



Gyilbag Amatus (PhD)

PERSONAL INFORMATION



📍 Centre for Climate Change and Gender Studies
University of Energy and Natural Resources, Sunyani. Ghana
☎ +233 242102783/+233 200179747
✉ amatusmike@yahoo.com
🌐 www.uenr.edu.gh

EDUCATION

- 202 PhD. Agriculture Meteorology and Climate Change.
Chinese Academy of Agricultural Sciences (CAAS), Institute of Environment and Sustainable Development in Agriculture (IEDA), Beijing, China
- 2015 MSc Environmental Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
- 2008 BEd Agriculture. University of Education Winneba, Mampong Campus, Mampong, Ghana

PROFESSIONAL EXPERIENCE

- 2024 Part-Time Research Fellow, Center for Climate Change and Gender Studies (3CGS) of the University of Energy and Natural Resources (UENR)
- 2024 Host, International Conference on Climate Action for Young African Entrepreneurs under the theme “Climate Action: From Research to Practice, an Entrepreneurial Perspective”
- 2023 Executive Director, 3A Environmental Solutions, involved in innovative research and environmental monitoring, locally and internationally
- 2021 Programmes Coordinator, Green WaterHut
- 2021 Course Tutor, College of Distant Education, University of Cape Coast (UCC), Ghana, Sunyani SHS Study Centre
- 2021 Course Tutor, University of Ghana, College of Continuing and Distant Education, Sunyani campus
- 2021 Coordinator of Robotics Study, St James Seminary Senior High School
- 2017 Member, China-UK-Africa Development Corridor Partnership (DCP), a joint International research project, led by the UNEP-WCMC
- 2016 Assistant Examiner and Team Leader, West African Examination Council (WASSCE), Ghana
- 2015 Chairman, Environmental & Sanitation Odomaseman Senior High School

PROJECT INVOLVEMENT

- 2025 Lead Scientist, EIA development for the construction of North Star Refinery, Accra-Tema
- 2021 Member of the Consortium, 3.8 million Euros Level Up Project on recycling and upgrading of bio-organic residues, UENR
- 2018 Member, Innovative Research Team of Climate Change and Utilization of Agro-climatic Resources, IEDA. Beijing
- 2021 Member, Innovative Research Team of the Centre for Climate Change and Gender Studies (3CGS) of the University of Energy and Natural Resources (UENR)

- 2023 Principal Investigator, Policies and Gender Responsiveness in Shea Network Ghana (SNG) and Friends of the Nation (FoN), funded by Oxfam International
- 2023 Principal Investigator, Inclusive Access to Gari Market Initiative in the East Gonja District; coordinated by Development Frontiers Women Ass (DFWA)
- 2021 WATSAN Mapping in Nanton District: Assessing the sanitation situation in Nanton and the role of women. Coordinated by the Afram Plains Development Organization (APDO) and funded by USAID
- 2021 Principal investigator: International Climate Change Initiative (IKI) Project, funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV)

SCHOLARSHIPS/AWARDS/PROJECTS

- 2021 Best International Research Student, Chinese Academy of Agricultural Sciences (CAAS), Beijing, China
- 2017 Chinese Government Scholarship Award, 2017-2021
- 2015 Best Teacher Award (Science category), Brong Ahafo Region, Sunyani
- 2014 Best Teacher Award (Science category), Sunyani-West District, Sunyani
- 2013 Outstanding Staff, Odomaseman Senior High School, November, 2013 2004 2008
- 2008 Outstanding staff, JMJ JHS, Atebubu, Sept 2008 2013
- 2004 Best Teacher Award, Junior Secondary School Category, Nadowli District, 2004

PROFESSIONAL MEMBERSHIP

- 2023 Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) National
- 2024 American Meteorological Society (AMS)
- 2024 Ghana Association of Sciences (GAS)

CONFERENCE/WORKSHOP/SEMINAR

- 2024 Co-host, International Conference on Climate Action for Young African Entrepreneurs under the theme “Climate Action: From Research to Practice, an Entrepreneurial Perspective”
- 2018 International conference on carbon-neutral tea production, Songyang, Jiangsu province, China, funded by FAO
- 2018 Agro-meteorological conference on the impacts of climate change on staple crop production in developing countries, held in Harbin, Heilongjiang province, China
- 2018 Conference on enhancing modern technologies in maize production and competitiveness in Northeast China, Harbin
- 2020 Conference on Environmental assessment, biodiversity and environmental policy setting; organized by the China-Uk-Africa Development Corridor Project, University of Cambridge, UK
- 2024 Africa Connect Meeting and Workshop on IoT-Based Acquisition of Research Data for Scientific Computing. Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy
- 2024 West and Central African Research and Education Network (WACREN) and ICTP-OAU International Workshop on advance scientific knowledge and technological innovation in environmental monitoring and data collection, deploying IoT-based sensors for real-time pollution monitoring. Hosted by the Institute Ecological and Environmental Studies (IEES) of the Obafemi Awolowo University (OAU) in Ile-Ife, Nigeria

- 2024 IoT Workshop: Installation and use of IoT-based sensors for real-time monitoring of pollution in surface Water bodies in Africa, Nigeria, Ile-Ife
- 2024: Workshop in Agrivoltaic Technology in Drylands of West Africa: Strengthening national innovation systems for diffusion and Market development at the water-energy-food nexus, Tamale, Ghana
- 2018: China-UK-Africa Development Corridor Partnership (DCP) workshop on “Climate Change and Environmental Conservation in Africa”
- 2019 Workshop on “Climate Change and Biodiversity Conservation Pathways in Developing Countries”, organized by the Institute of Environment and Sustainable Development in Agriculture (IEDA), Climate Change Lab,. Beijing, China.
- 2019 Training on “System Rice intensification (SRI) Concept, Northeast China, organized by the Qiqihar branch of the Heilongjiang Academy of Agricultural Sciences, Heilongjiang. Qiqihar. China
- 2019 Training on the novel concept, “Adaptation Technology System” (ATS), held in the Chinese Academy of Agricultural Sciences, Institute of Environment and Sustainable Development in Agriculture (IEDA), climate change lab, Beijing, China.
- 2020 Workshop on “Natural Capital and its Assessment”, organized and facilitated by the Development Corridors Partnership (DCP), led by the University of Cambridge and London School of Economics and Political Science, UK

PUBLICATIONS

1. **Gyilbag, A.**, Amou, M., Tulcan, R.X.S., Zhang, L., Demelash, T., Xu, Y. (2021). Characteristics of Enhanced Heatwaves over Tanzania and Scenario Projection in the 21st Century. *Atmosphere*, 12,1026. doi.org/10.3390/atmos12081026
2. **Gyilbag, A.**, Amou, M., Zhang, L., Demelash, T., Xu, Y. (2024) Quantification of Future Extreme Daily Precipitation Events Over Tanzania Using High-resolution Multi-model Ensemble Scenarios from CORDEX-Africa
3. Zhang, L., Huo, Z., Yang, B., Guo, A., Xiao, J., Li, S., Tan, F., **Gyilbag, A.** (2023). Climate warming worsens thermal resource utilization for practical rice cultivation in China. *International Journal of Biometeorology*, 68, 613–624. <https://doi.org/10.1007/s00484-023-02609-x>
4. Li, K., **Gyilbag, A.** (2020). A. Spatiotemporal Changes of Heatwaves and Extreme Temperatures in the Main Cities of China from 1955 to 2014. *Nat. Hazards Earth Syst. Sci.*, 20,1889–1901. doi.org/10.5194/nhess-20-1889-2020
5. Amou, A., **Gyilbag, A.**, Demelash, T., Xu, Y. (2021). Heatwaves in Kenya 1987-2016: Analysis on the Facts from CHIRTS High Resolution Satellite Remotely Sensed and Station Blended Temperature Dataset. *Atmosphere*, 12, 37. doi.org/10.3390/atmos12010037
6. Babuna, P., Xiaohua, Yang, X., **Gyilbag, A.**, Awudi, D.A., Ngmenbelle, D., Bian, D. (2020). The Impact of COVID-19 on the Insurance Industry. *Int. J. Environmental Research*, 111106. doi.org/10.3390/ijerph17165766
7. Farooq, M.S., **Gyilbag, A.**, Virk, A.L., Xu, Y. (2021). Adaptability Mechanisms of Japonica Rice Based on the Comparative Temperature Conditions of Harbin and Qiqihar, Heilongjiang Province of Northeast China. *Agronomy*, 11(11), 2367. <https://doi.org/10.3390/agronomy11112367>
8. Zhao, M., Liu, Y. **Gyilbag, A.** (2022). Assessment of Meteorological Variables and Air Pollution Affecting COVID-19 Cases in Urban Agglomerations: Evidence from China. *Int. J. Environ. Res. Public Health*, 19, 531. doi.org/10.3390/ijerph19010531
9. Babuna, P., Han, C., Li, M., **Gyilbag, A.**, Dehui, B., Tulcan, R.X.S., Yang, S., Yang, X. (2021). The Effects of Human Settlement Temperature and Humidity on the Growth Rules of Infected and Recovered Cases of COVID-19. *Environmental Research*, 197, 111106. doi: 10.1016/j.envres.2021.111106

10. Zubairu, S.M., Li, W., **Gyilbag, A.**, Kumi, M.A., Lashari, A.H. (2021). The Impact of Climate Change on Rainfall Patterns in Ghana: A Zoning Adaptation Strategy Through Developing Agroforestry. *Journal of Atmospheric Science Research*, Vol 04, Issue 01. doi:10.30564/jasr.v4i1.2703
11. Demelash, T., Amou, M., **Gyilbag, A.**, Tesfay, G., Xu, Y. (2021). Adaptation Potential of Current Wheat Cultivars and Planting Dates under the Changing Climate in Ethiopia. *Agronomy* 2022, 12, 37. doi.org/10.3390/agronomy12010037
12. Farooq, M.S., Khaskheli, M.A., Uzair, M, Xu, Y., Wattoo, F.M., Rehman, O., **Gyilbag, A.**, G., Fatima, H., Khan, S.A., Fiaz, S., Yousuf, M., Ramzan, K.M., Khan, N., Attia, K.A., Ercisli, S. and Golokhvast, K.S. (2022). Inquiring the inter-relationships amongst grain-filling, grain-yield, and grain-quality of Japonica rice at high latitudes of China. *Front. Genet.* 13:988256. doi: 0.3389/fgene.2022.988256
13. Kadio S. R. A., Semihinva, A., N'Da, H., Kabo-bag, A., **Gyilbag, A.**, & Boahah, E. (2023) Toward understanding land use land cover changes and their effects on land surface temperature in yam production area, Côte d'Ivoire, Gontougo Region, using remote sensing and machine learning tools (Google Earth Engine). *Front. Remote Sens., Sec. Image Analysis and Classification. Volume 4 - 2023* | <https://doi.org/10.3389/frsen.2023.1221757>
14. Bienibuor, A.K., Kwasi, P., Aning, A.A., Menyeh, A., Wemegah, D.D., Appiah, M.K., Gyilbag, A. (2024). Application of the electrical resistivity geophysical method in identifying high groundwater potential sites in a Voltaian geological setting

JOURNAL REVIEWER

2024 Journal of Environmental Science and Pollution Research

2021 Journal of Climate Resilience and Sustainability