



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Robel Takele Miteku**

Nationality

Gender **Male**

**Desired employment /
Occupational field** **Climate and Crop Modeling, Data Science**

Education and training

Dates **01/11/2014 – 05/06/2017**

Title of qualification awarded **Master of Science (MSc)**

Principal subjects/occupational skills covered **Agrometeorology and Natural Risk Management**

Name and type of organisation providing education and training **College of Agriculture and Environmental Science, Haramaya University**

Dates **1/11/2003 – 24/12/2007**

Title of qualification awarded **Bachelor of Science (B.Sc.)**

Principal subjects/occupational skills covered **Meteorology**

Name and type of organisation providing education and training **Water Technology Institute, Arba Minch University**

Personal skills and competences

Social skills and competences **Ability to work in multicultural environments, leadership in the international teams, able to work under minimal supervision and apply sound judgment, Able to excel at high pace while thinking critically and creatively to execute on details.**

Technical skills and competences

- ✓ Working experience in data Science and AI with H2O.AI.
- ✓ Knowledge of geo-statistics and mapping using species distribution modeling, including machine learning and regression tree based algorithms.
- ✓ Working experience in spatio-temporal prediction and automated mapping of Environmental Variables.
- ✓ Working experience in climate and crop modeling; knowledge of model development parameterization, calibration, and validation.
- ✓ Working knowledge and proven experience in statistical analysis.
- ✓ Working experience in developing weather index based insurance schemes.
- ✓ Developed an R package called AquaBEHER (<https://cran.r-project.org/web/packages/AquaBEHER/index.html>)
- ✓ Developed a shiny GUI app called AquaBEHERgui (<https://robeltakele.github.io/AquaBEHERgui/>)

Computer skills and competences	✓ Experienced working with windows and Linux operating systems; maintenance and troubleshooting. ✓ Proven experience in data processing and visualization tools such as R, SAGAGIS, MATLAB, CDO, NCO, GRASS, QGIS. ✓ Strong programming and scripting language experience with BASH, C/C++, FORTRAN, PYTHON e.t.c). ✓ Proven experience in building and deploying Linux based programs, automation and decision support tools.
Other skills and competences	✓ Graphics design for publications such as posters, magazines, books, flyer, brochures, business cards. ✓ Video and sound track editing for documentaries and short videos.
Membership	Ethiopian Meteorological Society, Education Committee of the African Meteorological Society (AfMS)
Annexes	Research, projects and publications

Publications:

- Kindie Tesfaye, **Robel Takele**, Vakhtang Shelia, Esayas Lemma, Addisu Dabale, Pierre C. Sibiry Traore, Dawit Solomon, Gerrit Hoogenboom, High spatial resolution seasonal crop yield forecasting for heterogeneous maize environments in Oromia, Ethiopia, Climate Services, Volume 32, 2023, 100425, ISSN 2405-8807, <https://doi.org/10.1016/j.cliser.2023.100425>.
- Takele R**, Buizza R and Dell'Acqua M (2023) Atmospheric drivers affect crop yields in Mozambique. Front. Clim. 5:1214703. <https://doi.org/10.3389/fclim.2023.1214703>.
- Tek B Sapkota, Bijay Singh, **Robel Takele**. [2023], Improving nitrogen use efficiency and reducing nitrogen surplus through best fertilizer nitrogen management in cereal production: The case of India and China. Advances in Agronomy, Academic Press, Volume 178. <https://doi.org/10.1016/bs.agron.2022.11.006>.
- Tek B Sapkota, Noufa Cheerakkollil Konath, **Robel Takele** and Sieglinde Snapp. [2022], Targeted Nitrogen Management to Increase Cereal Production while Reducing Nitrogen Consumption in India. Journal of Rice Research. <http://dx.doi.org/10.58297/FWXL2434>
- Kindie Tesfaye, **Robel Takele**, Tek B Sapkota, Arun Khatri-Chhetri, Dawit Solomon, Clare Stirling, Fabrizio Albanito. [2021], Global high-resolution gridded dataset of N2O Emission and mitigation potential from Maize and Wheat fields. Data in Brief, 37:107239. <http://dx.doi.org/10.1016/j.dib.2021.107239>.
- Kindie Tesfaye, **Robel Takele**, Tek B Sapkota, Arun Khatri-Chhetri, Dawit Solomon, Clare Stirling, Fabrizio Albanito. [2021], Model Comparison and Quantification of Nitrous Oxide Emission and Mitigation Potential from Maize and Wheat Fields at a Global Scale. Science of the Total Environment 782 (2021) 146696. <https://doi.org/10.1016/j.scitotenv.2021.146696>
- Sridhar Gummati, KPC Rao, Jemal Seid, Gizachew Legesse, Dakshina Murthy Kadiyala, **Robel Takele**, Tilahun Amede, Anthony Whitbread. [2017], Trends and changes in long-term observed daily rainfall events and the implications for Agriculture in Ethiopia. Theoretical and Applied Climatology.
- Fikadu Getachew, Mezgebu Getnet, **Robel Takele**, Eshetu Zewdu. [2017], Maize (Zea Mays L.) Productivity in Moist Mid-Highlands of Ethiopia Under Projected Climate Change: A case Study of Ambo District. Atmospheric and Oceanic Sciences. Vol. 2, pp.38-44.
- Fasil Mequanint, **Robel Takele**, Andualem Shiferaw, [2016], Observed and Future Climate Variability and Extremes Over East Shoa Zone, Ethiopia. J Climatol Weather Forecasting 4: 183. <http://dx.doi.org/10.4172/2332-2594.1000183>
- A.O. Ayeni, A.S.O. Soneye, O.O. Fasunwon, **R.T. Miteku**, L.A. Djotang. [2012], Water resources development optimization in a climate change scenario; case study of Benin Owena basin Nigeria. Research Journal of Environmental Sciences, 5: 59-67.

Technical Working Documents and Project Reports:

- Takele Robel**, Tesfaye K., Traore PCS. 2020. Seasonal Climate Predictability in Ethiopia: Review of best predictor sets for subseasonal to seasonal forecasting. CCAFS Working Paper No.301. Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
- Robel Takele**. [2019], Frost Hazard Map of Ethiopia. A research report to the National Meteorological Agency of Ethiopia by Ultimate Solutions Consultancy PLC. a collaborative research project financed by Farm Africa , Addis Ababa, Ethiopia.

- Robel Takele**, Mulugeta Worku, Degene Sahilu. [2018], Crop Production and Weather. Report to a collaborative research initiative of Farm Africa and Christian Aid led BRACED project in Ethiopia, Addis Ababa, Ethiopia.
- Robel Takele**, Kinde Tesfaye, Lisanework Nigatu. [2017], Pre-Season Maize Production Planning for Managing Climate Risk in Ethiopia. Msc Thesis. Haramaya University, Ethiopia.
- Robel Takele**, Fikadu Getachew, Yemane Kahsai, Atkilt Girma, Araya Alemie, G.Sridhar, K.P.C. Rao, Jemal Seid, Andualem Shimeles, Fasil Mequanint, Eshetu Zewdu, Girma Mamo. [2014], Impact of Climate Change on Agriculture: what, when, where and how?, Policy Brief, Agriculture Model Inter-comparison and Improvement Project.
- Robel Takele**, Andualem Shimes, Gizachew Legesse, Jemal Said, Tamene Mekonen, Liyuneh Gebre, Minilik Tsega, Girma Mamo, Kinde Tesfaye. [2013], Analyzing Climate Risks and Exploring Options in Eastern and Southern Africa. Research Report, Ethiopian Institute of Agricultural Research (EIAR), Addis Ababa, Ethiopia.
- Girma Mamo, Andualem Shimes, **Robel Takele**, Gizachew Legesse, Fikadu Getachew, Eshetu Zewdu. [2013], Making Ethiopian Agriculture Climate Resilient: Towards Networking and Coordination to Mainstream Climate Change Adaptation into Food Security and Sustainable Development. Project report submitted to thank Rockefeller Foundation, Biometrics, GIS and Agro-meteorology Research Process, Ethiopian Institute of Agricultural Research (EIAR), Addis Ababa, Ethiopia.
- Gizaw Mengistu, Girma Mamo, Andualem Shimes, Titke Kassa, Tamene Mekonnen, **Robel Takele**, Jemal Seid. [2012], Evaluating Representation of Global Climate Models for Regional Climate Scenario Studies over Ethiopia. Research report (phase-I). Department of physics, Addis Ababa University.
- Robel Takele**, Andualem Shimes, Girma Mamo, Gizachew Legesse, Fikadu Getachew, Eshetu Zewdu, Gezu Mengistu. [2012], Pilotng applicaon of seasonal climate outlook and weather forecast informa on for community based adaptation (CBA) to climate change. Project bulletin, Biometrics, GIS and Agro-meteorology Research Process, Ethiopian Institute of Agricultural Research (EIAR), Addis Ababa, Ethiopia.