

Dr. Bernard N. Baatuuwie

I. PERSONAL INFORMATION

- Dr. Bernard Nuoleyeng **BAATUUWIE** (PhD)
- Senior Lecturer
- Department of Forestry and Forest Resource Management
- Faculty of Natural Resources and Environment
- **Official Email Address (UDS):** bbaatuuwie@uds.edu.gh
- **Alternate Email Address:** tuuwiebernard@yahoo.com
- **Phone Number(s):** +233 (0) 243888371

Scholarly Addresses

- Research Gate Address:
https://www.researchgate.net/profile/Bernard_Baatuuwie?acceptedAuthorUid=2137194080
- Google Scholar Address: <https://scholar.google.com/citations?user=of-M9UUAAAAJ&hl=en>
- LinkedIn Address: <https://www.linkedin.com/in/bernard-n-baatuuwie-9a01841ab/>

Area(s) of Specialization:

- Geo-Information Science for Natural Resources Management
- Climate Change and Land Use
- Land Degradation and Restoration.

Research Interests:

- Mapping and Monitoring of Natural Resources using GIS and Remote Sensing,
- Climate Change and Landuse Management
- Forest Degradation and Restoration Measures
- Plantation Forestry Development and Management

II. BIOGRAPHICAL SKETCH

Dr. Bernard N. Baatuuwie (PhD) has a BSc. in Agricultural Technology in 2005 from the University for Development Studies (UDS), Tamale, Ghana was employed research assisted with the Department of Renewable Natural Resources, UDS. He obtained an MSc. in Geo-information Science for natural resources management in 2009 after which he was appointed a lecturer in the same Department the same year. He currently holds a PhD in Climate Change and Land Use. His research focus is on land degradation and restoration, mapping and monitoring of natural resources using GIS and remote sensing, climate change and land use management, Plantation Forestry development and management. He collaborated on a number research and development projects, funded by GIZ, WFP, World Bank etc. He held several positions in the UDS and is now the Vice-Dean of the Faculty of Natural Resources and Environment.

III. EDUCATION

- PhD in Climate Change and Landuse (2012-2015). Kwame Nkrumah University of Science and Technology (KNUST), Kumasi-Ghana.
- MSc. Geo-Information Science and Earth Observation for Natural Resources (2007-2009) Management. KNUST), Kumasi – Ghana/ International Institute for Geo-Information Science and Earth Observation (ITC), Enschede-The Netherlands
- BSc. (Hons.) Agriculture Technology (2001-2005). University for Development Studies

Short Courses/Training

- **2020:** Institutional Quality Assurance Training Workshop. Association of African Universities, Accra
- **2015 to 2017:** Intergovernmental platform on biodiversity and ecosystem services (IPBES fellowship programme, Bonne, Germany.
- **2010:** Training Workshop on Project Management, Monitoring and Evaluation in Tamale.
- **2010:** Training Course in Access and Benefit Sharing from Genetic Resources and Associated Traditional Knowledge. University of Cape Town, South Africa.

Languages

- English (working language)

Membership of Learned Professional Societies

- Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES, Fellow)
- Ghana Science Association (Member)
- Member, Ghana Institute of Horticulturalist

IV. EMPLOYMENT AND ADMINISTRATIVE/ACADEMIC EXPERIENCE

Academic/Administrative Position/Rank	Institution	Faculty	Department	Period
Vice Dean	University for Development Studies, Tamale, Ghana	Natural Resources and Environment	-	January 2020-Date
Senior Lecturer	University for Development Studies, Tamale, Ghana	Natural Resources and Environment	Forestry and Forest Resources Management	January,2016 – Date
Lecturer	University for Development Studies, Tamale, Ghana	Natural Resources and Environment	Forestry and Forest Resources Management	September 2009 – January 2016
Faculty Examination Officer	University for Development Studies, Tamale, Ghana	Natural Resources and Environment		2015 to 2018

Faculty Examination Officer	University for Development Studies, Tamale, Ghana	Renewable Natural Resources		2009 to 2011
Head of Department	University for Development Studies, Tamale, Ghana	Natural Resources and Environment	Forestry and Forest Resources Management	September 2018 – January 2020

V. STUDENT RESEARCH WORK SUPERVISION

1. Total Number of Graduate Students Supervised (Postgraduate Diploma, Masters, PhD) = 3
2. Total Number of Undergraduate Students Supervised (BSc.) = 38

a. Postgraduate

1. **Issah Baddianaah.** 2020- Ongoing. *Integrated Analysis of the Dynamics of Artisanal and Small-Scale Gold Mining Operations in the Northern Savannah Ecological Zone (NSEZ), Ghana.* University for Development Studies, Tamale, Ghana. Doctor of Philosophy (PhD). (Supervisor)
2. **Cynthia Kutir (2015):** *Farmers' Awareness and Response to Climate Uncertainties in the North Bank Region, The Gambia.* Master of Science (MSc). Thesis, University of The Gambia. (Co-supervisor)
3. **Bapio Zulkalayne Nuhu (2015):** *Climate Change and Land degradation at the Tono Irrigation Project Area.* Master of Science (MSc). Thesis, University for Development Studies. (Co-supervisor)

b. Undergraduate

1. **Owusu Sarah.** 2020. *Characterization and Utilization of Wood Residue Generated by Small Scale Sawmills in Tamale Metropolis.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
2. **Marfi Frank Nkrumah.** 2020. *Assessing the Effect of Landuse on the Population Density and Distribution of Vitellaria paradoxa.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
3. **Owusu Boahen Patrick.** 2020. *Impact of Mining Activities on Vegetation Cover in Konongo-Odumasi, Ghana.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
4. **Chukwu Patience Ndid.** 2019. *Effect of Shade on Germination and Initial Growth of Pterocarpus erinaceus (African Rosewood).* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)

5. **Arhin Peterson Theresa. 2019.** *Spatio-temporal analysis of land cover evolution of Kenikeni forest reserve in the Savannah Region of Ghana.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
6. **Osei Bonsu Gideon 2019.** *Assessing the land cover change of Tano-Offin forest reserve in Ghana.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
7. **Bonsu Joseph Appiah. 2019.** *Effects of different pre-sowing treatments on the aboveground germination and initial growth of *Borassus aethiopum*.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
8. **Tuu Prosper Kara-Yir. 2019.** *Assessment of nutrient and heavy metal content of compost prepared using food waste from different sources.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
9. **Adnan Smaila. 2018.** *Assessing the effects of pre-treatment on the germination and initial growth of *Detarium microcarpum* seed.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)
10. **Amponsah Amos. 2018.** *Land cover changes of Atewa forest reserve in Ghana.* University for Development Studies, Tamale, Ghana. Bachelor of Science (BSc). (Supervisor)

VII. GRANTS AND RESEARCH PROJECTS

1. Team Member, 2019 to Date. West Africa Center for Water, Irrigation and Sustainable (WACWISA). A World Bank's Africa Centers of Excellence (ACE) Impact Initiative. Funded by World Bank. (US\$ 6.4 million)
2. Team Member, 2013. Evaluation of Savannah Accelerated Development Authority (SADA) plantation programmes implemented by ACI. Funded by SADA, Ghana Government (GHS 62,180.00)

VIII. SCHOLARLY/RESEARCH PUBLICATIONS

a. Refereed Journal Publications

1. Coscieme, L. et al. (**Baatuwue N. B.** Co-authored out of 42 authors) 2019. Multiple conceptualizations of nature are key to inclusivity and legitimacy in global environmental governance. *Environmental Science and Policy* 104(2020), pp 36–42.
2. **Baatuwue, N. B.**, Nasare, L. I., Smaila, A., Issifu, H. and Asante, W.J. 2019. Effect of seed pre-treatment and its duration on germination of *Detarium microcarpum* (Guill. and Perr.). *African Journal of Environmental Science and Technology*, 13(8), pp. 317 -323.

3. Amoah, M. C., Issifu, H., Tom-Dery, D., Hussein, R., **Baatuwue, N. B.**, Ochire-Boadu, K. and Asante, J. W. 2019. Logging effects of illegal chainsaw milling and conventional logging in Krokosua Hills Forest Reserve, Ghana. *International Journal of Conservation Science*, 10(1), pp. 177-186.
4. Tiika, J. R., Issifu, H., **Baatuwue, N. B.**, Nasare, L. I. and Hussein, R. 2019. Seed quality, germinability and initial growth of *Pterocarpus erinaceus* (African Rosewood). How important are mother tree size, source and timing of fruit harvest? *Journal of Forest and Environmental Science*. 35(2), pp. 69-77.
5. Akapali, M., Ansah, T., Idriss, A. R. I., Alenyorege, A. and **Baatuwue, N. B.** 2018. Seasonal changes in pasture biomass and grazing behavior of cattle in the Guinea Savanna zone of Ghana. *African Journal of Range and Forage Science*, [Pp 1-8](#).
6. Prempeh, O. N., **Baatuwue, N. B.**, and Siaw, D. 2017. Estimating the extent of forest degradation using remotely sensed historical data and landscape fragmentation indices: A case of Bounfum Forest Reserve, Ghana. *Environmental Systems Research. Springer*. 7(12), pp. 63-73.
7. Asante, W. J., **Baatuwue, N. B.**, Nasare, L. I., and Gboglu, Y. I. 2017. Effect of land use change on the diversity and abundance of insects on Nyankpala Campus of University for Development Studies, Ghana. *Ghana Journal of Forestry*. 33, pp, 51 – 62.
8. **Baatuwue, N. B.**, Le, Q. B., Agyare, A.W. and Forkuo, K. E (2017): Communities' Perceptions of Land Degradation: A Case Study in the Savanna Belt of the White Volta Basin. *UDS International Journal of Development (UDSIJD)*. 3(2), pp. 32-50.
9. Kutir, C., **Baatuwue, B. N.** and Aabeyir, R. 2016. Farmers' Perception and Factors Influencing their Response to Climate Change in the North Bank Region of the Gambia. *Ghana Journal of Science, Technology and Development*. 4(2), pp. 29-46.
10. Issifu, H, Abonkra, B., Ochire-Boadu, K., Hussein, R., Tom-Dery, D., **Baatuwue, B. N.** and Asante, W. J. 2016. Seed size polymorphism in *Khaya senegalensis* (Desr.) A. Juss.: Implications for seed propagation. *African Journal of Plant Science*, 10 (2), pp. 50-57.
11. Kutir, C., **Baatuwue, B. N.**, Keita, S. and Sowe, M. 2015. Farmers Awareness and Response to Climate Change: A Case Study of the North Bank Region, The Gambia. *Journal of Economics and Sustainable Development*, 6 (24).

12. Hussein R., **Baatuwue, B.N.**, and Issifu, H. 2015. Natural Forest Reserves in The Northern Region of Ghana: Description and Management Status. *Research Journal of Forestry*, 2 (6) pp 1-15.
13. Lawer, E. A, **Baatuwue, B.N.**, Ochire-Boadu, K. and Asante, W. J. 2013. Preliminary Assessment of the Effects of Anthropogenic Activities on Vegetation Cover and Natural Regeneration in a Moist Semi-Deciduous Forest of Ghana. *International Journal of Ecosystem*, 3(5): 148-156.
14. Tom-Dery, D., **Baatuwue, B. N.** and Poreku, G. N. 2013. Prevalence of Seed-dispersers in a Semi-deciduous Forest of Ghana. *Current Research Journal of Biological Sciences*, 5(2): 62-69.
15. Asante, W. J., Ochire-Boadu, K and **Baatuwue, B. N.** 2012. Initial Growth Response of *Moringa oleifera* Seedlings to Different Soil Amendments. *African Journal of Agricultural Research*, 7(45); 6082-6086.
16. Maayiem, D., **Baatuwue, B. N.**, and Aalangdong, O. I. 2012. Indigenous Knowledge of Termite Control: A Case Study of Five Farming Communities in Gushegu District of Northern Ghana. *Journal of Entomology and Nematology*, 4(6); pp 58-64.
17. Hussein, R., Belko, R. and **Baatuwue, N. B.** 2011. A Survey of Browse Plants Trade in the Upper East Region of Ghana. *Agriculture and Biology Journal of North America*, 2(3); pp 546-551.
18. **Baatuwue B. N.**, Ochire-Boadu, K, Abdul-Ganiyu S. and Asante, W. J. 2011. Assessment of Soil and Water Conservation Measures Practiced by Farmers - A Case Study in the Tolon–Kumbungu District of Northern Ghana. *Journal of Soil Science and Environmental Management*, 2(4); 103-109.
19. **Baatuwue, N. B** and Van Leeuwen, L. 2011. Evaluation of Three Classifiers in Mapping Forest Stand Types Using Medium Resolution Imagery: A Case Study in the Offinso Forest District, Ghana. *African Journal of Environmental Science and Technology*, 5(1); pp 25-36.
20. **Baatuwue, N. B**, Asare, N. A., Osei, E. M. Jnr, Quaye-Ballard, J. A. 2011. The Restoration of Degraded Forests in Ghana: A Case Study in the Offinso Forest District. *Agriculture and Biology Journal of North America (ABJNA)*. 2(1); pp 134-142.

21. Asante, W. J., **Baatuwue, N. B.** and Avorgah, M. 2011. Indigenous Knowledge on the Conservation and Utilization of *Borassus Aethiopum*: A Case Study in the Agortime Traditional Area of the Volta Region, Ghana. *International Journal of Current Research*. 3 (9) pp 173-175.

b. Papers Presented at Symposia and Conferences

1. Hussein, R., Nanebge, D. E., **Baatuwue, N. B.** and Issifu, H. (2018). *Dynamics of forest reserves in urban areas: A Case Study of the Tamale Fuelwood Plantation Reserve*. Annual Interdisciplinary Conference (AIC). Organised by University for Development Studies. UDS ICC, Tamale.
2. Asante-Obeng, D. and **Baatuwue, N. B.** 2017: *Assessing the Land Use and Land Cover in and around Nyankpala using GIS and Remote Sensing*. Annual Interdisciplinary Conference (AIC). Instituted for Interdisciplinary Research and Consultancy Services (IIRaCS), University for Development Studies, Nyankpala Campus, Ghana.
3. Tiika, J. R., Issifu, H., **Baatuwue, N. B.**, Nasare, L. I. and Hussein, R. 2016. *Seed quality, germinability and initial growth of Pterocarpus erinaceus (African Rosewood). How important are mother tree size, source and timing of fruit harvest?* Annual Interdisciplinary Conference (AIC). Organised by Instituted for Interdisciplinary Research and Consultancy Services (IIRaCS), University for Development Studies, Navrongo Campus, Ghana.
4. **Baatuwue, N. B.** Le, Q. B. and Agyare, A. W. (2014). *Land Degradation Hotspot Analysis in the White Volta Basin*. International Conference on Enhancing Resilience to Climate and Ecosystem Changes in Semi-Arid Africa. Organised by CECAR Africa Project, UDS, Tamale, Ghana.
5. Asante, W. J., Ochire-Boadu, K and **Baatuwue, B. N.** 2009. *Initial Growth Response of Moringa oleifera Seedlings to Different Soil Amendments*. 26th Biennial Conference of Ghana Science Association. University of Cape Coast, Ghana.
6. Ochire-Boadu, K., Abdul-Ganiyu S., Asante, W.J. and **Baatuwue N. B.** (2009) *Assessment of soil and water conservation measures practiced by farmers - A case study in the Tolon–Kumbungu district of Northern Ghana*. 26th Biennial Conference of Ghana Science Association. University of Cape Coast, Ghana.

Posters

1. Nasare, L. I., Asante W.J. and **Baatuuwie, N. B.** 2019. *Will exotic tree species support local fauna at reclaimed sites? A case study of insect biodiversity in the guinea savanna zone of Ghana.* SER 2019 World Conference. Organised by Society for Ecological Restoration, Cape Town, South Africa.
2. Asante, W. J, **Baatuuwie, N. B.** and Nasare. L. I. 2018. *Growth performance of rubber clones (Hevea brasiliensis) in the guinea savanna.* Restoring Landscapes for Resilient livelihoods in Northern Ghana. organized by World Vision. RADACH Hotel, Tamale -Northern Region
3. **Baatuuwie, N. B.**, Le, Q. B., Agyare, A.W., Forkuo, K. E (2015). *Land Degradation Hotspots in the Savannah Belt of the White Volta Basin.* West African Clean Energy & Environment Exhibition & Conference at the Accra International Conference Centre. February 10 - 12, 2015.

IX TECHNICAL REPORTS

1. **Team Member** Enhanced Nutrition and Value Chains in Ghana (ENVAC) 2018: Mapping of Agricultural Value Chain Resources. Funded by United Nations World Food Programme, Ghana Country Office.
2. **Team Member:** Evaluation of Savannah Accelerated Development Authority (SADA) plantation programmes implemented by ACI 2013. Funded by SADA, Ghana government
3. **Team Member:** Rice Sector Support Project (RSSP) (2009 – 2012). Mapping of Valleys and Potential Rice Fields in Some Districts of the Northern and Upper West Regions of Ghana. A Collaboration Between Agence Française De Développement (AfD), Ministry of Food and Agriculture (MoFA) and Faculty of Agriculture, University for Development Studies (UDS) on Lowland Rice Production Hydrological Studies.

X. SERVICE ON BOARDS, COMMITTEES AND OUTREACH

1. **Committee Chairman:** Development of undergraduate and postgraduate programme in Natural Resources Education. 2019.
2. **Committee Member:** Fund raising for international conference of Irrigation and Agricultural Development (IRAD). Organised by the West African Centre for Water, Irrigation and Sustainable Agriculture (WACWISA). 2020
3. **Board Member:** School Management Board. Jema Senior High School, Kintampo South.
4. **Board Member:** Guidance and Counseling Board 2009 to 2012, 2015 to date, UDS, Tamale.

5. **Board Member:** Department of Forestry and Forest Resources Management, 2010-2012 and 2015 to Date. UDS, Tamale.
6. **Board Member:** Nyankpala Campus Board. 2017 to date
7. **Committee Member:** Evaluation of the grading system. University for Development Studies (2017/2018 academic year)
8. **Committee Member:** Planning of the Annual Interdisciplinary Conference (AIC). Instituted for Interdisciplinary Research and Consultancy Services (IIRaCS), University for Development Studies, Nyankpala Campus, Ghana. 2017
9. **Committee Member,** Committee on the Naming of Buildings, Roads and Streets after Deserving Personalities on Nyankpala campus. May 2016
10. **Committee Member:** Rebranding of the Faculty of Renewable Natural Resources to Faculty of Natural Resources and Environment, UDS. 2016.
11. **District Coordinator,** Third Trimester Field Practical Programme, Sawla-Tuna-Kalba District (2009- 2011).
12. **Committee Member:** Development of academic programme, Faculty of Renewable Natural Resources, Nyankpala Campus, UDS. (2014-2015)
13. **Committee Member:** Development of Graduate Programmes and Short courses, Faculty of Renewable Natural Resources, 2012.
14. **Committee Member:** Committee for examination mal-practice, 2009-2012, 2015-2017.
15. **Board Member:** Faculty of Natural Resources and Environment Board. 2009 to date
16. **Board Member:** Academic Board, UDS, 2009 to Date

XI. HONOURS AND AWARDS

1. Third best PhD graduating student of the West African Science Service Center on Climate Change and Adapted Land Use (WASCAL) PhD programme in Climate Change and Land Use hosted by KNUST. Ghana (2015)
2. Doctoral Scholarship under the West African Science Service Center on Climate Change and Adapted Land Use (WASCAL) initiative funded by the German Federal Ministry of Education and Research (BMBF), 2011 to 2015.
3. Partial scholarship from the International Institute for Geo-Information Science and Earth Observation (ITC), The Netherlands to pursue MSc. in Geo-information Science for Natural Resources Management, 2007-2009.