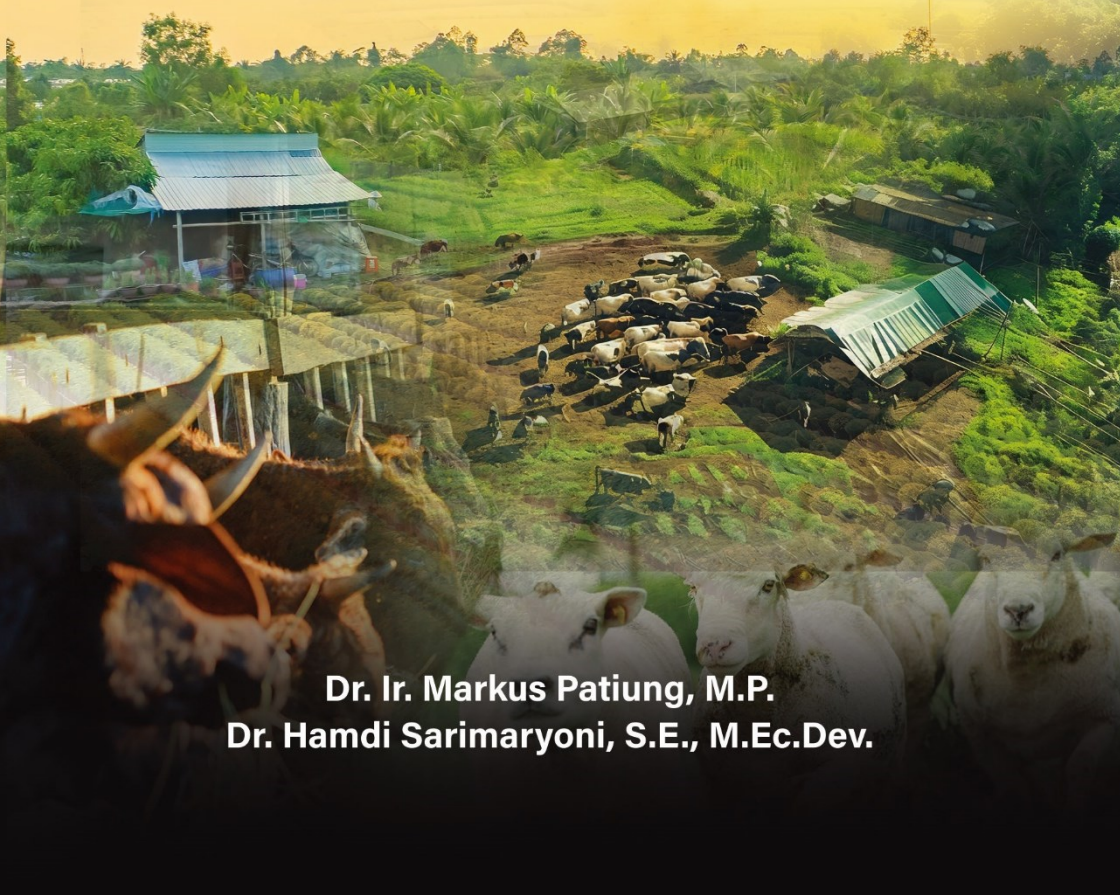


Pengantar Pertanian & Pternakan

dalam Strategi Diversifikasi Usaha



Dr. Ir. Markus Patiung, M.P.
Dr. Hamdi Sarimaryoni, S.E., M.Ec.Dev.

PENGANTAR

PERTANIAN *dan* PETERNAKAN

dalam Strategi Diversifikasi Usaha

Penulis

Dr. Ir. Markus Patiung, M.P.

Dr. Hamdi Sarimaryoni, S.E., M.Ec. Dev.



PENERBIT KBM INDONESIA

Adalah penerbit dengan misi memudahkan proses penerbitan buku buku penulis di tanah air Indonesia. Serta menjadi media sharing proses penerbitan buku.

PENGANTAR PERTANIAN DAN PETERNAKAN

dalam Strategi Diversifikasi Usaha

Copyright @2025 By Dr. Ir. Markus Patiung, M.P., dkk
All right reserved

Penulis

Dr. Ir. Markus Patiung, M.P.
Dr. Hamdi Sarimaryoni, S.E., M.Ec. Dev.

Desain Sampul

Aswan Kreatif

Tata Letak

Sofitahm

Editor

Dr. Muhamad Husein Maruapey, Drs., M.Sc.
Background isi buku di ambil dari <https://www.freepik.com/>

Official

Depok, Sleman-Jogjakarta (Kantor)
Penerbit Karya Bakti Makmur (KBM) Indonesia
Anggota IKAPI/No. IKAPI 279/JTI/2021
081357517526 (Tlpn/WA)

Website

<https://penerbitkbm.com>
www.penerbitbukumurah.com

Email

naskah@penerbitkbm.com

Distributor

<https://penerbitkbm.com/toko-buku/>

Youtube

Penerbit KBM Sastrabook

Instagram

@penerbit.kbmindonesia
@penerbitbukujogja

ISBN: 978-634-202-658-8

Cetakan ke-1, Agustus 2025
14,8 x 21 cm, iv + 96 halaman

Isi buku diluar tanggungjawab penerbit
Hak cipta merek KBM Indonesia sudah terdaftar di DJKI-Kemenkumham dan isi buku
dilindungi undang-undang.

Dilarang keras menerjemahkan, memfotokopi, atau
memperbanyak sebagian atau seluruh isi buku ini
tanpa seizin penerbit karena beresiko sengketa hukum

Sanksi Pelanggaran Pasal 113
Undang-Undang No. 28 Tahun 2014 Tentang Hak Cipta

1. Setiap Orang yang dengan tanpa hak melakukan pelanggaran hak ekonomi sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf i untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 1 (satu) tahun dan/atau pidana denda paling banyak Rp 100.000.000 (seratus juta rupiah).
2. Setiap Orang yang dengan tanpa hak dan/atau tanpa izin Pencipta atau pemegang Hak Cipta melakukan pelanggaran hak ekonomi Pencipta sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf c, huruf d, huruf f, dan/atau huruf h untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 3 (tiga) tahun dan/atau pidana denda paling banyak Rp 500.000.000,00 (lima ratus juta rupiah).
3. Setiap Orang yang dengan tanpa hak dan/atau tanpa izin Pencipta atau pemegang Hak Cipta melakukan pelanggaran hak ekonomi Pencipta sebagaimana dimaksud dalam Pasal 9 ayat (1) huruf a, huruf b, huruf e, dan/atau huruf g untuk Penggunaan Secara Komersial dipidana dengan pidana penjara paling lama 4 (empat) tahun dan/atau pidana denda paling banyak Rp 1.000.000.000,00 (satu miliar rupiah).
4. Setiap Orang yang memenuhi unsur sebagaimana dimaksud pada ayat (3) yang dilakukan dalam bentuk pembajakan, dipidana dengan pidana penjara paling lama 10 (sepuluh) tahun dan/atau pidana denda paling banyak Rp 4.000.000.000,00 (empat miliar rupiah).

PRAKATA

Puji syukur kehadiran Tuhan Yang Maha Esa atas rahmat dan karunia-Nya sehingga buku ini dapat disusun dan disajikan kepada pembaca. Buku dengan judul “Pengantar Pertanian dan Peternakan dalam Strategi Diversifikasi Usaha. Negara-negara Asia Tenggara memiliki potensi pertanian dan peternakan yang tak ternilai. Sektor ini bukan hanya sumber pendapatan Masyarakat, tetapi juga fondasi kokoh bagi pertumbuhan ekonomi nasional.

Sektor peternakan di Indonesia, sebagai bagian tak terpisahkan dari pertanian, telah bertransformasi dari pemeliharaan tradisional menjadi industri berteknologi tinggi. Meskipun persentasenya terhadap PDB tergolong kecil, perannya dalam penyediaan protein hewani, penyerapan tenaga kerja, dan penurunan kemiskinan menjadi bagian yang terpenting. Selain itu, sektor peternakan adalah sektor unggulan dengan potensi besar di masa depan. Strategi diversifikasi usaha merupakan faktor kunci bagi keberhasilan petani dan peternak untuk beradaptasi dengan kondisi ekonomi yang tidak menentu. Hal ini bukan hanya tentang menanam atau beternak komoditas berbeda, melainkan menciptakan beragam sumber pendapatan dari aset dan keahlian yang sudah ada..

Dengan demikian strategi diversifikasi usaha diharapkan mampu sebagai penyeimbang dalam mengendalikan resiko yang ditanggung oleh pelaku usaha. kami berharap dapat memberikan kontribusi nyata bagi peningkatan pengembangan usaha di Indonesia.

Surabaya, Juli 2025

DAFTAR ISI

PRAKATA.....	i
DAFTAR ISI	iii
BAB 1 PENDAHULUAN.....	1
A. Pengertian Pertanian.....	1
B. Transformasi Pertanian	5
C. Tantangan Peternakan.....	7
D. Peran Agroindustri	9
BAB 2 PENGARUH LUAS LAHAN PERTANIAN, DAN BIAYA PEMELIHARAAN TERHADAP PENDAPATAN PETANI.....	13
A. Manfaat Lahan Pertanian	13
B. Fungsi Ekologi Lingkungan Lahan Pertanian.....	16
C. Konsep dan Teori Pendapatan Petani	18
D. Faktor Risiko Luas Lahan Pertanian dan Produktivitas.....	21
E. Komponen Biaya Pemeliharaan Pertanian	23
F. Pendapatan Usaha Tani.....	28
BAB 3 PETERNAKAN INDONESIA.....	33
A. Peternakan dalam Tinjauan dan Implikasinya	33
B. Perkembangan Peternakan Unggas di Indonesia.....	37
C. Peternakan Berkelanjutan dan Lingkungan	40
D. Usaha Peternakan Unggas Pedaging.....	43
E. Aspek Zooteknis Usaha Pedaging	44
F. DOC (Day Old Chicken).....	45

G. Pakan Ternak	46
H. Perkandangan	48
I. Pencegahan Penyakit	50
BAB 4 STRATEGI DIVERSIFIKASI USAHA	55
A. Pendapatan Usaha Diversifikasi	55
B. Analisis Usaha Diversifikasi	57
C. Perkembangan Strategi Diversifikasi Usaha	58
D. Stategi Diversifikasi Horisontal (Produk & Komoditas)	61
E. Diversifikasi Vertikal (Integrasi Rantai Nilai).....	61
F. Diversifikasi Fungsional (Jasa & Agrowisata)	62
G. Diversifikasi Geografis (Ekspansi Lokasi & Pasar)	63
DAFTAR PUSTAKA	65
PROFIL PENULIS.....	95

DAFTAR PUSTAKA

- Abdulai, I. A., Ahmed, A., & Kuusaana, E. D. (2022). Secondary cities under siege: examining peri-urbanisation and farmer households' livelihood diversification practices in Ghana. *Heliyon*, 8(9), e10540. <https://doi.org/10.1016/j.heliyon.2022.e10540>
- Abokyi, E., Strijker, D., Asiedu, K. F., & Daams, M. N. (2020). The impact of output price support on smallholder farmers' income: evidence from maize farmers in Ghana. *Heliyon*, 6(9). <https://doi.org/10.1016/j.heliyon.2020.e05013>
- Acaroğlu, H., & García Márquez, F. P. (2022). High voltage direct current systems through submarine cables for offshore wind farms: A life-cycle cost analysis with voltage source converters for bulk power transmission. *Energy*, 249. <https://doi.org/10.1016/j.energy.2022.123713>
- Addison, M., Ohene-Yankyera, K., Osei-Wusu Adjei, P., Mujawamariya, G., & Asante, B. (2023). Uptake and income distribution effects of targeted farm technologies on rice farmers in forest and Guinea Savannah Zones of Ghana: Does gender matter? *Journal of Agriculture and Food Research*, 11(January), 100516. <https://doi.org/10.1016/j.jafr.2023.100516>
- Adelesi, O. O. (2024). Understanding farmers diversity in non-timber forest products activities in Ogun State, Nigeria.

- Scientific African*, 25(August 2023), e02331.
<https://doi.org/10.1016/j.sciaf.2024.e02331>
- Adelesi, O. O., Kim, Y. U., Schuler, J., Zander, P., Njoroge, M. M., Waithaka, L., Abdulai, A. L., MacCarthy, D. S., & Webber, H. (2024). The potential for index-based crop insurance to stabilize smallholder farmers' gross margins in Northern Ghana. *Agricultural Systems*, 221(September), 104130. <https://doi.org/10.1016/j.agsy.2024.104130>
- Adzigbli, W. K., Duku, E., Atampugre, G., Fürst, C., & Nyarko, B. K. (2024). Agricultural land use policies and landscape dynamics: Evidence from rainforest agroecological zone. *Land Use Policy*, 142(March), 107184. <https://doi.org/10.1016/j.landusepol.2024.107184>
- Agrawal, N., Singh, P. K., Jairath, G., Ahmad, M. F., Raposo, A., Khanam, A., Alarifi, S. N., Han, H., & Thakur, N. (2024). Physico-chemical changes in developed probiotic chicken meat spread fermented with *Lactobacillus acidophilus* and malted millet flour. *Applied Food Research*, 4(2). <https://doi.org/10.1016/j.afres.2024.100484>
- Aktary, M. L., Dunn, S., Sajobi, T., O'Hara, H., Leblanc, P., McCormack, G. R., Caron-Roy, S., Ball, K., Lee, Y. Y., Nejatnamini, S., Reimer, R. A., Pan, B., Minaker, L. M., Raine, K. D., Godley, J., Downs, S., Nykiforuk, C. I., & Olstad, D. L. (2023). Impact of a farmers' market healthy food subsidy on the diet quality of adults with low incomes in British Columbia, Canada: a pragmatic randomized controlled trial. *American Journal of Clinical Nutrition*, 117(4), 766–776. <https://doi.org/10.1016/j.ajcnut.2023.01.017>

- Al-Aziz, F. N., & Suryani, E. (2024). System Dynamics Modeling to Increase the Productivity of Chili Pepper through Good Agricultural Practices in East Java. *Procedia Computer Science*, 234, 733–740.
<https://doi.org/10.1016/j.procs.2024.03.094>
- Al, F., Haskaraca, G., & Yildiz, S. (2024). Ultrasound-assisted chilling to minimize sodium hypochlorite use while reducing pathogens and preserving quality in chicken breast meat. *Lwt*, 213(November), 117107.
<https://doi.org/10.1016/j.lwt.2024.117107>
- Al Zahra, W., van Middelaar, C. E., Oosting, S. J., & de Boer, I. J. M. (2024). Nutrient imbalances of smallholder dairy farming systems in Indonesia: The relevance of manure management. *Agricultural Systems*, 218(March), 103961.
<https://doi.org/10.1016/j.agry.2024.103961>
- Ali, M. M., Bari, M. S., Rahman, M. T., & Sarmin, I. J. (2024). Multistoried woodlot based agroforestry system for improved resource utilization and incomes for farmer. *Heliyon*, 10(16), e36096.
<https://doi.org/10.1016/j.heliyon.2024.e36096>
- Apriana, C. D., Sudarnika, E., Basri, C., Indrawan, D., Daryono, J., & Suseno, P. P. (2024). Assessment of the burden of rabies in one health approach control program in Ketapang District Indonesia: Using zDALY. *Preventive Medicine Reports*, 45(March 2023), 102838.
<https://doi.org/10.1016/j.pmedr.2024.102838>
- Arcasi, A., Mauro, A. W., Napoli, G., Tariello, F., & Vanoli, G. P. (2024). Energy and cost analysis for a crop production in a vertical farm. *Applied Thermal Engineering*,

239(October 2023), 122129.

<https://doi.org/10.1016/j.applthermaleng.2023.122129>

Ariyani, M., Jansen, L. J. M., Balzer-Rutgers, P., Hofstra, N., van Oel, P., & van de Schans, M. G. M. (2024). Antibiotic residues in the cirata reservoir, Indonesia and their effect on ecology and the selection for antibiotic-resistant bacteria. *Environmental Research*, 262(P2), 119992. <https://doi.org/10.1016/j.envres.2024.119992>

Atchadé, M. N., & Nougbodé, H. (2024). Statistical investigation on the relationship between climate change, food availability, agricultural productivity, and economic expansion. *Heliyon*, 10(12), e32520. <https://doi.org/10.1016/j.heliyon.2024.e32520>

Ayanwale, A. B., Ojo, T. O., & Adekunle, A. A. (2023). Estimating the distributional impact of innovation platforms on income of smallholder maize farmers in Nigeria. *Heliyon*, 9(5), e16026. <https://doi.org/10.1016/j.heliyon.2023.e16026>

Ayeni, M. D., Adewumi, M. O., Bello, M. A., AdiAdi, K. F., & Osungade, A. A. (2023). Effects of rabbit production on income and livelihood of rural households in Nigeria. *Heliyon*, 9(8), e18568. <https://doi.org/10.1016/j.heliyon.2023.e18568>

Badan Pusat Statistik Kabupaten Tasikmalaya. (2022). *Puspahiang Dalam Angka Tahun 2022*. 2. <https://tasikmalayakab.bps.go.id/publication/download.html?nrbvfeve=M2ViOTM1MDNIMDQwYjAwMDVjNGM3YWZh&xzmn=aHR0cHM6Ly90YXNpa21hbGF5YWthYi5icHMuZ28uaWQvcHVibGljYXRpb24vMjAyMi8wOS8y>

Ni8zZWI5MzUwM2UwNDBiMDAwNWM0YzdhYWVva
2VjYW1hdGFuLXB1c3BhaGlhbmctZGFsYW0tYW5na

Barnés-Calle, C., Matas, G., Claret, A., Guerrero, L., Fulladosa, E., & Gou, P. (2024). High moisture extrusion of pea protein isolate to mimic chicken texture: Instrumental and sensory insights. *Food Hydrocolloids*, 154(April).
<https://doi.org/10.1016/j.foodhyd.2024.110129>

Begun, V., & Schlickewei, U. (2024). Cost-optimized probabilistic maintenance for condition monitoring of wind turbines with rare failures. *Energy Reports*, 12(November), 4864–4882.
<https://doi.org/10.1016/j.egyr.2024.10.041>

Beltrán-Flores, E., Pla-Ferriol, M., Martínez-Alonso, M., Gaju, N., Sarrà, M., & Blánquez, P. (2023). Fungal treatment of agricultural washing wastewater: Comparison between two operational strategies. *Journal of Environmental Management*, 325(June 2022).
<https://doi.org/10.1016/j.jenvman.2022.116595>

Benimana, G. U., Ritho, D. C., & Irungu, D. P. (2023). Impact of adopting maize hermetic storage technologies on smallholder farmers' income in Gatsibo District, Rwanda. *Heliyon*, 9(3), e14592.
<https://doi.org/10.1016/j.heliyon.2023.e14592>

Bernués, A., Tenza-Peral, A., Gómez-Baggethun, E., Clemetsen, M., Eik, L. O., & Martín-Collado, D. (2022). Targeting best agricultural practices to enhance ecosystem services in European mountains. *Journal of Environmental Management*, 316(May).
<https://doi.org/10.1016/j.jenvman.2022.115255>

- Bianchi, M., Arnal, A. J., Astorkiza-Andres, M., Clavell-Diaz, J., Marques, A., & Isasa-Sarralde, M. (2024). Life cycle and economic assessment of tidal energy farms in early design phases: Application to a second-generation tidal device. *Heliyon*, 10(12), e32515. <https://doi.org/10.1016/j.heliyon.2024.e32515>
- Bonso, A. B., Motuma Jabessa, G., & Negeri, B. G. (2022). Does enset (Ensete Ventricosum) production upshot smallholder farmers food security and income: Evidence from Dedo Woreda, Jimma zone, Ethiopia. *Journal of Agriculture and Food Research*, 10(January), 100349. <https://doi.org/10.1016/j.jafr.2022.100349>
- Bouregba, H., Hachemi, M., Samatar, A. M., Mekhilef, S., Stojcevski, A., Seyedmahmoudian, M., & Hamidat, A. (2024). Feasibility study of a grid-connected PV/wind hybrid energy system for an urban dairy farm. *Heliyon*, 10(23). <https://doi.org/10.1016/j.heliyon.2024.e40650>
- Bouteska, A., Sharif, T., Bhuiyan, F., & Abedin, M. Z. (2024). Impacts of the changing climate on agricultural productivity and food security: Evidence from Ethiopia. *Journal of Cleaner Production*, 449(May 2023), 141793. <https://doi.org/10.1016/j.jclepro.2024.141793>
- BPS Kabupaten Jepara. (2024). *Volume XX, 2024. Kab. Jepar*, 460.
- Bratley, K. H., & Woodcock, C. E. (2024). Estimating the expansion and reduction of agricultural extent in Egypt using Landsat time series. *International Journal of Applied Earth Observation and Geoinformation*, 133(September), 104141. <https://doi.org/10.1016/j.jag.2024.104141>
- Burchfield, E., Ferro, M., Hüttel, S., Lakes, T., Leonhardt, H.,

- Niedermayr, A., Rissing, A., Seifert, S., & Wesemeyer, M. (2024a). Towards a comprehensive analysis of agricultural land systems in the EU and US: A critical view on publicly available datasets. *Land Use Policy*, 147(September). <https://doi.org/10.1016/j.landusepol.2024.107371>
- Burchfield, E., Ferro, M., Hüttel, S., Lakes, T., Leonhardt, H., Niedermayr, A., Rissing, A., Seifert, S., & Wesemeyer, M. (2024b). Towards a comprehensive analysis of agricultural land systems in the EU and US: A critical view on publicly available datasets. *Land Use Policy*, 147(November 2023), 107371. <https://doi.org/10.1016/j.landusepol.2024.107371>
- Cachetas, D., Vaz-Moreira, I., Pereira, V., & Manaia, C. M. (2024). Towards the definition of an antibiotic resistome signature in wastewater and downstream environments. *Environmental Pollution*, 357(June). <https://doi.org/10.1016/j.envpol.2024.124424>
- Cai, G., Su, X., Li, Y., & Wang, X. (2023). Comparisons between diversified multicropping systems in terms of crop productivity, economic benefits and carbon footprint in the Pearl River Delta region of South China. *Farming System*, 1(3), 100051. <https://doi.org/10.1016/j.farsys.2023.100051>
- Centeno-Telleria, M., Yue, H., Carrol, J., Aizpurua, J. I., & Penalba, M. (2024). O&M-aware techno-economic assessment for floating offshore wind farms: A geospatial evaluation off the North Sea and the Iberian Peninsula. *Applied Energy*, 371(January), 123684. <https://doi.org/10.1016/j.apenergy.2024.123684>
- Cheng, J., Dai, J. J., Liu, Y., & Zhao, W. Q. (2024). The impact of

- agricultural trade on green technological innovation in China's agricultural sector. *IScience*, 27(11), 111101. <https://doi.org/10.1016/j.isci.2024.111101>
- Cheng, J., Xu, Z., Liang, Z., Li, F., Cong, W. F., Zhang, C., Song, L., Wang, C., Zhang, F., Richter, A., van der Werf, W., & Groot, J. C. J. (2023). Farmers perceive diminishing ecosystem services, but overlook dis-services in intensively used agricultural landscapes in the North China Plain. *Journal of Environmental Management*, 347(October), 119060. <https://doi.org/10.1016/j.jenvman.2023.119060>
- Christi, R. F., Edianingsih, P., & Sudrajat, A. (2025). *Farmers : Journal of Community Services*. 6(1), 44–49.
- Dang, Q. T., Rammal, H. G., Ghauri, P. N., Jasovska, P., & Velasquez, S. (2024). 'Caught in the middle': Effects on and reactions of Vietnamese timber exporters in the context of US-China economic sanctions. *Journal of World Business*, 59(6), 101583. <https://doi.org/10.1016/j.jwb.2024.101583>
- de Matos Sá, M., Correia da Fonseca, F. X., Amaral, L., & Castro, R. (2024). Optimising O&M scheduling in offshore wind farms considering weather forecast uncertainty and wake losses. *Ocean Engineering*, 301(March), 117518. <https://doi.org/10.1016/j.oceaneng.2024.117518>
- Dean, J., Vogel, E., & Murphy, F. (2024). Modelling solar photovoltaic systems on dairy farms for cost savings and GHG emission reduction. *Science of the Total Environment*, 948(January), 174874. <https://doi.org/10.1016/j.scitotenv.2024.174874>
- Debie, E. (2024). Analysis of the decision to convert croplands

- into E. Camaldulensis woodlot and its impact on income diversification in Mecha district, Northwest Ethiopia. *Trees, Forests and People*, 17(July), 100636. <https://doi.org/10.1016/j.tfp.2024.100636>
- Derpsch, R., Kassam, A., Reicosky, D., Friedrich, T., Calegari, A., Basch, G., Gonzalez-Sanchez, E., & dos Santos, D. R. (2024). Nature's laws of declining soil productivity and Conservation Agriculture. *Soil Security*, 14(January 2023), 100127. <https://doi.org/10.1016/j.soisec.2024.100127>
- Devoy McAuliffe, F., Judge, F. M., & Murphy, J. (2024). Modelling the installation of next generation floating offshore wind farms. *Applied Energy*, 374(May), 124001. <https://doi.org/10.1016/j.apenergy.2024.124001>
- Díaz, H., & Guedes Soares, C. (2023). Cost and financial evaluation model for the design of floating offshore wind farms. *Ocean Engineering*, 287(P2), 115841. <https://doi.org/10.1016/j.oceaneng.2023.115841>
- Diaz Huerta, J., Bose, A., Wall, D. M., Murphy, J. D., & O'Shea, R. (2023). Assessing the cost variability of emissions abatement in small-scale on-farm anaerobic digestion. *DeCarbon*, 1(May), 100008. <https://doi.org/10.1016/j.decarb.2023.100008>
- Du, J., Zhong, C., Shi, Q., & Zhang, Z. (2024). Unveiling income disparities in rural E-commerce landscape: Evidence from China. *Sustainable Futures*, 8(May), 100243. <https://doi.org/10.1016/j.sftr.2024.100243>
- Duque-Acevedo, M., Belmonte-Ureña, L. J., Terán-Yépez, E., & Camacho-Ferre, F. (2022). Sustainability and circularity in fruit and vegetable production. Perceptions and practices

of reduction and valorization of agricultural waste biomass in south-eastern Spain. *Journal of Environmental Management*, 316(January).
<https://doi.org/10.1016/j.jenvman.2022.115270>

Eliyan, C., McConville, J., Zurbrügg, C., Koottatep, T., Sothea, K., & Vinnerås, B. (2024). Heavy metal contamination of faecal sludge for agricultural production in Phnom Penh, Cambodia. *Journal of Environmental Management*, 349(October 2023).
<https://doi.org/10.1016/j.jenvman.2023.119436>

Feng, J., & Wang, Y. (2024). Does digital inclusive finance promote agricultural development? A test based on threshold and spillover effects. *Finance Research Letters*, 69(PA), 106104. <https://doi.org/10.1016/j.frl.2024.106104>

Feng, X., Lin, S., Liang, Y., Lai, X., & Liu, M. (2024). Coordinated risk-averse distributionally robust optimization for maintenance and generation schedules of offshore wind farm cluster. *International Journal of Electrical Power and Energy Systems*, 159(May 2023), 109993. <https://doi.org/10.1016/j.ijepes.2024.109993>

Fewella, L. N. (2024). Smartification furniture manufacturing: A furniture prototype with thermal-based sensors (Visions and Challenges). *Results in Engineering*, 24(October), 103508. <https://doi.org/10.1016/j.rineng.2024.103508>

Finger, R., Sok, J., Ahovi, E., Akter, S., Bremmer, J., Dachbrodt-Saaydeh, S., de Lauwere, C., Kreft, C., Kudsk, P., Lambarraa-Lehnhardt, F., McCallum, C., Lansink, A. O., Wauters, E., & Möhring, N. (2024). Towards sustainable crop protection in agriculture: A framework for research

- and policy. *Agricultural Systems*, 219(June).
<https://doi.org/10.1016/j.agry.2024.104037>
- Forgenie, D., Khoiriyah, N., Mahase-Forgenie, M., & Adeleye, B. N. (2023). An error-corrected linear approximate almost ideal demand system model for imported meats and seafood in Indonesia. *Heliyon*, 9(11), e21390.
<https://doi.org/10.1016/j.heliyon.2023.e21390>
- Garnier, J., Billen, G., Aguilera, E., Lassaletta, L., Einarsson, R., Serra, J., Cameira, M. do R., Marques-dos-Santos, C., & Sanz-Cobena, A. (2023). How much can changes in the agro-food system reduce agricultural nitrogen losses to the environment? Example of a temperate-Mediterranean gradient. *Journal of Environmental Management*, 337(March).
<https://doi.org/10.1016/j.jenvman.2023.117732>
- Georgali, P. Z. M., Afxentiou, N., Kylili, A., & Fokaides, P. A. (2021). Definition of optimal agricultural plastic waste collection centers with advanced spatial analysis tools. *Cleaner Engineering and Technology*, 5, 100326.
<https://doi.org/10.1016/j.clet.2021.100326>
- Golestani, N., Arzaghi, E., Abbassi, R., Garaniya, V., & Meng, H. (2023). A system dynamics model of offshore wind farm degradation: Enabling operation and maintenance planning under foreseen asset management impacts. *Applied Ocean Research*, 138(June), 103685.
<https://doi.org/10.1016/j.apor.2023.103685>
- Gordon, S., Wagner, T., Smalling, K., & Devereux, O. (2023). Estrogenic activity response to best management practice implementation in agricultural watersheds in the Chesapeake Bay watershed. *Journal of Environmental*

- Management*, 326(PA), 116734.
<https://doi.org/10.1016/j.jenvman.2022.116734>
- Guerrero-Brotons, M., Álvarez-Rogel, J., Arce, M. I., & Gómez, R. (2023). Addressing the C/N imbalance in the treatment of irrigated agricultural water by using a hybrid constructed wetland at field-scale. *Journal of Environmental Management*, 348(October).
<https://doi.org/10.1016/j.jenvman.2023.119329>
- Guerrero Lara, L., Feola, G., & Driessen, P. (2024). Drawing boundaries: Negotiating a collective ‘we’ in community-supported agriculture networks. *Journal of Rural Studies*, 106(January), 103197.
<https://doi.org/10.1016/j.jrurstud.2024.103197>
- Gunawan, H., Setyawati, T., Atmoko, T., Subarudi, Kwatrina, R. T., Yeny, I., Yuwati, T. W., Effendy, R., Abdullah, L., Mukhlisi, Lastini, T., Arini, D. I. D., Sari, U. K., Sitepu, B. S., Pattiselanno, F., & Kuswanda, W. (2024). A review of forest fragmentation in Indonesia under the DPSIR framework for biodiversity conservation strategies. *Global Ecology and Conservation*, 51(May 2023), e02918.
<https://doi.org/10.1016/j.gecco.2024.e02918>
- Hang, Z. (2024). Assessing the economic viability of prolonged fuel cycles in the agricultural sector: Impacts on productivity, Human capital and sustainability. *Heliyon*, 10(23), e39594.
<https://doi.org/10.1016/j.heliyon.2024.e39594>
- Hayo, L., & Hasegawa, H. (2024). Enhancing emission reductions in South African agriculture: The crucial role of carbon credits in incentivizing climate-smart farming

- practices. *Sustainable Futures*, 8(August), 100260.
<https://doi.org/10.1016/j.sftr.2024.100260>
- Hendrawan, D., & Musshoff, O. (2024). Risky for the income, useful for the environment: Predicting farmers' intention to adopt oil palm agroforestry using an extended theory of planned behaviour. *Journal of Cleaner Production*, 475(September), 143692.
<https://doi.org/10.1016/j.jclepro.2024.143692>
- Hou, D., & Wang, X. (2024). Unveiling the role of agricultural insurance in driving rural industry revitalization in China. *Heliyon*, 10(14), e34483.
<https://doi.org/10.1016/j.heliyon.2024.e34483>
- Ibrahim, A., Baliarti, E., Budisatria, I. G. S., Artama, W. T., Widayanti, R., Maharani, D., Tavares, L., & Margawati, E. T. (2023). Genetic diversity and relationship among Indonesian local sheep breeds on Java Island based on mitochondrial cytochrome b gene sequences. *Journal of Genetic Engineering and Biotechnology*, 21(1), 34.
<https://doi.org/10.1186/s43141-023-00491-z>
- Imran Hasan Tusar, M., & Sarker, B. R. (2024). Technician assignment in multi-shift maintenance schedules in an offshore wind farm. *Renewable Energy Focus*, 51(August), 100616. <https://doi.org/10.1016/j.ref.2024.100616>
- Jarčuška, B., Gálffyová, M., Schnürmacher, R., Baláž, M., Mišík, M., Repel, M., Fulín, M., Kerestúr, D., Lackovičová, Z., Mojžiš, M., Zámečník, M., Kaňuch, P., & Krištín, A. (2024). Solar parks can enhance bird diversity in agricultural landscape. *Journal of Environmental Management*, 351(June 2023). <https://doi.org/10.1016/j.jenvman.2023.119902>

- Kashyap, D., de Vries, M., Pronk, A., & Adiyoga, W. (2023). Environmental impact assessment of vegetable production in West Java, Indonesia. *Science of the Total Environment*, 864(November 2022), 160999. <https://doi.org/10.1016/j.scitotenv.2022.160999>
- Kehinde, A. D., & Ogundeji, A. A. (2023). Distributive impacts of non-farm income on output and farm income of cassava farmers in Southwestern Nigeria. *Scientific African*, 19, e01535. <https://doi.org/10.1016/j.sciaf.2022.e01535>
- Khasanah, H. (2025). *ECO-FRIENDLY FEED MIGRATION : QUALITY OF LOCAL BROILER FINISHER PELLETS WITH NATURAL ADHESIVES*. 25(March), 1–7. <https://doi.org/10.24198/jit.v25i1.54079>
- Kitole, F. A., Ojo, T. O., & Mkuna, E. J. (2024). Unveiling the nexus between maltreatment of smallholder youth farmers and agricultural productivity in Tanzania. *Scientific African*, 25, e02270. <https://doi.org/10.1016/j.sciaf.2024.e02270>
- Kusmayadi, T., Hadiana, M. H., & Tanuwiria, U. H. (2020). Reproductive Performances of Friesian Holstein Dairy Cows in Different Agricultural Ecosystems. *Buletin Peternakan*, 44(2), 8–14. <https://doi.org/10.21059/buletinpeternakan.v44i2.39917>
- Kusmiyati, K., Wijaya, D. K., Hartono, B. J. R., Shidik, G. F., & Fudholi, A. (2023). Harnessing the power of cow dung: Exploring the environmental, energy, and economic potential of biogas production in Indonesia. *Results in Engineering*, 20(September), 101431. <https://doi.org/10.1016/j.rineng.2023.101431>

- Kwizerimana, S., Mugwe, J., & Nigat, B. (2023). Impact of collective marketing participation on farmers' income: Evidence from smallholder avocado farmers of Murang'a County, Kenya. *Social Sciences and Humanities Open*, 8(1), 100614. <https://doi.org/10.1016/j.ssaho.2023.100614>
- Kyoi, S., Mori, K., & Matsushita, K. (2024). Seeking sustainable efficient global agricultural production with nexus approach. *Journal of Cleaner Production*, 477(September), 143805. <https://doi.org/10.1016/j.jclepro.2024.143805>
- Laroche, P. C. S. J., Gómez-Suárez, M., Persson, U. M., Pendrill, F., Schwarzmüller, F., Schulp, C. J. E., & Kastner, T. (2024). Accounting for trade in derived products when estimating European Union's role in driving deforestation. *Ecological Economics*, 224(November 2022). <https://doi.org/10.1016/j.ecolecon.2024.108288>
- Lazakis, I., & Khan, S. (2021). An optimization framework for daily route planning and scheduling of maintenance vessel activities in offshore wind farms. *Ocean Engineering*, 225, 108752. <https://doi.org/10.1016/j.oceaneng.2021.108752>
- Le Page, T., Ferchiou, A., Dufour, S., Kabera, F., Dubuc, J., Lhermie, G., Raboisson, D., & Roy, J. P. (2024). Dairy farmer income, working time, and antimicrobial use under different dry cow therapy protocols. *Journal of Dairy Science*, 107(10), 8115–8129. <https://doi.org/10.3168/jds.2023-24407>
- Li, M., Bijvoet, B., Wu, K., Jiang, X., & Negenborn, R. R. (2024). Optimal chartering decisions for vessel fleet to support offshore wind farm maintenance operations. *Ocean Engineering*, 298(January), 117202.

<https://doi.org/10.1016/j.oceaneng.2024.117202>

- Li, M., Jiang, X., Carroll, J., & Negenborn, R. R. (2022). A multi-objective maintenance strategy optimization framework for offshore wind farms considering uncertainty. *Applied Energy*, 321(January), 119284. <https://doi.org/10.1016/j.apenergy.2022.119284>
- Li, M., Jiang, X., Carroll, J., & Negenborn, R. R. (2023). A closed-loop maintenance strategy for offshore wind farms: Incorporating dynamic wind farm states and uncertainty-awareness in decision-making. *Renewable and Sustainable Energy Reviews*, 184(June), 113535. <https://doi.org/10.1016/j.rser.2023.113535>
- Li, M., Jiang, X., Carroll, J., & Negenborn, R. R. (2024). Operation and maintenance management for offshore wind farms integrating inventory control and health information. *Renewable Energy*, 231(May), 120970. <https://doi.org/10.1016/j.renene.2024.120970>
- Liang, H., & Meng, Y. (2024). Impact of direct payments and non-financial support on smallholder income from environmentally friendly agriculture in Tohoku region, Japan. *Journal of Environmental Management*, 351(November 2023), 119698. <https://doi.org/10.1016/j.jenvman.2023.119698>
- Liao, L., Diaz-Rainey, I., Kuruppuarachchi, D., & Gehricke, S. (2023). The role of fundamentals and policy in New Zealand's carbon prices. *Energy Economics*, 124(March), 106737. <https://doi.org/10.1016/j.eneco.2023.106737>
- Llena, M., Carreras, S., Bernatek-Jakiel, A., Ollero, A., & Nadal-Romero, E. (2024). Agricultural land abandonment linked

to pipe collapse and gully development: Reconstruction from archival SfM and LiDAR datasets. *Geoderma*, 449(March), 116995.

<https://doi.org/10.1016/j.geoderma.2024.116995>

Luan, X., Yasmeen, R., & Hassan Shah, W. U. (2024). Assessing energy efficiency, regional disparities in production technology, and factors influencing total factor energy productivity change in the agricultural sector of China. *Heliyon*, 10(15), e35043.

<https://doi.org/10.1016/j.heliyon.2024.e35043>

Ma, X., & Yuan, H. (2024). Ecological footprint and carrying capacity of agricultural water-land-energy nexus in China. *Ecological Indicators*, 168(November), 112786.

<https://doi.org/10.1016/j.ecolind.2024.112786>

MacAfee, E., de Jong, E., & Lohr, A. J. (2024). Leveraging local knowledge for landslide disaster risk reduction in an urban informal settlement in Manado, Indonesia. *International Journal of Disaster Risk Reduction*, 111(March), 104710. <https://doi.org/10.1016/j.ijdr.2024.104710>

Malcher, J., Critchell, K., Matthews, T. G., & Lester, R. E. (2023). How wide, how much? A framework for quantifying the economic and ecological outcomes of altering riparian width on agricultural land. *Science of the Total Environment*, 897(January), 165342.

<https://doi.org/10.1016/j.scitotenv.2023.165342>

Maryoni, H. S., Gayatri, S., Ekowati, T., & Sunarti, D. (2023). Broiler Business is the Best Diversification for Furniture Business. *TEM Journal*, 12(2), 890–898. <https://doi.org/10.18421/TEM122-35>

- Maryoni, H. S., & Gunawan, I. (2025). Improving operational efficiency analysis through marketing performance (Cymbopogon Nardus L.). *Scientific Horizons*, 28(1), 110–118. <https://doi.org/10.48077/scihor1.2025.110>
- Mishra, A., Alzoubi, Y. I., & Gavrilovic, N. (2024). Quality attributes of software architecture in IoT-based agricultural systems. *Smart Agricultural Technology*, 8(August), 100523. <https://doi.org/10.1016/j.atech.2024.100523>
- Mng'ong'o, M. E., Mwaipopo, R. E., Ojija, F., & Matimbwa, H. (2024). The role of conservation agriculture in enhancing biodiversity and common beans productivity. *Soil Advances*, 2(September), 100018. <https://doi.org/10.1016/j.soilad.2024.100018>
- Moch Aminnudin, & Hamdi Sari Maryoni. (2021). Analisis Kesejahteraan Usaha Kecil Dan Menengah (Ukm) Di Kabupaten Jepara. *Jurnal Ilmiah Cano Ekonomos*, 10(2), 26–31. <https://doi.org/10.30606/cano.v10i2.1173>
- Morugán-Coronado, A., Pérez-Rodríguez, P., Insolia, E., Soto-Gómez, D., Fernández-Calviño, D., & Zornoza, R. (2022). The impact of crop diversification, tillage and fertilization type on soil total microbial, fungal and bacterial abundance: A worldwide meta-analysis of agricultural sites. *Agriculture, Ecosystems and Environment*, 329. <https://doi.org/10.1016/j.agee.2022.107867>
- Mpakairi, K. S., Dube, T., Sibanda, M., & Mutanga, O. (2024). Remote sensing crop water productivity and water use for sustainable agriculture during extreme weather events in South Africa. *International Journal of Applied Earth*

- Observation and Geoinformation*, 129(March), 103833.
<https://doi.org/10.1016/j.jag.2024.103833>
- Niero, G., Censi, S., Mian, C., Manuelian, C. L., Rovai, M., Tsiplakou, E., da Costa, L., Fuerst-Waltl, B., Cruz, A. G., Berry, D. P., Lopez-Villalobos, N., Masi, A., Rakwal, R., Hambardzumyan, G., Borrisser-Pairó, F., Koczura, M., Trujillo Rojas, L. M., Albanell, E., Guaman Rivera, S., ... De Marchi, M. (2024). Low public awareness opens up new opportunities for highlighting milk as an iodine dietary source. *Journal of Dairy Science*, 107(12), 10231–10243.
<https://doi.org/10.3168/jds.2024-25030>
- Ningrum, L., Nooraeni, R., Berliana, S. M., & Sari, L. K. (2024). Association of SDG Indicators of the Social Development Pillar in Indonesia using the Apriori Algorithm. *Procedia Computer Science*, 245(C), 450–459.
<https://doi.org/10.1016/j.procs.2024.10.271>
- Owusu Junior, P., Agyei, S. K., Adam, A. M., & Bossman, A. (2022). Time-frequency connectedness between food commodities: New implications for portfolio diversification. *Environmental Challenges*, 9(June), 100623.
<https://doi.org/10.1016/j.envc.2022.100623>
- Panoutsopoulos, H., Espejo-Garcia, B., Raaijmakers, S., Wang, X., Fountas, S., & Brewster, C. (2024). Investigating the effect of different fine-tuning configuration scenarios on agricultural term extraction using BERT. *Computers and Electronics in Agriculture*, 225(August 2023).
<https://doi.org/10.1016/j.compag.2024.109268>
- Pei, D., Wen, Y., Li, W., Ma, Z., Guo, L., Zhang, J., Liu, M., Mu, X., & Wang, Z. (2024). Agricultural water rebound effect

- and its driving factors in Xinjiang, China. *Agricultural Water Management*, 304(September), 109086. <https://doi.org/10.1016/j.agwat.2024.109086>
- Peinado Gonzalo, A., Benmessaoud, T., Entezami, M., & García Márquez, F. P. (2022). Optimal maintenance management of offshore wind turbines by minimizing the costs. *Sustainable Energy Technologies and Assessments*, 52(March). <https://doi.org/10.1016/j.seta.2022.102230>
- Peña-Sanchez, Y., Penalba, M., Knudsen, T., Nava, V., & Pardo, D. (2024). Development and validation of a health-aware floating offshore wind farm simulation platform: FOWLTY. *Wind Energy and Engineering Research*, 2(May), 100008. <https://doi.org/10.1016/j.weer.2024.100008>
- Perdinan, Tjahjono, R. E. P., Infrawan, D. Y. D., Armanto, A. N., Pratiwi, S. D., Putra, E. I., Yonvitner, Oktaviani, S., Lestari, K. G., Adi, R. F., Sudiarno, A. R., Kaban, E., Widyaningrum, R., & Mayor, J. (2024). Management Strategies of Tropical Savanna Ecosystem for Multiple Benefits of Community Livelihoods in Semiarid Region of Indonesia. *World Development Sustainability*, 4(March), 100137. <https://doi.org/10.1016/j.wds.2024.100137>
- Pérez-Blanco, C. D., Gil-García, L., & Saiz-Santiago, P. (2021). An actionable hydroeconomic Decision Support System for the assessment of water reallocations in irrigated agriculture. A study of minimum environmental flows in the Douro River Basin, Spain. *Journal of Environmental Management*, 298(July). <https://doi.org/10.1016/j.jenvman.2021.113432>
- Pinheiro, J. S., De Vries, A., Rodrigues, J. P. P., & Marcondes, M.

- I. (2021). Production costs, economic viability, and risks associated with compost bedded pack, freestall, and drylot systems in dairy farms. *Animal*, 15(12), 100404. <https://doi.org/10.1016/j.animal.2021.100404>
- Ponce-Robles, L., Benelhadj, L., García-García, A. J., Pedrero-Salcedo, F., Nortes-Tortosa, P. A., Albacete, J., & Alarcón, J. J. (2022). Risk assessment for uptake and accumulation of pharmaceuticals by baby leaf lettuce irrigated with reclaimed water under commercial agricultural activities. *Journal of Environmental Management*, 324(September). <https://doi.org/10.1016/j.jenvman.2022.116321>
- Pradel, M., David, R., & Gaudin, F. (2024). O-AMIE: A tool combining systems engineering and life cycle assessment to eco-design agricultural practices and assess their environmental impacts. *Computers and Electronics in Agriculture*, 227(P1), 109558. <https://doi.org/10.1016/j.compag.2024.109558>
- Ragasa, C., Osei-Mensah, Y. O., & Amewu, S. (2022). Impact of fish feed formulation training on feed use and farmers' income: Evidence from Ghana. *Aquaculture*, 558(May), 738378. <https://doi.org/10.1016/j.aquaculture.2022.738378>
- Ramadhan, A., Arymurthy, A. M., Sensuse, D. I., & Muladno. (2021). Modeling e-Livestock Indonesia. *Heliyon*, 7(8), e07754. <https://doi.org/10.1016/j.heliyon.2021.e07754>
- Ramirez-Contreras, N. E., Fontanilla-Díaz, C. A., Pardo, L. E., Delgado, T., Munar-Florez, D., Wicke, B., Ruíz-Delgado, J., van der Hilst, F., Garcia-Nuñez, J. A., Mosquera-Montoya, M., & Faaij, A. P. C. (2022). Integral analysis of environmental and economic performance of combined

- agricultural intensification & bioenergy production in the Orinoquia region. *Journal of Environmental Management*, 303(June 2021).
<https://doi.org/10.1016/j.jenvman.2021.114137>
- Ramirez, S., & Bauso, D. (2022). Dynamic coordinated maintenance of wind-farms with risk-averse agents under CVaR criterion. *Automatica*, 146, 110568.
<https://doi.org/10.1016/j.automatica.2022.110568>
- Ramos-Gerena, C. E. (2024). Regulating belonging: Contradictions in Puerto Rico's agricultural land-use policies. *Land Use Policy*, 145(June), 107279.
<https://doi.org/10.1016/j.landusepol.2024.107279>
- Rathore, S. S., Babu, S., Shekhawat, K., Kumar, V., Gairola, A., Wani, O. A., & Singh, V. K. (2024). Exploring sustainable agricultural production models to coordinate system productivity, soil biological health and eco-efficiency in the semi-arid region. *Environmental and Sustainability Indicators*, 24(September), 100480.
<https://doi.org/10.1016/j.indic.2024.100480>
- Roberts, M., Hawes, C., & Young, M. (2023). Environmental management on agricultural land: Cost benefit analysis of an integrated cropping system for provision of environmental public goods. *Journal of Environmental Management*, 331(January), 117306.
<https://doi.org/10.1016/j.jenvman.2023.117306>
- Sánchez, A. C., Jones, S. K., Purvis, A., Estrada-Carmona, N., & De Palma, A. (2022). Landscape and functional groups moderate the effect of diversified farming on biodiversity: A global meta-analysis. *Agriculture, Ecosystems and*

Environment, 332(March).

<https://doi.org/10.1016/j.agee.2022.107933>

Schneider, A. K., Klabunde, F., Buck, L., Ohlhoff, M., Reis, L., Olvermann, M., Kauffeld, S., Engel, B., Glatzel, G., Schröder, B., & Frerichs, L. (2023). Drawing transformation pathways for making use of joint effects of food and energy production with biodiversity agriphotovoltaics and electrified agricultural machinery. *Journal of Environmental Management*, 335(February). <https://doi.org/10.1016/j.jenvman.2023.117539>

Siyal, A. W., Gerbens-Leenes, P. W., & Vaca-Jiménez, S. D. (2023). Freshwater competition among agricultural, industrial, and municipal sectors in a water-scarce country. Lessons of Pakistan's fifty-year development of freshwater consumption for other water-scarce countries. *Water Resources and Industry*, 29. <https://doi.org/10.1016/j.wri.2023.100206>

Sjulgård, H., Colombi, T., & Keller, T. (2022). Spatiotemporal patterns of crop diversity reveal potential for diversification in Swedish agriculture. *Agriculture, Ecosystems and Environment*, 336(December 2021), 108046. <https://doi.org/10.1016/j.agee.2022.108046>

Smith, D., Ilham, N., Putri, R., Widjaja, E., Nugroho, W. S., Cooper, T. L., Nuradji, H., Dharmayanti, N. L. P. I., & Mayberry, D. (2024). Calculation of livestock biomass and value by province in Indonesia: Key information to support policymaking. *Preventive Veterinary Medicine*, 226, 106164. <https://doi.org/10.1016/j.prevetmed.2024.106164>

SUDARYANTO, T., ERWIDODO, DERMOREDOJO, S. K.,

- PURBA, H. J., RACHMAWATI, R. R., & IRAWAN, A. R. (2023). Regional rural transformation and its association with household income and poverty incidence in Indonesia in the last two decades. *Journal of Integrative Agriculture*, 22(12), 3596–3609. <https://doi.org/10.1016/j.jia.2023.11.029>
- Sudol, T. A., Miller Hesed, C. D., Clark, J. M., & Moser, F. C. (2023). Resisting-accepting-directing sea level rise on the Chesapeake Bay: Agricultural producers' motivations and actions. *Journal of Environmental Management*, 332(January), 117355. <https://doi.org/10.1016/j.jenvman.2023.117355>
- Suganda, A., Mujahidin Fahmid, I., Baba, S., & Salman, D. (2024). Fluctuations and disparity in broiler and carcass price before during and after covid-19 pandemic in Indonesia. *Heliyon*, 10(8), e29073. <https://doi.org/10.1016/j.heliyon.2024.e29073>
- Sukmono, Y., Hadibarata, T., Kristanti, R. A., Singh, A., Al Farraj, D. A., & Elshikh, M. S. (2024). Occurrence and visual characterization of microplastics from Mahakam River at Tenggarong City, Indonesia. *Journal of Contaminant Hydrology*, 267(March), 104440. <https://doi.org/10.1016/j.jconhyd.2024.104440>
- Suminah, S., Suwarto, S., Sugihardjo, S., Anantanyu, S., & Padmaningrum, D. (2022). Determinants of micro, small, and medium-scale enterprise performers' income during the Covid-19 pandemic era. *Heliyon*, 8(7), e09875. <https://doi.org/10.1016/j.heliyon.2022.e09875>
- Swastika, D. K. S., Priyanti, A., Hasibuan, A. M., Sahara, D., Arya, N. N., Malik, A., Ilham, N., Sayekti, A. L., Triastono,

- J., Asnawi, R., Sugandi, D., Hayati, N. Q., & Atman, A. (2024). Pursuing circular economics through the integrated crop-livestock systems: An integrative review on practices, strategies and challenges post Green Revolution in Indonesia. *Journal of Agriculture and Food Research*, 18(June), 101269. <https://doi.org/10.1016/j.jafr.2024.101269>
- Tabe-Ojong, M. P., Alamsyah, Z., & Sibhatu, K. T. (2023). Oil palm expansion, food security and diets: Comparative evidence from Cameroon and Indonesia. *Journal of Cleaner Production*, 418(June), 138085. <https://doi.org/10.1016/j.jclepro.2023.138085>
- Tacconi, F., Lefroy, D., Waha, K., Ojeda, J. J., Leith, P., & Mohammed, C. (2024). "Agricultural diversity, farmers' definitions and uses: The case of Tasmanian farms". *Journal of Rural Studies*, 108(February), 103266. <https://doi.org/10.1016/j.jrurstud.2024.103266>
- Tan, S., Zhong, Y., Yang, F., & Gong, X. (2021). The impact of Nanshan National Park concession policy on farmers' income in China. *Global Ecology and Conservation*, 31(May), e01804. <https://doi.org/10.1016/j.gecco.2021.e01804>
- Tessitore, S., Testa, F., Di Iorio, V., & Iraldo, F. (2025). Life cycle assessment as an enabler of an environmental sustainability strategy evolution amid institutional pressures: A best practice from the furniture industry. *Cleaner Environmental Systems*, 16(January), 100255. <https://doi.org/10.1016/j.cesys.2025.100255>
- Torres-Gonzalez, M., Pikosky, M. A., Ricklefs-Johnson, K., Fulgoni, K., Fulgoni, V. L., Agarwal, S., & Cifelli, C. J. (2024). Whole milk intake is associated with lower body

- weight and body mass index in American adults. *Nutrition Research*, 132, 180–189.
<https://doi.org/10.1016/j.nutres.2024.11.002>
- Tsai, H. W., & Lee, Y. C. (2024). Will changing land use and cropping practices affect resource use efficiency and environmental sustainability of agricultural systems? A hierarchical emergy assessment approach. *Ecological Indicators*, 160(March), 111933.
<https://doi.org/10.1016/j.ecolind.2024.111933>
- Tukuboya, F., Mizuno, K., Herdiansyah, H., & Frimawaty, E. (2024). Togutil tribe's ecological hunting calendar on Halmahera Island, Indonesia. *Global Ecology and Conservation*, 55(February), e03244.
<https://doi.org/10.1016/j.gecco.2024.e03244>
- Ummah, M. S. (2019). No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析Title. *Sustainability (Switzerland)*, 11(1), 1–14.
http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI
- Valerio, E., Hilmiati, N., Prior, J., & Panjaitan, T. (2024). Steering the herd or missing the mark? Navigating the role of research for development projects as innovation intermediaries in the Indonesian cattle sector. *Agricultural Systems*, 214(August 2023), 103843.
<https://doi.org/10.1016/j.agsy.2023.103843>

- Valerio, E., Hilmiati, N., Stella Thei, R., Safa Barraza, A., & Prior, J. (2024). Innovation for whom? The case of women in cattle farming in Nusa Tenggara Barat, Indonesia. *Journal of Rural Studies*, 106(May 2023), 103198. <https://doi.org/10.1016/j.jrurstud.2024.103198>
- Vásquez, C., Klik, A., Stumpp, C., Laaha, G., Strauss, P., Özcelik, N. B., Pistotnik, G., Yin, S., Dostal, T., Gaona, G., & Strohmeier, S. (2024). Rainfall erosivity across Austria's main agricultural areas: Identification of rainfall characteristics and spatiotemporal patterns. *Journal of Hydrology: Regional Studies*, 53. <https://doi.org/10.1016/j.ejrh.2024.101770>
- Villegas-Cayllahua, E. A., Dutra, D. R., de Oliveira, R. F., Pereira, M. R., Cavalcanti, É. N. F., Ferrari, F. B., de Souza, R. A., de Almeida Fidelis, H., Giampietro-Ganeco, A., de Souza, P. A., de Mello, J. L. M., & Borba, H. (2024). Concentration of lipids, cholesterol, and fatty acid profile in chicken breast meat affected by wooden breast myopathy frozen for up to 12 mo. *Poultry Science*, 103(1), 1–8. <https://doi.org/10.1016/j.psj.2023.103153>
- Wang, H., Li, T., Nishida, E., Kato, Y., Fukano, Y., & Guo, W. (2023). Drone-Based Harvest Data Prediction Can Reduce On-Farm Food Loss and Improve Farmer Income. *Plant Phenomics*, 5, 86. <https://doi.org/10.34133/plantphenomics.0086>
- Wanzala, R. W., Marwa, N., & Lwanga, E. N. (2024). Impact of agricultural credit on coffee productivity in Kenya. *World Development Sustainability*, 5(May), 100166. <https://doi.org/10.1016/j.wds.2024.100166>

- Widiono, S., Wahyuni, E. S., Kolopaking, L. M., & Satria, A. (2024). Livelihood vulnerability of indigenous people to climate change around the Kerinci Seblat National Park in Bengkulu, Indonesia. *Regional Sustainability*, 5(4), 100181. <https://doi.org/10.1016/j.regsus.2024.100181>
- Wonde, K. M., Tsehay, A. S., & Lemma, S. E. (2022). Training at farmers training centers and its impact on crop productivity and households' income in Ethiopia: A propensity score matching (PSM) analysis. *Heliyon*, 8(7), e09837. <https://doi.org/10.1016/j.heliyon.2022.e09837>
- Xu, C., Wang, J., Sun, Y., Liu, M., Liu, J., & Sajjad, M. M. (2024). Deep learning-driven land cover monitoring and landscape ecological health assessment: A dynamic study in coastal regions of the China–Pakistan Economic Corridor from 2000 to 2023. *Ecological Indicators*, 169(November), 112860. <https://doi.org/10.1016/j.ecolind.2024.112860>
- Yang, C., Zhou, D., Zou, M., Yang, X., Lai, Q., & Liu, F. (2024). The impact of social capital on rural residents' income and its mechanism analysis —Based on the intermediary effect test of non-agricultural employment. *Heliyon*, 10(14), e34228. <https://doi.org/10.1016/j.heliyon.2024.e34228>
- Yin, Y., Gulzar, F., Mamadiyarov, Z., Aizhan, A., Yadav, R. S., & Chen, C. (2024). An analysis of the rebound impact of energy consumption and the factors that influence it in China's agricultural productivity. *Energy Strategy Reviews*, 56(November), 101585. <https://doi.org/10.1016/j.esr.2024.101585>
- Yin, Z., Liu, Y., Tang, L., Zhou, W., & Pan, Y. (2023). Spatial-

- temporal evolution of agricultural land utilization benefits and tradeoffs/synergies in the Beijing-Tianjin-Hebei region. *Ecological Indicators*, 156(August), 111110. <https://doi.org/10.1016/j.ecolind.2023.111110>
- Yuliana, Y., Ekowati, T., & Handayani, M. (2017). Efisiensi Alokasi Penggunaan Faktor Produksi pada Usahatani Padi di Kecamatan Wirosari, Kabupaten Grobogan. *AGRARIS: Journal of Agribusiness and Rural Development Research*, 3(1). <https://doi.org/10.18196/agr.3143>
- Zhang, F., Bai, Y., Xuan, X., & Cai, Y. (2024). Unveiling the dynamic flows and spatial inequalities arising from agricultural methane and nitrous oxide emissions. *Ecological Informatics*, 84(January), 102863. <https://doi.org/10.1016/j.ecoinf.2024.102863>
- Zhang, F., Wang, H., Qin, T., Rojas, R., Qiu, L., Yang, S., Fang, Z., & Xue, S. (2023). Towards sustainable management of agricultural resources: A framework to assess the relationship between water, soil, economic factors, and grain production. *Journal of Environmental Management*, 344(June), 118401. <https://doi.org/10.1016/j.jenvman.2023.118401>
- Zhou, K., & Li, J. (2024). Impact of the comprehensive agricultural water use reform policy on food production: Quasinatural experimental evidence from China. *Agricultural Water Management*, 302(January), 108981. <https://doi.org/10.1016/j.agwat.2024.108981>

PROFIL PENULIS

Dr. Ir. Markus Patiung, MP



Penulis merupakan dosen di Universitas Wijaya Kusuma Surabaya. Jabatan fungsional akademik penulis adalah Lektor Kepala dan saat ini menjabat sebagai Dekan Fakultas Pertanian hingga tahun 2025-2029. Lahir di Kota Tana Toraja pada tanggal 22 Oktober 1963. Pendidikan S1 dari almater

tercinta yaitu Universitas Wijaya Kusuma Surabaya tahun 1989. Selanjutnya, S2 dan S3 ditempuh di Universitas Gadjah Mada Yogyakarta tahun 1995 dengan konsentrasi keilmuan Ekonomi Pertanian, dan Ekonomi Sumber daya Lingkungan dari Universitas Brawijaya Malang tahun 2014. Aktif dalam keorganisasian Komisariat PERHEPI Surabaya sebagai penasehat dari tahun 2024 hingga sekarang. Pengalaman dalam kepanitian seminar nasional diantaranya menjadi ketua panitia di seminar nasional Magister Agrobisnis dan bekerja sama dengan PERHEPI di beberapa tahun terakhir dari tahun 2020 hingga tahun 2022. Pengalaman kerjasama dengan pemerintah daerah diantaranya adalah penyusunan kegiatan penanggulangan kemiskinan dengan Pemerintah Kabupaten Bojonegoro tahun 2025, Kerjasama dengan Pemerintah Kabupaten Gresik kegiatan program penyusunan penanggulangan kemiskinan tahun 2025.

Selanjutnya program Kerjasama penyusunan pengangulangan kemiskinan di Kabupaten Pacitan tahun 2025, dan program yang sama dengan Kabupaten Jombang tahun 2024 dan masih banyak kerja sama yang telah dirintis oleh penulis untuk berusaha mengabdikan dedikasinya untuk pengembangan Pendidikan tinggi di Indonesia.

Dr. Hamdi Sarimaryoni, SE., M.Ec. Dev



Penulis merupakan Dosen pada Program Studi Magister Agribisnis di Universitas Wijaya Kusuma Surabaya. Lahir dari keluarga sederhana anak pertama dari lima bersaudara dengan orang tua Bapak Sarifuddin Saring DH dan Ibu Sumartini. Lahir di Medan, tanggal 14 Juli 1980 dengan riwayat pendidikan dari S1 ditempuh pada tahun 2008 di Prodi Manajemen Universitas Sarjanawiyata Tamansiswa Yogyakarta (UST). S2 ditempuh di Universitas Gadjah Mada Yogyakarta pada Program Studi Magister Ekonomi Pembangunan (MEP-UGM) tahun 2012. Selanjutnya, studi S3 di Program Studi Doktor Ilmu Peternakan Fakultas Pertanian dan Peternakan Universitas Diponegoro (Undip- Semarang) tahun 2023. Bidang konsentrasi keilmuan yang di geluti adalah diversifikasi sosial ekonomi peternakan. Pengalaman mengajar mata kuliah UMKM, Makro Ekonomi, Mikro Ekonomi, Manajemen Keuangan, dan Strategi Manajemen. ID scopus 58304466600 dengan Id Sinta 6864653 dan ID Orcid 0000-0002-7679-7074. Email: hamdi@uwks.ac.id.