*, volume 5 (2), 107-122. <https://doi.org/10.1002/fes3.81>

- Shrestha, S., Chapagain, R., & Babel, M. S. (2017). Quantifying the impact of climate change on crop yield and water footprint of rice in the Nam Oon Irrigation Project, Thailand. *Science of the Total Environment*, volume 599-600, 689-699. <https://doi.org/10.1016/j.scitotenv.2017.05.028>
- Thapa, S., Xue, Q., Jessup, K. E., Rudd, J. C., Liu, S., Marek, T. H., Devkota, R. N., Baker, J. A., & Baker, S. (2019). Yield determination in winter wheat under different water regimes. *Field Crops Research*, volume 233, 80-87. <https://doi.org/10.1016/j.fcr.2018.12.018>
- Tuninetti, M., Tamea, S., D'Odorico, P., Laio, F., & Ridolfi, L. (2015). Global sensitivity of high-resolution estimates of crop water footprint. *Water Resources Research*, volume 51 (10), 8257-8272. <https://doi.org/10.1002/2015WR017148>
- Van Vuuren, D. P., Bijl, D. L., Bogaart, P., Stehfest, E., Biemans, H., Dekker, S. C., Doelman, J. C., Gernaat, D. E. H. J., & Harmsen, M. (2019). Integrated scenarios to support analysis of the food–energy–water nexus. *Nature Sustainability*, volume 2 (12), 1132-1141. <https://doi.org/10.1038/s41893-019-0418-8>
- Watanabe, T. (2018). Paddy fields as artificial and temporal wetland. Irrigation in agroecosystems. London, Inggris : IntechOpen. <http://dx.doi.org/10.5772/intechopen.80581>
- Widowati, S., Khumaida, N., & Ardie, S. W. (2016). Karakterisasi Morfologi dan Sifat Kuantitatif Gandum (*Triticum aestivum* L.) di Dataran Menengah. *Jurnal Agronomi Indonesia*, volume 44 (2), 162-169. <https://doi.org/10.24831/jai.v44i2.13485>
- WWAP, (2019). *United Nations World Water Development Report 2019: Leaving No One Behind*. Paris : UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000367306>
- Zhang, G., Wang, X., Zhang, L., Xiong, K., Zheng, C., Lu, F., Zhao, H., Zheng, H., & Ouyang, Z. (2018). Carbon and water footprints of major cereal crops production in China. *Journal of Cleaner Production*, volume 194, 613-623. <https://doi.org/10.1016/j.jclepro.2018.05.024>
- Zhao, Y., Ding, D., Si, B., Zhang, Z., Hu, W., & Schoenau, J. (2019). Temporal variability of water footprint for cereal production and its controls in Saskatchewan, Canada. *Science of The Total Environment*, volume 660 (1-2), 1306-1316. <http://dx.doi.org/10.1016/j.scitotenv.2018.12.410>

Zhuo, L., Mekonnen, M.M., Hokestra, A.Y., Wada, Y., (2016). Inter- and intra-annual variation of water footprint of crops and blue water scarcity in the Yellow River basin (1961–2009). *Adv. Water Resource*, volume 87, 29–41. <https://doi.org/10.1016/j.advwatres.2015.11.002>

