

DAFTAR PUSTAKA

- [1] H. Limanseto, “Industri Kelapa Sawit Indonesia: Menjaga Keseimbangan Aspek Sosial, Ekonomi, dan Lingkungan - Kementerian Koordinator Bidang Perekonomian Republik Indonesia,” Jul. 09, 2024. [Online]. Available: <https://www.ekon.go.id/publikasi/detail/2921/industri-kelapa-sawit-indonesia-menjaga-keseimbangan-aspek-sosial-ekonomi-dan-lingkungan>
- [2] adi ahdiat, “Ekspor Sawit Indonesia Meningkat pada 2023, tapi Nilainya Turun | Databoks,” Jul. 09, 2024. [Online]. Available: <https://databoks.katadata.co.id/datapublish/2024/03/05/ekspor-sawit-indonesia-meningkat-pada-2023-tapi-nilainya-turun>
- [3] M. Rizky, “Video CNBC Indonesia - Kurang Petani Muda & Penyuluh Pertanian, RI Sulit Swasembada Pangan?,” Jul. 09, 2024. [Online]. Available: <https://www.cnbcindonesia.com/news/20240627094910-8-549729/kurang-petani-muda-penyuluh-pertanian-ri-sulit-swasembada-pangan>
- [4] P. REPUBLIK INDONESIA, “UNDANG-UNDANG REPUBLIK INDONESIA”.
- [5] B. P. S. Indonesia, “Angka Deforestasi (Netto) Indonesia di Dalam dan di Luar Kawasan Hutan Tahun 2013-2022 (Ha/Th) - Tabel Statistik,” Jul. 09, 2024. [Online]. Available: <https://www.bps.go.id/id/statistics-table/1/MjA4MSMx/angka-deforestasi--netto--indonesia-di-dalam-dan-di-luar-kawasan-hutan-tahun-2013-2022--ha-th-.html>
- [6] K. Laia, “Deforestasi Akibat Industri Sawit Naik Lagi pada 2023,” Jul. 09, 2024. [Online]. Available: <https://betahita.id/news/detail/9919/deforestasi-akibat-industri-sawit-naik-lagi-pada-2023-.html?v=1708473848>
- [7] P. Oktavianto, “Deforestasi Akibat Kelapa Sawit Kembali Naik,” Jul. 09, 2024. [Online]. Available: <https://www.forestdigest.com/detail/2519/deforestasi-perkebunan-sawit>
- [8] N. Anugrah, “Laju Deforestasi Indonesia Tahun 2021-2022 Turun 8,4%,” Jul. 09, 2024. [Online]. Available: <https://ppid.menlhk.go.id/berita/siaran-pers/7243/laju-deforestasi-indonesia-tahun-2021-2022-turun-84>
- [9] S. W.D. and R. I.A.P., “Laju dan penyebab deforestasi di Indonesia: penelaahan kerancuan dan penyelesaiannya,” *Laju dan penyebab deforestasi di Indones. penelaahan kerancuan dan penyelesaiannya*, vol. 9, no. 9, 1997, doi: 10.17528/cifor/000057.
- [10] K. Pertanian, “STANDAR OPERASIONAL PROSEDUR LEGALITAS LAHAN”.
- [11] H. Santoso and W. Saputra, *ISPO dan Momentum Legalitas Perkebunan*

Sawit Swafaya. 2020.

- [12] A. Rahman, R. P. Sari, and D. Prawira, "SISTEM INFORMASI GEOGRAFIS PEMETAAN LAHAN PERTANIAN DAN KOMODITI HASIL PANEN BERBASIS WEBSITE (Studi Kasus : Dinas Pertanian Kabupaten Sanggau)," *Coding J. Komput. dan Apl.*, vol. 11, no. 1, p. 83, Jul. 2023, doi: 10.26418/coding.v11i1.54912.
- [13] H. T. Bisono, A. U. Wijaya, and F. Saleh, "PEMALSUAN SURAT HAK MILIK TANAH (Studi Kasus Putusan Pengadilan Negeri Dataran Hunipopu Nomor 76 / Pid . B / 2021 / PN Drh)," *J. Huk. Wijaya Putra*, vol. 1, no. 2, pp. 12–24, 2022.
- [14] B. University, "Pengertian Blockchain beserta Manfaat dan Cara Kerjanya," Aug. 10, 2022. [Online]. Available: <https://online.binus.ac.id/2022/07/18/pengertian-blockchain-serta-manfaat-dan-cara-kerjanya/>
- [15] U. Agarwal *et al.*, "Blockchain Technology for Secure Supply Chain Management: A Comprehensive Review," *IEEE Access*, vol. 10, pp. 85493–85517, Jul. 2022, doi: 10.1109/ACCESS.2022.3194319.
- [16] Z. Zheng, S. Xie, H. N. Dai, X. Chen, and H. Wang, "Blockchain challenges and opportunities: a survey," *Int. J. Web Grid Serv.*, vol. 14, no. 4, p. 352, Aug. 2018, doi: 10.1504/IJWGS.2018.095647.
- [17] "Smart Contracts Implementation, Applications, Benefits, and Limitations," *J. Inf. Eng. Appl.*, Jul. 2019, doi: 10.7176/JIEA/9-5-07.
- [18] M. H. Arshad, "Performance Modeling for Blockchain-based Systems and its Evaluation in a Simulation".
- [19] T. Rathee and M. Malik, "Blockchain as an IPFS (Interplanetary File System) Storage Index," *Int. J. Innov. Eng. Technol.*, vol. 14, no. 2, 2019.
- [20] M. Marchesi, L. Marchesi, and R. Tonelli, "An Agile Software Engineering Method to Design Blockchain Applications".
- [21] "Kementerian Pertanian Direktorat Jenderal Perkebunan : Rintisan STD-B di Provinsi Jambi dalam Mendukung Data Pekebun Nasional," Aug. 15, 2024. [Online]. Available: <https://ditjenbun.pertanian.go.id/rintisan-std-b-di-provinsi-jambi-dalam-mendukung-data-pekebun-nasional/>
- [22] D. K. Paser, "Sosialisasikan STD-B Ke Pekebun Sawit Desa Keluang Paser Jaya Kecamatan Kuaro Oleh Disbunak Paser - Dinas Perkebunan dan Peternakan Kabupaten Paser," Aug. 15, 2024. [Online]. Available: <https://disbunak.paserkab.go.id/detailpost/sosialisasikan-std-b-ke-pekebun-sawit-desa-keluang-paser-jaya-kecamatan-kuaro-oleh-disbunak-paser>
- [23] M. Syani, Mahdani, F. Laia, D. Mulyana, and N. Yudi Permana, "Aplikasi Sistem Informasi Geografis (SIG) Pendataan Pada Pengawasan Dan

- Pengendalian Menara Telekomunikasi Berbasis Android (Studi Kasus Dinas Komunikasi Dan Informatika Kota Cimahi),” *J. Sist. Inf. Galuh*, vol. 2, no. 2, pp. 16–29, Aug. 2024, doi: 10.25157/jsig.v2i2.3950.
- [24] S. Sudarman, H. Sadikin, and K. Prijatna, “Desain Alternatif Lembar Peta Rupabumi Indonesia (RBI) Skala Besar,” *GEOMATIKA*, vol. 26, no. 1, p. 35, Aug. 2020, doi: 10.24895/JIG.2020.26-1.1081.
- [25] R. Rencang, “Urgensi Sistem Pengamanan pada Sertifikat Tanah Digital,” 2021.
- [26] S. Pinuji, “INTEGRASI SISTEM INFORMASI PERTANAHAN DAN INFRASTRUKTUR DATA SPASIAL DALAM RANGKA PERWUJUDAN ONE MAP POLICY,” *BHUMI J. Agrar. dan Pertanah.*, vol. 2, no. 1, p. 48, Aug. 2016, doi: 10.31292/jb.v2i1.31.
- [27] “What is Immutable Ledger in Blockchain and Its Benefits,” Aug. 15, 2024. [Online]. Available: <https://www.solulab.com/what-is-immutable-ledger-in-blockchain-and-its-benefits/>
- [28] F. S. R. dan D. Kelompok Keahlian Ilmu Kemanusiaan Institut Teknologi Bandung, A. Z. Ausop, and E. S. N. Aulia, “TEKNOLOGI CRYPTOCURRENCY BITCOIN UNTUK INVESTASI DAN TRANSAKSI BISNIS MENURUT SYARIAT ISLAM,” *J. Sosioteknologi*, vol. 17, no. 1, pp. 74–92, Aug. 2018, doi: 10.5614/sostek.itbj.2018.17.1.8.
- [29] T. I. Ramdhani, N. N. Faiza, M. Wulandari, A. D. Nastiti, and H. Kurniawan, “CFPChain: Optimalisasi Sistem Seleksi Pendanaan Riset BRIN Menggunakan Pendekatan Berbasis Konsorsium Blockchain,” *J. Teknol. Inf. dan Ilmu Komput.*, vol. 11, no. 1, pp. 27–36, Aug. 2024, doi: 10.25126/jtiik.20241116676.
- [30] M. Fuad, “Apa Itu Blockchain: Mengungkap Teknologi Revolusioner di Era Digital,” Aug. 15, 2024. [Online]. Available: <https://bif.telkomuniversity.ac.id/apa-itu-blockchain-mengungkap-teknologi-revolusioner-di-era-digital/>
- [31] F. C. Mustofa, T. Aditya, and H. Sutanta, “Sistem Informasi Pertanahan Partisipatif untuk Pemetaan Bidang Tanah: Sebuah Tinjauan Pustaka Komprehensif,” *Maj. Ilm. GLOBE*, vol. 20, no. 1, p. 1, Aug. 2018, doi: 10.24895/MIG.2018.20-1.702.
- [32] A. K. Kibet, D. G. Bayyou, and R. A. Esquivel, “BLOCKCHAIN: IT’S STRUCTURE, PRINCIPLES, APPLICATIONS AND FORESEEN ISSUES,” vol. 6, no. 4, 2019.
- [33] M. R. Supriadi and R. Andarsyah, “INTEGRITAS DATA PRIVATE BLOCKCHAIN HYPERLEDGER FABRIC MENGGUNAKAN METODE PRACTICAL BYZANTINE FAULT TOLERANCE DAN PROOF OF AUTHORITY,” *Semant. Tek. Inf.*, vol. 9, no. 2, p. 223, Aug. 2023, doi:

10.55679/semantik.v9i2.42584.

- [34] “Membership Service Providers (MSP) — Hyperledger Fabric Docs main documentation,” Aug. 15, 2024. [Online]. Available: <https://hyperledger-fabric.readthedocs.io/en/latest/msp.html>
- [35] “Identity — Hyperledger Fabric Docs main documentation,” Aug. 15, 2024. [Online]. Available: <https://hyperledger-fabric.readthedocs.io/en/latest/identity/identity.html>
- [36] “Mengenai Smart Contract Dalam Blockchain,” Aug. 15, 2024. [Online]. Available: <https://sis.binus.ac.id/2023/05/02/mengenai-smart-contract-dalam-blockchain/>
- [37] “Apa Itu Smart Contract dan Bagaimana Cara Kerjanya? - Gramedia,” Aug. 15, 2022. [Online]. Available: <https://www.gramedia.com/best-seller/smart-contract/>
- [38] L. Arief, T. A. Sundara, and H. Saputra, “Studi Perbandingan Jaringan Blockchain sebagai Platform Sistem Rating,” *J. RESTI (Rekayasa Sist. dan Teknol. Informasi)*, vol. 5, no. 4, pp. 827–836, Aug. 2021, doi: 10.29207/resti.v5i4.2588.
- [39] “Smart Contracts and Chaincode — Hyperledger Fabric Docs main documentation,” Aug. 15, 2024. [Online]. Available: <https://hyperledger-fabric.readthedocs.io/en/release-2.2/smartcontract/smartcontract.html>
- [40] C. Müller, M. Brandenburger, C. Cachin, P. Felber, C. Göttel, and V. Schiavoni, “TZ4Fabric: Executing Smart Contracts with ARM TrustZone”.
- [41] “Caliper,” Aug. 15, 2024. [Online]. Available: <https://www.hyperledger.org/projects/caliper>
- [42] N. Rohman, “Urgence and Security of Digitalization of Land Electronic Certificate Issuance Documents,” *Act. Yuris J. Huk.*, vol. 2, no. 2, pp. 1–7, 2022, doi: 10.25273/ay.v2i2.13152.
- [43] S. H. Saeed, S. M. Hadi, and A. H. Hamad, “Performance Evaluation of E-Voting Based on Hyperledger Fabric Blockchain Platform,” *Rev. d’Intelligence Artif.*, vol. 36, no. 4, pp. 581–587, Aug. 2022, doi: 10.18280/ria.360410.
- [44] N. Gaur, L. Desrosiers, V. Ramakrishna, P. Novotny, S. Baset, and A. O’Dowd, *Hands-On Blockchain with Hyperledger: Building Decentralized Applications with Hyperledger Fabric and Composer*. Birmingham Mumbai: Packt Publishing Ltd, 2018.
- [45] T. Id, “Hebatnya Teknologi Hyperledger dalam Blockchain,” Aug. 18, 2021. [Online]. Available: <https://www.techfor.id/hebatnya-teknologi-hyperledger-dalam-blockchain/>
- [46] “Apa Itu InterPlanetary File System (IPFS) dan Bagaimana Cara Kerjanya?,”

- Aug. 18, 2024. [Online]. Available: <https://support.bittime.com/hc/id/articles/9048028040719-Apa-Itu-InterPlanetary-File-System-IPFS-dan-Bagaimana-Cara-Kerjanya>
- [47] robby kurniawan, “Mengenal IPFS: Revolusi Penyimpanan File Desentralisasi,” Aug. 18, 2024. [Online]. Available: <https://indodax.com/academy/ipfs-dalam-crypto/>
- [48] “What is Pinning? - Pinata Docs,” Aug. 18, 2024. [Online]. Available: <https://docs.pinata.cloud/ipfs-101/what-is-ipfs-pinning>
- [49] “How does IPFS work with NFTs?,” Aug. 18, 2024. [Online]. Available: <https://docs.pinata.cloud/ipfs-101/how-does-ipfs-work-with-nfts>
- [50] “What is OpenStreetMap? | OpenStreetMap,” Aug. 18, 2024. [Online]. Available: <https://welcome.openstreetmap.org/what-is-openstreetmap/>
- [51] “IPB Training - Pengantar OpenStreetMap: Kolaborasi Pemetaan Global,” Aug. 18, 2024. [Online]. Available: <https://ipbtraining.com/article/28-pengantar-openstreetmap-kolaborasi-pemetaan-global>
- [52] R. Hidayatulloh and P. Airlangga, “Integrasi Mapbox dan Google Map untuk Menunjang Fitur tambahan pada system informasi geografis,” *Exact Pap. Compil.*, vol. 4, no. 1, pp. 491–496, Aug. 2022, doi: 10.32764/epic.v4i1.648.
- [53] “Data Vektor dan Raster dalam GIS - Labgis FTI Unand,” Aug. 18, 2022. [Online]. Available: <http://labgis.si.fti.unand.ac.id/data-vektor-dan-raster-dalam-gis/>
- [54] “Introduction | React Leaflet,” Aug. 18, 2024. [Online]. Available: <https://react-leaflet.js.org/docs/next/start-introduction/>
- [55] “Node.js — About Node.js®,” Aug. 18, 2024. [Online]. Available: <https://nodejs.org/en/about>
- [56] M. Maulana, “Node js Adalah: Pengertian, Cara Kerja, Kelebihan dan Contoh,” Aug. 18, 2022. [Online]. Available: <https://itbox.id/blog/node-js-adalah/>
- [57] “Apa itu TypeScript? Arti, Fungsi, Contoh, FAQs 2024 | RevoU,” Aug. 18, 2024. [Online]. Available: <https://revou.co/kosakata/typescript>
- [58] Prasatya, “Apa Itu Express JS: Pengertian, Manfaat, Contoh Syntax - CODEPOLITAN,” Aug. 18, 2024. [Online]. Available: <https://codepolitan.com/blog/apa-itu-express-js-pengertian-manfaat-contoh-syntax>
- [59] A. Amarulloh, “ANALISIS PERBANDINGAN PERFORMA WEB SERVICE REST MENGGUNAKAN FRAMEWORK LARAVEL, DJANGO, DAN Node JS PADA APLIKASI BERBASIS WEBSITE,” vol. 09, no. 01, 2023.

- [60] admin_dti, “ReactJS : Definisi, Fitur, dan Cara Kerja | Artikel DTI,” Aug. 18, 2023. [Online]. Available: <https://jakarta.telkomuniversity.ac.id/reactjs-definisi-fitur-manfaat-cara-kerja-dan-keunggulan/>
- [61] Prasatya, “5 Alasan React Js adalah Library Pengembangan Web Terbaik - CODEPOLITAN,” Aug. 18, 2024. [Online]. Available: <https://codepolitan.com/blog/5-alasan-react-js-adalah-library-pengembangan-web-terbaik>
- [62] “Mengenal MySQL, Definisi, Fungsi, hingga Cara Kerjanya,” Aug. 18, 2024. [Online]. Available: <https://www.biznetgio.com/news/apa-itu-mysql>
- [63] “Apa itu Bahasa Kueri Terstruktur (SQL)? - Penjelasan tentang SQL - AWS,” Aug. 18, 2024. [Online]. Available: <https://aws.amazon.com/id/what-is/sql/>
- [64] “CouchDB sebagai salah satu Database NoSQL,” Aug. 18, 2019. [Online]. Available: <http://lea.si.fti.unand.ac.id/2019/04/couchdb-sebagai-salah-satu-database-nosql/>
- [65] “IBM Cloudant,” Aug. 18, 2024. [Online]. Available: <https://www.ibm.com/products/cloudant>
- [66] “Docker overview | Docker Docs,” Aug. 18, 2024. [Online]. Available: <https://docs.docker.com/guides/docker-overview/>
- [67] A. R. Ekaputra and A. S. Affandi, “Pemanfaatan layanan cloud computing dan docker container untuk meningkatkan kinerja aplikasi web,” *J. Inf. Syst. Appl. Dev.*, vol. 1, no. 2, pp. 138–147, Aug. 2023, doi: 10.26905/jisad.v1i2.11084.
- [68] “Apa itu Docker? | AWS,” Aug. 18, 2024. [Online]. Available: <https://aws.amazon.com/id/docker/>
- [69] “Pengertian UML (Unified Modelling Language) - BAMAI UMA Artikel,” Aug. 18, 2024. [Online]. Available: <https://bpmpp.uma.ac.id/2021/12/03/pengertian-uml-unified-modelling-language/>
- [70] D. Intern, “Apa itu UML? Beserta Pengertian dan Contohnya,” Aug. 18, 2021. [Online]. Available: <https://www.dicoding.com/blog/apa-itu-uml/>

