

DAFTAR PUSTAKA

- [1] A. R. Salasa, "Paradigma dan dimensi strategi ketahanan pangan Indonesia," *Jejaring Adm. Publik*, vol. 13, no. 1, pp. 35–48, 2021, doi: 10.20473/jap.v13i1.29357.
- [2] C. A. P. Silalahi, Suaidah, and A. D. Silalahi, "The influence of increased prices of satisfactions on economic growth," *Int. J. Econ. Bus. Account. Res. (IJEBAR)*, vol. 7, no. 1, 2023, doi: 10.29040/ijebar.v7i1.8406.
- [3] R. Rahmanta, S. F. Ayu, E. F. Fadillah, and R. S. Sitorus, "Pengaruh fluktuasi harga komoditas pangan terhadap inflasi di Provinsi Sumatera Utara," *J. Agrica*, vol. 13, no. 2, 2020, doi: 10.31289/agrica.v13i2.4063.
- [4] Badan Pangan Nasional, "Rencana strategis Badan Pangan Nasional 2022–2024," Jakarta, Indonesia: Badan Pangan Nasional, 2022. [Online]. Available: <https://badanpangan.go.id>. [Accessed: Jan. 15, 2026].
- [5] "Membahas kebijakan ketahanan pangan Indonesia tahun 2024," *Tempo.co*. [Online]. Available: <https://www.tempo.co/info-tempo/membahas-kebijakan-ketahanan-pangan-indonesia-tahun-2024-114374>. [Accessed: Jan. 15, 2026].
- [6] N. P. Widasari, E. Tanur, Y. R. U. Sitanggang, and M. Situmorang, "Pengendalian harga pangan melalui penghitungan indikator proxy inflasi," *J. Good Gov.*, pp. 117–136, 2023, doi: 10.32834/gg.v19i2.625.
- [7] Bank Indonesia, "Laporan perekonomian Provinsi Sumatera Utara Mei 2023," Jakarta, Indonesia: Bank Indonesia, 2023. [Online]. Available: <https://www.bi.go.id/id/publikasi/laporan/lpp/Pages/Laporan-Perekonomian-Provinsi-Sumatera-Utara-Mei-2023.aspx>. [Accessed: Jan. 15, 2026].
- [8] R. J. Hyndman and G. Athanasopoulos, *Forecasting: Principles and Practice*, 3rd ed. Cham, Switzerland: Springer, 2021. [Online]. Available: <https://otexts.com/fpp3/>. [Accessed: Jan. 22, 2026].
- [9] H. F. Wahyudiputra, W. Witanti, and G. Abdillah, "Chicken egg price prediction using extreme gradient boosting method," *J. Ilm. Mat. dan Terap.*, vol. 21, no. 1, pp. 65–73, 2024, doi: 10.22487/2540766x.2024.v21.i1.17214.
- [10] D. R. Lestari, E. A. S. Bangun, F. L. Gaol, and T. Matsuo, "Machine learning-based forecasting of agricultural commodity prices using ensemble models," *J. Human, Earth, Futur.*, vol. 6, no. 4, pp. 887–899, 2025, doi: 10.28991/hef-2025-06-04-09.
- [11] M. F. Al Anshari, "Forecasting rice price volatility in Indonesia: Integrating ENSO indicators with machine learning approaches," *Int. J. Sustain. Dev. Plan.*, vol. 20, no. 11, Nov. 2025, doi: 10.18280/ijdp.201109.
- [12] D. Riando and A. Afyati, "Implementasi algoritma XGBoost untuk memprediksi harga jual cabai rawit di DKI Jakarta," *Eduvest - J. Univers. Stud.*, vol. 4, no. 9, pp. 7877–7889, 2024, doi: 10.59188/eduvest.v4i9.3784.
- [13] S. Harahap, "Implementasi metode regresi linear sederhana untuk prediksi harga beras di Kota Medan," in *Pros. Semin. Nas. Tek. UISU (SEMNASTEK)*, Medan, Indonesia, Jun. 2023.
- [14] K. Puteri and A. Silvanie, "Machine learning untuk model prediksi harga sembako dengan metode regresi linear berganda," *J. Nas. Inform. (JUNIF)*, vol. 1, no. 2, pp. 82–94, 2020.
- [15] S. E. Suwu and A. Panjaitan, "Pengaruh harga tanaman pangan dan upah petani terhadap konsumsi," *Polyglot J. Ilm.*, vol. 17, no. 2, p. 330, 2021, doi: 10.19166/pji.v17i2.2576.
- [16] D. Adriani, A. F. Sinaga, D. Puspitasari, and F. A. B. Sinulingga, "Analisis harga,

- pendapatan, dan permintaan bahan pokok di Medan: Suatu kajian literatur,” *PROMOSI (Jurnal Pendidik. Ekon.)*, vol. 10, no. 1, 2022, doi: 10.24127/pro.v10i1.5413.
- [17] R. Simanjuntak, T. Supriana, and A. Rauf, “Analysis of production efficiency of rice seed producers in Serdang Bedagai Regency, North Sumatera, Indonesia,” *Int. J. Res. Rev.*, vol. 10, no. 7, pp. 350–365, 2023, doi: 10.52403/ijrr.20230747.
- [18] L. Azima and E. T. Astuti, “Keterkaitan indeks harga konsumen (IHK) kelompok bahan makanan dengan kelompok makanan jadi, minuman, rokok, dan tembakau di Indonesia tahun 2014–2019,” *Indones. J. Appl. Stat.*, vol. 5, no. 2, p. 78, 2023, doi: 10.13057/ijas.v5i2.54988.
- [19] Badan Pusat Statistik, “Disagregasi inflasi: Inflasi inti, volatile food, dan administered prices,” BPS. [Online]. Available: <https://www.bps.go.id/en/statistics-table/1/OTA4IzE=/headline--core--administered-price--and-volatile-good-inflation-of-indonesia--2009-2024.html>. [Accessed: Feb. 5, 2026].
- [20] A. B. Setiawan *et al.*, “Unraveling the interplay among inflation, rice prices, and farmers exchange rate in Indonesia,” *Agro Ekon.*, vol. 35, no. 1, p. 1, 2024, doi: 10.22146/ae.86078.
- [21] C. Zhang, N. N. A. Sjarif, and R. Ibrahim, “Deep learning models for price forecasting of financial time series: A review of recent advancements: 2020–2022,” *Wiley Interdiscip. Rev. Data Min. Knowl. Discov.*, vol. 14, no. 1, 2024, doi: 10.1002/widm.1519.
- [22] I. H. Sarker, “Machine learning: Algorithms, real-world applications and research directions,” *SN Comput. Sci.*, vol. 2, no. 3, p. 160, 2021, doi: 10.1007/s42979-021-00592-x.
- [23] G. James, D. Witten, T. Hastie, and R. Tibshirani, *An Introduction to Statistical Learning with Applications in R*, 2nd ed. New York, NY, USA: Springer, 2021, doi: 10.1007/978-1-0716-1418-1.
- [24] J. Han, J. Pei, and H. Tong, *Data Mining: Concepts and Techniques*, 4th ed. Amsterdam, The Netherlands: Elsevier/Morgan Kaufmann, 2023, ISBN: 978-0-12-811760-6.
- [25] T. Chen and C. Guestrin, “XGBoost: A scalable tree boosting system,” in *Proc. 22nd ACM SIGKDD Int. Conf. Knowl. Discovery Data Mining*, San Francisco, CA, USA, Aug. 2016, pp. 785–794, doi: 10.1145/2939672.2939785.
- [26] V. U. Sihombing, U. Siadari, R. Sari, and M. A. Munthe, “The impact of climate change on productivity and food security in Indonesia,” *J. Agri. Socio Econ. Bus.*, vol. 5, no. 2, pp. 191–202, 2023.
- [27] A. Suryana, “Ketahanan pangan, gizi, dan diversifikasi pangan,” *J. Pangan*, vol. 30, no. 1, pp. 1–12, 2021, doi: 10.33964/jp.v30i1.521.
- [28] T. Hapsari, W. Widodo, and B. Irawan, “Analisis faktor-faktor penentu inflasi pangan di Indonesia,” *J. Agro Ekon.*, vol. 40, no. 2, pp. 87–104, 2022, doi: 10.21082/jae.v40n2.2022.87-104.
- [29] M. A. Hearst *et al.*, “A survey of data mining techniques for agricultural applications,” *Comput. Electron. Agric.*, vol. 189, p. 106387, 2021, doi: 10.1016/j.compag.2021.106387.
- [30] R. Prasetyo, D. Sartika, and F. Hadi, “Comparative analysis of supervised machine learning algorithms for commodity price prediction in Indonesia,” *Int. J. Adv. Comput. Sci. Appl.*, vol. 14, no. 3, pp. 215–225, 2023, doi: 10.14569/IJACSA.2023.0140325.
- [31] S. Maulana, A. Wibowo, and R. Nugroho, “Optimasi hyperparameter XGBoost

- menggunakan grid search untuk prediksi harga komoditas pangan,” *J. Teknol. Inf. dan Ilmu Komput.*, vol. 11, no. 2, pp. 451–462, 2024, doi: 10.25126/jtiik.2024112456.
- [32] B. Pham, T. Nguyen, and L. Tran, “Food price forecasting using ensemble machine learning: A systematic review,” *Appl. Soft Comput.*, vol. 148, p. 110913, 2023, doi: 10.1016/j.asoc.2023.110913.
- [33] M. Schroer, F. Kruse, and N. M. Gomez, “A systematic literature review on data mining processes,” *Procedia Comput. Sci.*, vol. 181, pp. 126–134, 2021, doi: 10.1016/j.procs.2021.01.110.
- [34] F. Martinez-Plumed *et al.*, “CRISP-DM twenty years later: From data mining processes to data science trajectories,” *IEEE Trans. Knowl. Data Eng.*, vol. 33, no. 8, pp. 3048–3061, 2021, doi: 10.1109/TKDE.2019.2962680.
- [35] Z. Khan *et al.*, “Imputation techniques for missing data in time-series analysis,” *Appl. Sci.*, vol. 12, no. 14, pp. 7100–7115, Jul. 2022.
- [36] S. S. Jomaa *et al.*, “A systematic review of missing value imputation in time series data,” *J. Big Data*, vol. 10, no. 1, pp. 45–68, Dec. 2023.
- [37] Badan Pusat Statistik Kota Binjai, “Mei 2022 Sumatera Utara inflasi 0,74 persen,” BPS Kota Binjai, Jun. 2022. [Online]. Available: <https://binjaikota.bps.go.id/id/pressrelease/2022/06/02/454/mei-2022--sumatera-utara-inflasi-0-74-persen.html>. [Accessed: Apr. 24, 2026].
- [38] Badan Pusat Statistik Provinsi Sumatera Utara, “September 2022 gabungan lima kota IHK di Sumatera Utara inflasi 1,00 persen,” BPS Provinsi Sumatera Utara, Oct. 2022. [Online]. Available: <https://sumut.bps.go.id/id/pressrelease/2022/10/03/879/september-2022--gabungan-lima-kota-ihk-di-sumatera-utara--inflasi-1-00-persen.html>. [Accessed: Apr. 24, 2026].
- [39] Badan Pusat Statistik Provinsi Sumatera Utara, “Desember 2023 inflasi year on year (yoy) gabungan lima kota IHK di Sumatera Utara sebesar 2,25 persen,” BPS Provinsi Sumatera Utara, Jan. 2024. [Online]. Available: <https://sumut.bps.go.id/id/pressrelease/2024/01/02/1216/desember-2023--inflasi-year-on-year--yoy--gabungan-lima-kota--ihk-di-sumatera-utara-sebesar-2-25-persen.html>. [Accessed: Apr. 24, 2026].
- [40] Badan Pusat Statistik Provinsi Sumatera Utara, “Agustus 2024 inflasi year on year (y-on-y) Provinsi Sumatera Utara sebesar 1,86 persen,” BPS Provinsi Sumatera Utara, Sep. 2024. [Online]. Available: <https://sumut.bps.go.id/id/pressrelease/2024/09/02/1224/agustus-2024-inflasi-year-on-year--y-on-y--provinsi-sumatera--utara-sebesar-1-86-persen.html>. [Accessed: Apr. 24, 2026].
- [41] I. R. Siregar, A. Nugraha, K. A. Notodiputro, Y. Angraini, and L. N. A. Mualifah, “The comparison of long short-term memory and bidirectional long short-term memory for forecasting coal price,” *BAREKENG: J. Math. Appl.*, vol. 19, no. 1, pp. 245–258, Mar. 2025, doi: 10.30598/barekengvol19iss1pp0245-0258.