



PERSONAL INFORMATION

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Jimma University

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Educational background

- Educational background: Bed in Geography and Environmental studies from Jimma University in 2008. MSc in Geographic Information Science and Remote Sensing from Wageningen University, The Netherlands in 2012, and PhD in Natural Resource Management from Jimma University in Ethiopia in January 2023.
- Since 2017 I am PhD student of climate change adaptation and mitigation
- Research interest: land use land cover change, climate change adaptation and mitigation, climate smart agriculture, biodiversity conservation, ecotourism suitability evaluation and assessment, environmental impact assessment.

EDUCATION

From	To	University	Program	Degree	Country
Oct 2017	January 2023	Jimma University	Natural Resource Management	PhD	Ethiopia
September 2010	August 2012	Wageningen University	Geo-information Science	MSc	The Netherlands
January 2006	June 2008	Jimma University	Geography and Environmental Studies	B.ED	Ethiopia
September 2001	June 2003	Jimma Teachers College	Diploma in Geography	Diploma	Ethiopia

List of publications

1. Dejene, I.N., Moisa, M.B., Gameda, D.O.,2023. Spatiotemporal Monitoring of Drought Using Satellite Precipitation Products: The Case of Borena Agro-pastoralists and Pastoralists Regions, South Ethiopia. 2023. Heliyon. <https://doi.org/10.1016/j.heliyon.2023.e13990>.
2. Moisa, M.B., Bulto, T.W., Werku, B.C., Berkessa, Y.W., Chebo, A.K., Negash, D.A., Gameda, D.O. (2023). Analyzing the Geospatial Dynamics of Abay Choman and Jimma Geneti Watershed's Wetland in the Western Ethiopian Region of Horro Guduru Wollega Zone. Air Soil and Water Research.16, <https://doi.org/10.1177/11786221222115>
3. Teshome, D.S., Moisa, M.B.,Gameda, D.O.,You, S. (2022). Effect of Land Use-Land Cover Change on Soil Erosion and Sediment Yield in Muger Sub-basin, Upper Blue Nile Basin, Ethiopia. *Land*. 11, 2173. <https://doi.org/10.3390/land11122173>.
4. Moisa, M.B., Tufa, C.A., Gabissa, B.T., Gurmessa, M.M., Wedajo, Y.N., Feyissa, M.E., Gameda, D.O. (2022). Integration of Geospatial Technologies with Multi-criteria Decision Analysis for Aquaculture Land Suitability Evaluation: The case of Fincha'a River Sub-basin, Western Ethiopia. *Journal of Agriculture and Food Research*. 10, 100448. <https://doi.org/10.1016/j.jafr.2022.100448>
5. Moisa, M.B., Dejene, I.N., Roba, Z.R., Gameda, D.O. (2022). Impact of Urban Land Use and Land Cover Change on Urban Heat Island and Urban Thermal Comfort Level: A Case Study of Addis Ababa city, Ethiopia. *Environmental Monitoring and Assessment*. 194,736. <https://doi.org/10.1007/s10661-022-10414-z>
6. Moisa M.B., Merga, B.B., Gameda D.O. (2022). Assessment of land suitability for Oilseeds crops (sesame and groundnut) using geospatial techniques: In the case study of Diga district, East Wollega zone, Western Ethiopia. *Oil Crop Science*. 7 (3),127-134. <https://doi.org/10.1016/j.ocsci.2022.08.001>
7. Moisa, M.B., Dejene, I.N., Gameda, D.O. (2022). Integration of geospatial technologies with multiple regression model for urban land use land cover change analysis and its

- impact on land surface temperature in Jimma City, southwestern Ethiopia. *Applied Geomatics*. <https://doi.org/10.1007/s12518-022-00463-x>.
8. Moisa, M.B., Gameda, D.O. (2022). Assessment of Urban Thermal Field Variance Index and Thermal Comfort Level of Addis Ababa Metropolitan City, Ethiopia. *Heliyon*. 8 (8), e10185. <https://doi.org/10.1016/j.heliyon.2022.e10185>
 9. Deribew K.T; Mihretu Y; Abreha G; Gameda DO. (2022). Spatial analysis of potential ecological sites in the northeastern parts of Ethiopia using multi-criteria decision-making models. *Asia-Pacific Journal of Regional Science*. <https://doi.org/10.1007/s41685-022-00248-5>
 10. Moisa M.B; Hinkosa L.B; Gameda D.O. (2022) Analysis of Land Surface Temperature using Geospatial Technologies in Gida Kiremu, Limu, and Amuru Districts, Western Ethiopia. *Artificial Intelligence in Agriculture*. 6:90-99.
 11. Moisa, M.B., Dejene, I, N., Gameda, D.O. (2022) Geospatial technology–based analysis of land use land cover dynamics and its effects on land surface temperature in Guder River sub-basin, Abay Basin, Ethiopia. *Applied Geomatics*. 14(3):451-463.
 12. Moisa, M.B., Dejene, I.N., Hinkosa, L.B., Gameda, D.O. (2022). Land Use Land Cover Change Analysis with Special Emphasis on Forest Cover Change Using Geospatial Techniques: A Case of Geba Watershed, Western Ethiopia. *SN Applied Sciences*. 4 (6), 187. <https://doi.org/10.1007/s42452-022-05069-x>
 13. Moisa M.B., Merga, B.B., **Gameda, D.O.** (2022). Land Suitability Evaluation for Surface Irrigation Using Geographic Information System and Remote Sensing. A Case Study in Didessa River Sub-Basin, Western Ethiopia. *Sustainable Water Resources Management*. 8 (3), 82. <https://doi.org/10.1007/s40899-022-00674-5>
 14. Moisa, M.B., Dejeene, I.N., Hirko, O., **Gameda, D.O.** (2022). Impact of Deforestation on Soil Erosion in the Highland Areas of Western Ethiopia using Geospatial Techniques: A case study of Upper Anger Watershed. *Asia-Pacific Journal of Regional Science*. 6(2):489-514.
 15. **Gameda, D.O.**, Korecha, D., Garede, W. (2022). Monitoring Climate Extremes Using Standardized Evapotranspiration Index and Future Projection of Rainfall and Temperature in the Wettest Parts of Southwest Ethiopia. *Environmental Challenges*.7, 100517. <https://doi.org/10.1016/j.envc.2022.100517>.
 16. Moisa, M.B., Merga, B.B., **Gameda, D.O***. (2022). Urban Heat Island Dynamics in Response to Land Use Land Cover Change. A Case of Jimma City, Southwestern Ethiopia. *Journal of Theoretical and Applied Climatology*.149 (1-2):413-423.
 17. Merga, B.B., Moisa, M.B., Negash, D.A., Ahmed, Z., **Gameda, D.O.** (2022). Land Surface Temperature Variation in Response to Land Use and Land Cover Dynamics: A Case of Didessa River Sub-basin, Western Ethiopia. *Earth Systems and Environment*. <https://doi.org/10.1007/s41748-022-00303-3>
 18. Moisa, M.B., Dejene, I.N., Mega, B.B., **Gameda, D.O.** (2022). Soil Loss Estimation and Prioritization Using Geographic Information System and RUSLE Model: A Case Study

- of Anger River Sub-Basin, Western Ethiopia. *Journal of water and Climate Change*. 13(3):1170-1184.
19. Wolteji, B.N., Bedhadha, S.T., Gebre, S.L., Alemayehu, E., **Gemeda, D.O***. (2022). Multiple Indices Based Agricultural Droughts Assessment in Rift Valley Region of Ethiopia. *Environmental Challenges*. 7, 100488.
 20. Moisa, M.B., Tiye, F.S., Dejene, I.N., **Gemeda, D.O.** (2022). Land suitability analysis for maize production using geospatial technologies in the Didessa Watershed, Ethiopia. *Artificial Intelligence in Agriculture*. 6:34-46.
 21. Moisa, M.B., Merga, B.B., **Gemeda, D.O.** (2022). Multiple Indices Based Assessment of Agricultural Drought: A Case Study in Gilgel Gibe Sub basin, Southern Ethiopia. *Journal of Theoretical and Applied Climatology*. 148 (1-2):455-464.
 22. Moisa, M.B., Dejene, I.N., Merga, B.B., **Gemeda, D.O.** (2022). Impacts of Land use/Land cover Dynamics on Land Surface Temperature using Geospatial Techniques in Anger River Sub-basin, Western Ethiopia. *Environmental Earth Sciences*. 81 (3), 99.
 23. **Gemeda, D.O***, Koricha, D., Garedew, W. (2021). Evidences of Climate Change Presences in the Wettest Parts of Southwest Ethiopia. *Heliyon* 7(9), e08009.
 24. Moisa, M.B., **Gemeda D.O.** (2021). Analysis of Urban Expansion and Land use/Land Cover Changes using Geospatial Techniques: A case of Addis Ababa City, Ethiopia. *Applied Geomatics*.13(4):853-861.
 25. Negash, D.A., Moisa, M.B., Merga, B.B. Sadeta, F., **Gemeda D.O.*** (2021). Soil erosion risk assessment for prioritization of sub-watershed: the case of Chogo Watershed, Horo Guduru Wollega, Ethiopia. *Environ Earth Sci* 80, 589.
 26. Moisa, M.B., Negash, D.A., Merga, B.B., **Gemeda D.O.** (2021). Impact of Land Use and Land Cover Change on Soil Erosion Using RUSLE Model and Geographic Information System: A Case of Temeji Watershed, Western Ethiopia. *Journal of Water and Climate Change*.12 (7):3404-3420.
 27. **Gemeda, D.O***; Feyssa, D.H., Garedew, W. (2021). Meteorological data trend analysis and local community perception towards climate change: a case study of Jimma City, Southwestern Ethiopia. *Environment, Development and Sustainability*. 23:5885-5903.
 28. Ambecha, A.B., Melka, A.M., **Gemeda, D.O***(2020). Ecotourism Site Suitability Evaluation Using Geospatial Technologies: A Case of Andiracha District, Ethiopia. *Spatial Information Research*. 28:559-568.
 29. Negassa, M.D., Mallie, D.T., **Gemeda D.O*** (2020). Forest Cover Change Detection using Geographic Information Systems and Remote Sensing Techniques: A spatio-temporal study on Komto Protected Forest Priority Area, East Wollega Zone, Ethiopia. *Environmental Systems Research*. 9(1):1-14.
 30. Abebe, M.S., Tsegaye, K., **Gemeda, D.O.*** (2019). Exploiting temporal-spatial patterns of informal settlements using GIS and remote sensing technique: A case study of Jimma city, Southwestern Ethiopia. *Environmental Systems Research*, 8 (6).

31. **Gemeda, D.O.** (2019). Climate Change Variability Analysis in and around Jinka, Southern Ethiopia. With Special Emphasis on Temperature and Rainfall. *The Journal of Agricultural Sciences - Sri Lanka*, 14 (3):145-153.
32. Hayidso, T.H., **Gemeda, D.O***, Abraham, A.M. (2019). Identifying Road Traffic Accidents Hotspots Areas Using GIS in Ethiopia: a case study of Hosanna Town. *Transport and Telecommunication*. 20 (2):123–132.
33. Taye, B., Gebre, S.L., **Gemeda, D.O.**, Getahun, K. (2019) Using Geospatial Techniques in the Selection of Potential Ecotourism Sites in Menz-geramidir District, Ethiopia. *Ghana Journal of Geography*. 11 (1):201-227.
34. *Dinsa, T.T., Gemeda, D.O**.(2019). The Role of Wetlands for Climate Change Mitigation and Biodiversity Conservation. *Journal of Applied Sciences and Environmental Management*. 23 (7):1297-1300.
35. Meles, S.K., **Gemeda, D.O***. (2019) Effects of Habitat Loss and Human influence on the Survival of Black-crowned cranes in Africa. *Journal of Degraded and Mining Lands Management*. 6 (3):1705-1711.
36. Aticho, A., **Gemeda, D.O.**, Mekonnen, T., Chalchesa, T., Abetu, D., Morrison, K., Archibald, G. (2019). Assessment of community knowledge and perception on environmental issues in Jimma Zone, Southwest Ethiopia. *Journal of Degraded and Mining Lands Management*, 6 (2):1635-1644.
37. Gegulo, D.F., **Gemeda, D.O.**, Gebre, S.L. (2019). Perception and Response to Climate Change by Small Farmers: The Case of Mareko District, Southern Ethiopia. *Int. J. Econ. Environ. Geol.* 10 (1):42-47.
38. Owar, O., Legesse, S., **Obsi, D.** (2019). GIS Based Analysis of the Extent and Dynamic of Forest Cover Changes Between 1990–2017 Using Geospatial Techniques: In Case of Gog District, Gambella Regional State, Western Ethiopia. In: Wade, S. (eds) *Earth Observations and Geospatial Science in Service of Sustainable Development Goals*. Southern Space Studies. Springer, Cham. https://doi.org/10.1007/978-3-030-16016-6_4.
39. Demeke, M., Gebre, S.L., **Gemeda, D.O.** (2018). Assessment of Land Use Land Cover Change Dynamics Using GIS and Remote Sensing of Soro District, Hadya zone, Southern Ethiopia. *The Nigerian Journal of Technological Research*. 14 (1):62-74.
40. Aticho, A., **Gemeda, D.O.**, Feyisa, D.H., Jiru, D.B., Beyene, A., Seyoum, D., Snelder, D.S., Feyisa, G.L., Aynalem, S., Archibald, G., Gutema, T.M. (2018) Assessment of black crowned crane and wattled crane population and spatiotemporal distribution in Jimma Zone, Southwest Ethiopia. *Global Ecology and Conservation*, 16, e00459.
41. **Gemeda, D.O***, Meles, S.K. (2018) Impacts of Human-Wildlife Conflict in Developing Countries. *J. Appl. Sci. Environ. Manage.* 22 (8)1233-1238.
42. Othow, O.O., Gebre, S.L., **Gemeda, D.O.** (2017). Analyzing the Rate of Land Use and Land Cover Change and Determining the Causes of Forest Cover Change in Gog District, Gambella Regional State, Ethiopia. *Journal of Remote Sensing & GIS*.6:4.

43. **Gemeda, D.O. (2016)** Black Crowned Crane (*Balearica pavonine* L.) Conservation guideline in Chora Boter district of Jimma Zone: The case of Ethiopia. *International Journal of Biodiversity and Conservation*, 8 (8):164-170.
44. **Gemeda, D.O***, Minstro, A.A., Feyssa, D.H., Sima, A.D., Gutema, T.M. (2016) Community knowledge, attitude and practice towards black crowned crane (*Balearica pavonine* L.) conservation in Chora Boter district of Jimma Zone, Ethiopia, *Journal of Ecology and the Natural Environment*,8(4):40-48.
45. Feyssa, D.H., **Gemeda, D.O***. (2015). Impacts of Climate Change on Production System in Semi-arid regions of Ethiopia. *J. Biol. and Chem. Res* 32 (2):755-764.
46. **Gemeda, D.O***, Sima, A.D. (2015). The impacts of climate change on African continent and the way forward. *Journal of Ecology and the Natural Environment*, 7(10):256-262.
47. **Gemeda, D.O***, Sima, A.D. (2015). Climate Change Adaptation and Mitigations: Students' Knowledge and Experiences in Jimma University, Ethiopia. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*. 23(2):123-137
48. Gemeda, D.O. (2015). Perceptions of Climate Change among Natural Resources Management Students at Jimma University, Ethiopia. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*. 23(1):106-119.
49. **Gemeda, D.O.** (2012). Assessing the development of Ethiopian National Spatial Data Infrastructure. Centre for Geo-Information, A thesis submitted in partial fulfilment of the degree of Master of Science at Wageningen University and Research Centre, The Netherlands. <https://edepot.wur.nl/203038>.

Accepted Manuscript

1. Moisa, M.B., Feyissa, M.E., Dejene, I.N., Tiye, F.S., Deribew, K.T., Gemeda, D.O., 2023. Land Suitability Evaluation for Moringa Oleifera tree Cultivation using Geospatial techniques in Dhidhessa Catchment, Abay Basin, Ethiopia. *Oil Crop Science*.

Revised Manuscript

1. Dessalegn Obsi Gemeda^{1*}; Diriba Korecha²; Weyessa Garedew³. Determinants of Climate Change Adaptation Strategies and Existing Barriers: Evidences from Farming Communities in the Wettest parts of Ethiopia. *Climate services*.
2. Mohammed Abdella Weday¹²; Kenate Worku Tabor¹; Dessalegn Obsi Gemeda³. Flood Hazards and Risk Mapping Using Geospatial Technologies in Jimma City, Southwestern Ethiopia.

Manuscript Under Review

1. Mitiku Badasa Moisa^{1*}, Lachisa Busha Hinkosa², Dessalegn Obsi Gemeda³. Analysis of Land Use and Land Cover Dynamics using GIS and Remote Sensing: A case of Upper Anger Watershed, Western Ethiopia. *Remote sensing in earth systems science*.

2. Dessalegn Obsi Gameda^{1*}; Diriba Korecha²; Weyessa Garedew³. Climate Change Perception and Vulnerability Assessment of the Farming Communities in the Wettest parts of Southwest Ethiopia. *Climate Risk Management*.
3. Biratu Bobo Merga; Mitiku Badasa Moisa; Dessalegn Obsi Gameda; Firdisa Sadeta Tiye. GIS Based Flood Risk Assessment in Shebele Sub-basin in West Hararghe Zone, Southeastern Ethiopia. *Water and Climate Change*.
4. Mekdes Shiferaw^{1,2}; Zerihun Kebebew¹; Dessalegn Obsi Gameda¹. Impact of Forest Cover Change on Ecosystem Services in Central Highlands of Ethiopia: A Case of Wof-Washa Forest. *Heliyon*.
5. Mitiku Badasa Moisa, ²Biratu Bobo Merga, ³**Dessalegn Obsi Gameda**. Urban Green Space Suitability Analysis Using Geospatial Techniques: A Case Study of Addis Ababa City, Ethiopia. *Geocarto International*.
6. Mitiku Badasa Moisa; Bacha Temesgen Gabissa; Yonas Name Wedajo; Gedefa Adugna Tamene; Dessalegn Obsi Gameda. Forest and Wetland Versus Land Surface Temperature: A case of Yayo district, Southwestern Ethiopia. *Water conservation science and engineering*.