



CURRICULUM VITAE

DR. MICHAEL ASIGBAASE

A. Profile/Personal Details

Profile

Name	Dr. Michael Asigbaase
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ORCID ID	0000-0002-9162-1149

B. Educational Background

SN	Dates	Degree/Diploma/Certificate Obtained	Institution
1	Oct. 2015 – Oct. 2019	PhD Environmental Science	University of Nottingham, United Kingdom
2	May 2018 – Jan. 2019	Certificate in Preparing to Teach in Higher Education	University of Nottingham, United Kingdom
3	Sept. 2011 – Sept. 2012	MSc. Natural Resources (Sustainable Environmental Management)	University of Greenwich, United Kingdom
4	Aug. 2006 – June 2010	BSc. Natural Resources Management (Silviculture and Forest Management)	Kwame Nkrumah University of Science and Technology, Ghana
5	Jan. 2011 – Mar. 2011	Diploma Human Resources Management (Single Subject)	Institute of Commercial Management, United Kingdom
6	Oct. 2010 – Dec. 2010	Diploma Project Management (Single Subject)	Institute of Commercial Management, United Kingdom

C. WORK/PROFESSIONAL EXPERIENCE

SN	Dates	Employment Organisation	Department/School/Unit	Position Held
1	Feb. 2021 – date	University of Energy and Natural Resources	Forest Science	Lecturer
2	Mar. 2020 – Aug. 2020	University of Nottingham	School of Biosciences	Teaching Demonstrator
3	Apr. 2018 – Apr. 2019	University of Nottingham	School of Biosciences	Teaching Demonstrator
4	May 2015 – Oct. 2015	Ghana Wildlife Society	Conservation Education, Marketing and Communication	Project Officer
5	Nov. 2013 – Apr. 2015	OLAG Senior High School	Science	Teacher
6	Oct. 2010 – Sept. 2011	KNUST	Silviculture and Forest Management	Teaching and Research Assistant (National Service Person)

D. UNIVERSITY TEACHING AND SUPERVISION

- i. Lectures undergraduate level courses in Forest Ecology and Natural Forest Silviculture, General Ecology and Biodiversity Conservation, Forest Systematics, Nursery Management and Plantation Silviculture, Forest Policy and Legislation, Project Planning and Management, Plant Physiology and Genetics, Forest Soils and Hydrology, Natural Resources Inventory
- ii. Lectures postgraduate level courses in Environmental Impact Assessment and Occupational Health and Safety, Forest Policy and Legislation, Forest Ecology and Silviculture, and Project Planning and Management.
- iii. Supervision of undergraduate theses
- iv. Supervision of postgraduate theses
- iv. Academic Tutor/Counsellor of undergraduate students

E. AREA OF SPECIALITY

- i. Agroforestry and Environmental Sustainability
- ii. Ethnoecology/Medicinal Plants
- iii. Plant-Environment-People Interactions

F. SELECTED RESEARCH PUBLICATIONS

- | SN | TITLE OF PUBLICATION |
|----|---|
| 1 | Mohammed, L., Mensah, J. K., Abugre, S., Asigbaase, M. , & Opuni-Frimpong, E. (2025). Efforts towards restoring <i>Tetrapleura tetraptera</i> in forest landscapes threatened by the insect pest, <i>Tragocephala nobilis</i> . <i>International Journal of Tropical Insect Science</i> . https://doi.org/10.1007/s42690-025-01579-4 |
| 2 | Adusu, D., Kumi, S., Antwi, M., Asigbaase, M. , & Sackey, E. K. (2025). Drivers of illegal mining in the Amansie West District using the partial lease square model. <i>Environmental Development</i> , 56, 101291. https://doi.org/10.1016/j.envdev.2025.101291 |
| 3 | Abugre, S., Asigbaase, M. , Kumi, S. et al. Forest landscape degradation, carbon loss and ecological consequences of illegal gold mining in Ghana. <i>Discov. For.</i> 1, 20 (2025). https://doi.org/10.1007/s44415-025-00020-5 |
| 4 | Asigbaase, M. , Abugre, S., Banowiiri, M., & Akutteh, J. (2025). Adoption dynamics of organic pesticides among cocoa producers in two ecological zones of Ghana. <i>Global Challenges</i> , 9(1), e00045. https://doi.org/10.1002/gch2.202500045 |
| 5 | Asigbaase, M. , S. B. Ndego, and B. Effah. 2025. Shade Tree Selection in Cocoa Agroforestry: Ghanaian Farmers' Preferences, Ecological Insight and Drivers of Local Ecological Knowledge. <i>Ecology and Evolution</i> 15, no. 7: e71685. https://doi.org/10.1002/ece3.71685 . |
| 6 | Asigbaase, M. , Kumi, S., & Acheamfour, S. A. (2025). Termite-tree-soil interactions in cocoa agroforestry systems: Farmer perceptions of ecological dynamics, practices and challenges in three ecological zones of Ghana. <i>International Journal of Tropical Insect Science</i> . https://doi.org/10.1007/s42690-025-01534-3 |
| 7 | Asigbaase, M. , Anaba, L., Adusu, D., Abugre, S., Musah, A. A., Nsor, C. A., & Sarfo, D. A. (2025). Ethnobotanical Study of Medicinal Shrubs and Herbs Used by Forest-Fringe Communities of Ghana. <i>Scientifica</i> , 1362301. https://doi.org/10.1155/sci5/1362301 |
| 8 | Nsor, C. A., Perry-Amissah, M., Mensah, J. N., Boadi, S., Asigbaase, M. , Addae-Wireko, L., & Acolatse, R. (2025). Birds' co-occurrence is mediated by diet, habitat type, and anthropogenic disturbances in Ghana's Central Region. <i>Avian Research</i> , 16(3), 100251. https://doi.org/10.1016/j.avrs.2025.100251 |
| 9 | Awukuvi, D., Asigbaase, M. , & Derkyi, M. (2025). Crop-raiding by forest elephants (<i>Loxodonta cyclotis</i>) around a West African national park: Insights from a mixed method approach. <i>Journal of Energy and Natural Resource Management</i> , 10(2), 48–61. |
| 10 | Okyere, I., Abugre, S., Kwawuvi, D., Adusu, D. and Asigbaase, M. (2025). Influence of municipal dumpsite on water quality in Sunyani Municipality. <i>Ethiopian Journal of Environmental Studies & Management</i> 18(3): 285 – 303, 2025. ISSN:1998-0507. https://ejesm.org/doi/v18i3.2 . |
| 11 | Asigbaase, M. , Annan, M., Adusu, D., Abugre, S., Nsor, C. A., Kumi, S., & Acheamfour, S. A. (2024). Teak-soil interaction: Teak (<i>Tectona grandis</i>) plantations impact and are impacted by soil properties and fertility in Southwestern Ghana. <i>Applied and Environmental Soil Science</i> , 2024, 7931830. https://doi.org/10.1155/2024/7931830 |
| 12 | Asigbaase, M. , Adusu, D., Sarfo, D. A., Nsor, C. A., Kumi, S., Adams, S., Nsiah, P. K., & Acheamfour, S. A. (2024). Evaluating growth patterns and soil dynamics of the endangered African rosewood (<i>Pterocarpus erinaceus</i> Poir.) in contrasting ecological |

- regions in Ghana. *International Journal of Forestry Research*, 2024, 9978908. <https://doi.org/10.1155/2024/9978908>
- 13 Kumi, S., Nsiah, P. K., Ahiabu, H. K., Ofosu-bamfo, B., **Asigbaase, M.**, Anning, A. K., & Amponsah, G. (2024). Forest landscape restoration-induced changes in land cover and woody plant community structure in a degraded forest reserve in Ghana. *Trees, Forests and People*, 16, 100578. <https://doi.org/10.1016/j.tfp.2024.100578>
 - 14 **Asigbaase, M.**, Adusu, D., Musah, A. A., Anaba, L., Nsor, C. A., Abugre, S., & Derkyi, M. (2024). Ethnobotanical and ethnopharmacological survey of medicinal tree species used in the treatment of diseases by forest-fringe communities of Southwestern Ghana. *Heliyon*, 10(1), e23645. <https://doi.org/10.1016/j.heliyon.2023.e23645>
 - 15 **Asigbaase, M.**, Adusu, D., Anaba, L., Abugre, S., Kang-Milung, S., Acheamfour, S. A., Adamu, I., & Ackah, D. K. (2023). Conservation and economic benefits of medicinal plants: Insights from forest-fringe communities of Southwestern Ghana. *Trees, Forests and People*, 14, 100462. <https://doi.org/10.1016/j.tfp.2023.100462>
 - 16 **Asigbaase, M.**, Dawoe, E., Abugre, S., Kyereh, B. and Nsor C.A. (2023). Allometric relationships between stem diameter, height and crown area of associated trees of cocoa agroforests of Ghana. *Sci Rep* 13, 14897. <https://doi.org/10.1038/s41598-023-42219-6>
 - 17 **Asigbaase, M.**, Dawoe E., Lomax, B.H. and Sjogersten, S. (2021). Temporal changes in litterfall and potential nutrient return in cocoa agroforestry systems under organic and conventional management, Ghana. *Heliyon* 7(10):e08051. [doi:10.1016/j.heliyon.2021.e08051](https://doi.org/10.1016/j.heliyon.2021.e08051).
 - 18 **Asigbaase, M.**, Dawoe, E., Sjogersten, S and Lomax, B.H. (2021). Biomass and carbon stocks of cocoa agroforestry systems in Ghana. *Agriculture, Ecosystems and Environment* 306 (2021) 107192. <https://doi.org/10.1016/j.agee.2020.107192>.
 - 19 **Asigbaase, M.**, Dawoe, E., Lomax, B.H. and Sjogersten, S. (2021). Decomposition and nutrient mineralization of leaf litter in smallholder cocoa agroforests: a comparison of organic and conventional farms in Ghana. *Journal of Soils and Sediments* 21, 1010-1023. <https://doi.org/10.1007/s11368-020-02844-4>.
 - 20 **Asigbaase, M.**, Lomax, B.H., Dawoe, E. and Sjogersten, S. (2020). Influence of organic cocoa agroforestry on soil physico-chemical properties and crop yields of smallholders' cocoa farms, Ghana. *Renewable Agriculture and Food Systems* 1–10. <https://doi.org/10.1017/S1742170520000290>.
 - 21 **Asigbaase, M.**, Sjogersten, S., Lomax, B.H. and Dawoe, E. (2019): Tree diversity and its ecological importance value in organic and conventional cocoa agroforests in Ghana. *PLoS ONE* 14(1): e0210557. <https://doi.org/10.1371/journal.pone.0210557>.
 - 22 Haggard, J., **Asigbaase, M.**, Bonilla, G., P., and Quilo, A. (2015): Tree biodiversity on sustainably certified and conventional coffee farms in Central America. *Biological Conservation* 24, 1175–1194. <https://doi.org/10.1007/s10531-014-0851-y>.

G. RECENT RESEARCH WORK

- i. Plant-Soil Interactions in Timber Plantations Jan. 2022 - Date
- ii. Ethnobotanical Assessment of Medicinal Plants Jan. 2022 - Date
- iii. Ecosystem Services of Agroecosystems Oct. 2019 – Date
- iv. Impact of Cash Crop Plantations on Soil Properties and Fertility Jan. 2023 – Sept. 2024

- v. Integrated Landscape Management and Restoration Nov. 2023 – Nov. 2024
- vi. Allometries of Shade Trees on Cocoa Agroecosystems Feb. 2021 – Dec. 2023
- v. Contribution of Organic Cocoa Agroforestry to Sustainable Land Management Oct. 2015 – Oct. 2019
- vi. Biodiversity conservation and carbon sequestration of shade trees in coffee stands in Central America 2011 – 2012

H. RESEARCH INTEREST

- i. Ecosystem Ecology and Environmental Change: Investigating ecosystem dynamics, resilience, and responses to environmental shifts, with a focus on understanding biodiversity patterns and ecosystem services under changing climatic and land-use conditions.
- ii. Ethnoecology and Medicinal Plants: Exploring traditional ecological knowledge and the use of medicinal plants in indigenous and rural communities, examining the cultural significance, conservation, and potential pharmacological applications of ethnobotanical resources.
- iii. Plant-Environment-People Interactions: Studying the interactions among plants, their environments, and human societies, with emphasis on resource management, and ecological adaptation.
- iv. Agroforestry and Agroecology: Assessing sustainable agroforestry systems and agroecological practices that enhance biodiversity, promote soil health, and increase productivity while supporting climate resilience and rural livelihoods.
- v. Sustainable Environmental Management: Developing and applying sustainable management practices that balance ecological health, economic needs, and social well-being, aiming to protect natural resources and foster resilient communities.
- vi. Linking Biodiversity and Quality of Health: Exploring the interconnections between biodiversity and human health, with a focus on how diverse ecosystems support physical, mental, and societal well-being.