

- Azarnivand, A., Hashemi-Madani, F. S., & Banihabib, M. E. (2015). Extended Fuzzy Analytic Hierarchy Process Approach In Water And Environmental Management: Case Study Of Lake Urmia Basin, Iran. *Environmental Earth Sciences*, 73(1), 13–26. <https://doi.org/10.1007/s12665-014-3424-3>
- Carli, R., Dotoli, M., & Pellegrino, R. (2018). Multi-Criteria Decision-Making For Sustainable Metropolitan Cities Assessment. *Journal Of Environmental Management*, 226, 46–61. <https://doi.org/10.1016/j.jenvman.2018.07.075>
- Ciptomulyono, U. (2010). *Paradigma Pengambilan Keputusan Multikriteria Dalam Perspektif Pengembangan Proyek Dan Industri Yang Berwawasan Lingkungan*. Institut Teknologi Sepuluh Nopember Surabaya.
- Djuma, H., Bruggeman, A., Camera, C., Eliades, M., & Kostarelos, K. (2017). The impact of a check dam on groundwater recharge and sedimentation in an ephemeral stream. *Water*, 9(10), 1–16. <https://doi.org/10.3390/w9100813>
- Faizah, N. S., Asmaranto, R., & Fidari, J. S. (2023). Pengaruh angin terhadap dimensi rip-rap bendungan (Studi kasus Bendungan Sutami). *Jurnal Teknologi dan Rekayasa Sumber Daya Air*, 3(2), 217–230. <https://jtresda.ub.ac.id/index.php/jtresda/article/view/424>
- Fidari, J. S., Bisri, M., & Suhartanto, E. (2014). Studi Pendugaan Sisa Usia Guna Waduk Sutami Dengan Pendekatan Sedimentasi. *Jurnal Teknik Pengairan*, 4(2), 1–13.
- Forouzan Boroujeni, R., Hadian, M.R., Talebi, A., dan Yazdi, J., 2025. Influence of Check Dams on Reducing Sediment Load by Combined Hydrological and Hydraulic Model. *Iranian Journal of Science and Technology - Transactions of Civil Engineering*, (0123456789). <https://doi.org/10.1007/s40996-025-01763-z>
- Fülöp, J. (2001). Introduction To Decision Making Methods. *Operations Research*, 1–15.
- Gade, P. K., & Osuri, M. (2014). Evaluation Of Multi Criteria Decision Making Methods For Potential Use In Application Security. (Unpublished Manuscript), 1–63.
- Garai, T., & Garg, H. (2022). Multi-Criteria Decision Making Of Water Resource Management

- Generalized Single Valued Non-Linear Bipolar Neutrosophic Environment. *Expert Systems With Applications*, 205, 117715. <https://doi.org/10.1016/j.eswa.2022.117715>
- Herdi, Setiaji, B., dan Wijaya, A., 2024. Evaluasi Efektivitas Bangunan Pengendali Sedimen (Check Dam) dalam Menekan Laju Sedimentasi pada Waduk Jatigede. *AKSELERASI: Jurnal Ilmiah Teknik Sipi*, 6 (1), 53–65.
- Haudi. (2021). *Teknik Pengambilan Keputusan*. Insan Cendekia Mandiri.
- Ishizaka, A., & Labib, A. (2009). Analytic Hierarchy Process And Expert Choice: Benefits And Limitations. *OR Insight*, 22(4), 201–220. <https://doi.org/10.1057/ori.2009.10>
- Japan International Cooperation Agency (JICA). (2024). *The Preparatory Survey For The Project For Upgrading Sutami Dam Under Operation In Brantas River Basin*.
- Jabbar, L. A., & Khalil, I. A. (2022). Development Of Multi Criteria Analysis Model For Best Sediment Management Techniques In Kuala Krai, Malaysia. *Journal Of Water Resources And Geosciences*, 1(1), 70.
- Jiang, X. dan Wei, Y., 2020. Erosion characteristics of outburst floods on channel beds under the conditions of different natural dam downstream slope angles. *Landslides*, 17 (8), 1823–1834.
- Juwana, I., Rahardyan, N.A., Permadi, D.A., dan Sutadian, A.D., 2022. Uncertainty and Sensitivity Analysis of the Effective Implementation of Water Quality Improvement Programs for Citarum River, West Java, Indonesia. *Water (Switzerland)*, 14 (24). <https://doi.org/10.3390/w14244077>
- Kim, D.H., 2016. A feasibility study on the ICT research infrastructure projects for the ICT Devices and SW globalization using AHP. *Information (Japan)*, 19 (8B), 3327–3332
- Kousalya, P., & Supraja, S. (2013). On Some Aspects Of Sensitivity Analysis In AHP – An Illustration. *International Journal Of Scientific & Engineering Research*, 4(6), 979–983.
- Kumar, A., & Pant, S. (2023). Analytical Hierarchy Process For Sustainable Agriculture: An Overview. *MethodsX*, 10, 101954. <https://doi.org/10.1016/j.mex.2022.101954>
- Lucas-Borja, M.E., Piton, G., Yu, Y., Castillo, C., dan Antonio Zema, D., 2021. Check dams

<https://doi.org/10.1016/j.catena.2021.105390>

- Maletič, D., Maletič, M., Lovrenčić, V., Al-Najjar, B., & Gomišček, B. (2014). An Application Of Analytic Hierarchy Process (AHP) And Sensitivity Analysis For Maintenance Policy Selection. *Organizacija, 47*(3), 177–188. <https://doi.org/10.2478/orga-2014-0016>
- Mano, V., Nemery, J., Belleudy, P., dan Poirel, A., 2009. Assessment of suspended sediment transport in four alpine watersheds (France): Influence of the climatic regime. *Hydrological Processes, 23* (5), 777–792.
- Morris, G. L. (2020). Classification Of Management Alternatives To Combat Reservoir Sedimentation. *Water (Switzerland), 12*(3), 847. <https://doi.org/10.3390/w12030861>
- Okeola, O. G., & Sule, B. F. (2012). Evaluation Of Management Alternatives For Urban Water Supply System Using Multicriteria Decision Analysis. *Journal Of King Saud University – Engineering Sciences, 24*(1), 19–24. <https://doi.org/10.1016/j.jksues.2011.07.004>
- Otálvaro Barco, M., Vásquez Paniagua, J. A., Polanco López De Mesa, J. A., & Botero Hernandez, B. A. (2025). Sustainability And Multicriteria Decision Making In Sediment Management In Hydropower Plants: A Systematic Literature Review. *SAGE Open, 15*(1), 1–22. <https://doi.org/10.1177/21582440251324748>
- Paleie, I., & Lalic, B. (2009). Analytical Hierarchy Process As A Tool For Selecting And Evaluating Projects. *International Journal Of Simulation Modelling, 8*(1), 16–26.
- Pasolong, H. (2023). *Teori Pengambilan Keputusan*. Alfabeta.
- Perum Jasa Tirta I. (2020). *Pengelolaan Ketersediaan Air*. <https://jasatirta1.co.id/pengelolaan-ketersediaan-air/>
- Perum Jasa Tirta I. (2022, December 5). *Jasa Tirta I Bersama Insan PU Se-Jawa Timur Peringati Harbak PU Ke-77 & 50 Tahun Bendungan Sutami Dengan Menanam 12 Ribu Pohon*. <https://jasatirta1.co.id/2022/12/05/jasa-tirta-i-bersama-insan-pu-se-jawa-timur-peringati-harbak-pu-ke-77-50-tahun-bendungan-sutami-dengan-menanam-12-ribu-pohon/>
- Rahmansyah, N., & Lusinia, S. A. (2016). *Buku Ajar Sistem Pendukung Keputusan*. Sistem

- Saaty, T. L. (1990). How To Make A Decision: The Analytic Hierarchy Process. *European Journal Of Operational Research*, 48(1), 9–26. [https://doi.org/10.1016/0377-2217\(90\)90057-I](https://doi.org/10.1016/0377-2217(90)90057-I)
- Saaty, T. L. (2004). Decision Making — The Analytic Hierarchy And Network Processes (AHP/ANP). *Journal Of Systems Science And Systems Engineering*, 13(1), 1–35. <https://doi.org/10.1007/s11518-006-0151-5>
- Saaty, T. L. (2008). Decision Making With The Analytic Hierarchy Process. *International Journal Of Services Sciences*, 1(1), 83–98. <https://doi.org/10.1504/IJSSCI.2008.017590>
- Schredelseker, K., & Hauser, F. (2008). *Lecture Notes In Economics And Mathematical Systems: Preface*. Springer.
- Srdjevic, B., Medeiros, Y. D. P., & Srdjevic, Z. (2002). Evaluating Management Strategies In Paraguacu River Basin By Analytic Hierarchy Process. In *Proceedings, International Congress On Environmental Modelling And Software* (Vol. 1, pp. 42–47).
- Srdjevic, B., & Medeiros, Y. D. P. (2008). Fuzzy AHP Assessment Of Water Management Plans. *Water Resources Management*, 22(7), 877–894. <https://doi.org/10.1007/s11269-007-9197-5>
- Srdjevic, B., Srdjevic, Z., & Pinto Medeiros, Y. D. (2017). Multicriteria And Social Choice Methods In Assessing Water Management Plans. In *CEUR Workshop Proceedings* (Vol. 2030, pp. 541–553). <http://ceur-ws.org/Vol-2030/>
- Sri Widaningsih. (2017). Analisis Sensitivitas Metode AHP Dengan Menggunakan Weighted Sum Model (WSM) Pada Simulasi Pemilihan Investasi Sektor Finansial. *Media Jurnal Informatika*, 9(1), 1–8.
- Sumi, T., & Kantoush, S. A. (2011). Sediment Management Strategies For Sustainable Reservoir. In A. J. Schleiss & R. M. Boes (Eds.), *Dams And Reservoirs Under Changing Challenges* (pp. 1–12). CRC Press. <https://doi.org/10.1201/b11669-47>
- Suroso, M. R., & Rahmanto, M. C. (2007). Studi Pengaruh Sedimentasi Kali Brantas Terhadap Kapasitas Dan Usia Rencana Waduk Sutami Malang. *Jurnal Rekayasa Sipil*, 1(1), 33–42.



- And Concepts. *Encyclopedia*, 3(1), 77–87. <https://doi.org/10.3390/encyclopedia3010006>
- Thungngern, J., Wijitkosum, S., Sriburi, T., & Sukhsri, C. (2015). A Review Of The Analytical Hierarchy Process (AHP): An Approach To Water Resource Management In Thailand. *Applied Environmental Research*, 37(3), 1–12. <https://doi.org/10.35762/AER.2015.37.3.2>
- Trinh, L.H., Zablotskii, V.R., Le, T.G., Dinh, T.T.H., Le, T.T., Trinh, T.T., dan Nguyen, T.T.N., 2018. Estimation of suspended sediment concentration using VNREDSat – 1A multispectral data, a case study in Red River, Hanoi, Vietnam. *Geography, Environment, Sustainability*, 11 (3), 49–60.
- Vassoney, E., Mammoliti Mochet, A., & Comoglio, C. (2017). Use Of Multicriteria Analysis (MCA) For Sustainable Hydropower Planning And Management. *Journal Of Environmental Management*, 196, 48–55. <https://doi.org/10.1016/j.jenvman.2017.02.067>
- Waluyo, G., Laksono, F.A.T., Zaenurrohman, J.A., Mishra, M., Piranti, A.S., dan Kovács, J., 2024. Sediment dredging assessment of the Mrica Banjarnegara hydroelectric reservoir based on technical and economic aspects. *Lake and Reservoir Management*, 40 (2), 145–158. <https://doi.org/10.1080/10402381.2024.2319590>
- Wang, H.W., Kondolf, M., Tullós, D., dan Kuo, W.C., 2018. Sediment management in Taiwan’s reservoirs and barriers to implementation. *Water (Switzerland)*, 10 (8). <https://doi.org/10.3390/w10081034>
- Winar Irianto, E., Triweko, W., Yudianto, D., & Pusat Litbang SDA. (2010). Pengembangan Kriteria Status Mutu Ekosistem Danau Sebagai Bagian Dari Indikator Pengelolaan Terpadu Wilayah Sungai. *Jurnal Teknik Hidraulik*, 1(1), 1–94. <https://doi.org/10.32679/jth.v1i1.227>