

**Safwa Mohammed**  (Ph.D) Assistant professor: Debrecen University (**Hungary**).

Citations: **259**; *h* index: **11**; <https://scholar.google.hu/citations?user=BtRhLZgAAAAJ&hl=en&oi=sra>,  
<https://tudoster.idea.unideb.hu/en/szerzok/3106>, <https://publons.com/researcher/3009082/safwan-mohammed/>

**Overview:** A researcher in environmental issues such as land degradation, ecosystem management, climate change and GHGs emissions, with over 9 years of research experience including soil science, land degradation, climate change, and carbon emission.

### Education

Ph.D. candidate, University of Debrecen, Hungary (**Summa cum laude**) (09/2017 – 11/2021) topic: *Carbon dioxide emission and its consequences in the agricultural sector*

MSc. Modelling Soil Erosion- Tishreen University- Syria, 87.44% (**Excellent**) (12/2013-01/2017)

MSc. Land Evaluation- Damascus university- Syria, 84.45% (**Very Good**) (11/2009-11/2013)

BSc. Agricultural Engineering- Damascus university; 75% (**Top Student**). (09/2003-11/2008)

### Work experience and community service

**Assistant professor**, Debrecen University (09/2021- now) (**Hungary**)

1. Conducting research and publishing papers in academic journals.
2. Teaching and supervising undergraduate and graduate students.
3. Writing proposals to secure funding for research

**SDG CORPS** (02/2021- now) (voluntary work) (**India**)

- 1- Rest of Asia Regional Coordination Team

**Mentor** – Debrecen University (07/2020- 07/2021) (voluntary work) (**Hungary**)

1. Supporting new international students whom accepted to study at DU.

**Climate Global Ambassador**- voluntary work (Hamburg University) (1/2020- 12/2020) (voluntary work) (**Germany**)

1. Networking with international student regarding climate project.
2. Promoting climate events.
3. Collaboration with other colleagues for some projects

**Administrative Officer**- Damascus University - Directorate of International and Cultural Relations. (12/2016- 09/7/2017)

1. Preparing Agreements and Memorandum of Understanding.
2. Providing students with guidance and information.
3. Searching the needs of potential beneficiaries and Reporting

**Mentor** - Syria Trust for development (NGO) – Tishreen University (07/2015- 02/2017)

1. Leading a team of 20 persons.
2. Preparing questionnaires, statistics and reports, and discussing of the general plan.
3. Searching the needs of potential beneficiaries.

### Work experience reflected by international publications

- **Mohammed, S.**, Gill, A. R., Alsafadi, K., Hijazi, O., Yadav, K. K., Khan, A. H., ... & Harsanyi, E. (2021). An overview of greenhouse gases emissions in Hungary. *Journal of Cleaner Production*, 127865. <https://doi.org/10.1016/j.jclepro.2021.127865>
- **Mohammed, S.**, Mirzaei, M., Pappné Törő, Á., Anari, M. G., Moghiseh, E., Asadi, H., ... & Harsányi, E. (2021). Soil carbon dioxide emissions from maize (*Zea mays* L.) fields as influenced by tillage management and climate. *Irrigation and Drainage*. <https://doi.org/10.1002/ird.2633>
- Elbeltagi, A., Azad, N., Arshad, A., **Mohammed, S.**, Mokhtar, A., Pande, C., ... & Deng, J. (2021). Applications of Gaussian process regression for predicting blue water footprint: Case study in Ad Daqahliyah, Egypt. *Agricultural Water Management*, 255, 107052. <https://doi.org/10.1016/j.agwat.2021.107052>

- Singh, V. K., Kumar, D., Singh, S. K., Pham, Q. B., Linh, N. T. T., **Mohammed, S.**, & Anh, D. T. (2021). Development of fuzzy analytic hierarchy process based water quality model of Upper Ganga river basin, India. *Journal of Environmental Management*, 284, 111985. <https://doi.org/10.1016/j.jenvman.2021.111985>
- **Mohammed, S.**, Alsafadi, K., Enaruvbe, G. O., & Harsányi, E. (2021). Assessment of soil micronutrient level for vineyard production in southern Syria. *Modeling Earth Systems and Environment*, 1-10. <https://doi.org/10.1007/s40808-021-01104-9>
- **Mohammed, S.**, Hassan, E., Abdo, H. G., Szabo, S., Mokhtar, A., Alsafadi, K., ... & Rodrigo-Comino, J. Impacts of rainstorms on soil erosion and organic matter for different cover crop systems in the western coast agricultural region of Syria. *Soil Use and Management*. <https://doi.org/10.1111/sum.12683>
- **Mohammed, S.**, Alsafadi, K., Al-Awadhi, T., Sherief, Y., Harsanyie, E., & El Kenawy, A. M. (2020). Space and time variability of meteorological drought in Syria. *Acta Geophysica*, 1-22. <https://doi.org/10.1007/s11600-020-00501-5>
- **Mohammed, S.**, Abdo, H. G., Szabo, S., Pham, Q. B., Holb, I. J., Linh, N. T. T., ... & Ibrahim, J. (2020). Estimating Human Impacts on Soil Erosion Considering Different Hillslope Inclinations and Land Uses in the Coastal Region of Syria. *Water*, 12(10), 2786. <https://doi.org/10.3390/w12102786>
- Zanella, A., Ponge, J. F., Andretta, A., Aubert, M., Bernier, N., Bonifacio, E., ... & De Nobili, M. (2020). Combined forest and soil management after a catastrophic event. *Journal of mountain science*, 17(10), 2459-2484. <https://doi.org/10.1007/s11629-019-5890-0>
- **Mohammed, S.**, Al-Ebraheem, A., Holb, I. J., Alsafadi, K., Dikkeh, M., Pham, Q. B., ... & Szabo, S. (2020). Soil management effects on soil water erosion and runoff in central Syria—A comparative evaluation of general linear model and random forest regression. *Water*, 12(9), 2529. <https://doi.org/10.3390/w12092529>
- **Mohammed, S.**, Alsafadi, K., Talukdar, S., Kiwan, S., Hennawi, S., Alshihabi, O., ... & Harsanyie, E. (2020). Estimation of soil erosion risk in southern part of Syria by using RUSLE integrating geo informatics approach. *Remote Sensing Applications: Society and Environment*, 20, 100375. <https://doi.org/10.1016/j.rsase.2020.100375>
- **Mohammed, S.**, Alsafadi, K., Ali, H., Mousavi, S. M. N., Kiwan, S., Hennawi, S., ... & Anh, D. T. (2020). Assessment of land suitability potentials for winter wheat cultivation by using a multi criteria decision Support-Geographic information system (MCDS-GIS) approach in Al-Yarmouk Basin (S syria). *Geocarto International*, 1-19. <https://doi.org/10.1080/10106049.2020.1790674>
- **Safwan, M.**, Alaa, K., Omran, A., Quoc, B. P., Nguyen, T. T. L., Van, N. T., ... & Endre, H. (2020). Predicting soil erosion hazard in Lattakia Governorate (W Syria). *International Journal of Sediment Research*. <https://doi.org/10.1016/j.ijsrc.2020.06.005>
- **Mohammed, S.**, Alsafadi, K., Daher, H., Gombos, B., Mahmood, S., & Harsányi, E. (2020). Precipitation pattern changes and response of vegetation to drought variability in the eastern Hungary. *Bulletin of the National Research Centre*, 44, 1-10. <https://doi.org/10.1186/s42269-020-00306-y>
- Alsafadi, K., **Mohammed, S. A.**, Ayugi, B., Sharaf, M., & Harsányi, E. (2020). Spatial–Temporal Evolution of Drought Characteristics Over Hungary Between 1961 and 2010. *Pure and Applied Geophysics*, 1-18. <https://link.springer.com/article/10.1007%2Fs00024-020-02449-5>.
- **Mohammed, S.**, Habi, H., Ali, H., Alhenawi, S., Kiwan, S., Ghanem, S., ... & Harsányi, E. (2020). Soils of the Southern Syria-A big database for the future land management planning. *Data in Brief*, 105832. <https://doi.org/10.1016/j.dib.2020.105832>
- **Mohammed, S. A.**, & Harsányi, E. (2019). Drought cycle tracking in Hungary using Standardized Precipitation Index (SPI). *Acta Agraria Debreceniensis*, (2), 97-101. <https://doi.org/10.34101/actaagrar/2/3685>
- Ghanem, S., Rukia, A., Sulieman, M. M., Brevik, E. C., & **Mohammed, S.** (2020). Dataset on the Mediterranean soils from the coastal region of the Lattakia governorate, Syria. *Data in brief*, 29, 105254. <https://doi.org/10.1016/j.dib.2020.105254>

- **Mohammed, S.**, Alsafadi, K., Takács, I., & Harsányi, E. (2019). Contemporary changes of greenhouse gases emission from the agricultural sector in the EU-27. *Geology, Ecology, and Landscapes*, 1-6. <https://doi.org/10.1080/24749508.2019.1694129>
- **Mohammed, S. A.**, Alkerdi, A., Nagy, J., & Harsányi, E. (2020). Syrian crisis repercussions on the agricultural sector: Case study of wheat, cotton and olives. *Regional Science Policy & Practice*, 12(3), 519-537. <https://doi.org/10.1111/rsp3.12222>
- **Mohammed, S. A.**, & Fallah, R. Q. (2019). Climate change indicators in Alsheikh-Badr Basin (Syria). *Geography, Environment, Sustainability*, 12(2), 87-96. <https://doi.org/10.24057/2071-9388-2018-63>
- Alsafadi, K., **Mohammed, S.**, Habib, H., Kiwan, S., Hennawi, S., & Sharaf, M. (2020). An integration of bioclimatic, soil, and topographic indicators for viticulture suitability using multi-criteria evaluation: A case study in the Western slopes of Jabal Al Arab—Syria. *Geocarto International*, 35(13), 1466-1488. <https://doi.org/10.1080/10106049.2019.1583291>

### Conferences

1. **Invited speaker:** Keep soil alive, protect soil biodiversity (2020)- *YPARD Pakistan- Pakistan*
2. **Presentation:** Climate change in a changing world- University of Hamburg (2020)- **Germany**.
3. **Presentation:** International Conference on Sustainable Energy-Water-Environment Nexus in Desert Climates 2019 (IC-SEWEN'19), **Qatar**.
4. **Presentation:** 18<sup>th</sup> Alps-Adria Scientific Workshop (2019), **Italy**.
5. **Presentation:** 3<sup>rd</sup> Agriculture and Climate Change Conference, (2019), **Hungary**.
6. **Poster:** International Conference on "Natural Hazards and Risks in a Changing World" (2018). University of Potsdam- **Germany**.
7. **Presentation:** 3<sup>rd</sup> Ph.D. student conference for environmental science (2018). Hungarian soil science society; **Hungary**.
8. **Presentation:** National Conference for Environmental Research and Reconstruction in Syria (2017) - Ministry of Local Administration and Environment in cooperation with UNESCO, Damascus - **Syria**.

### Summer school:

1. 1<sup>st</sup> (CR)<sup>2</sup> summer school „Integrative Assessment of Climate Change Water Scarcity” Climate and Resilience Science Center (CR)<sup>2</sup> (2021) **Chile** <http://www.summerschool.cr2.cl/>
2. International summer school „New Technologies for Supporting Water Resources Management for A Sustainable Agriculture in The Mediterranean And Middle East Regions” University of Naples Federico II Portici (2019) **Italy**, <https://www.agraria.unina.it/post-laurea/summer-school/international-summer-school>

### Honours and awards:

1. Appreciation certificate from Hamburg University of Applied Sciences (2020) (**Germany**)
2. Best PhD. Presentation in the 2<sup>ed</sup> Ph.D student conference for environmental science (2018) (**Hungary**).
3. Appreciation certificate from Ministry of Environment (2015) (**Syria**).
4. Appreciation certificate from Business Clinic - Damascus University (2013) (**Syria**).
5. Appreciation certificate from Damascus University (2012) (**Syria**).
6. Certificate: Martyr Basil al-Assad for Best Student Damascus University (2008) (**Syria**).
7. Certificate: Martyr Basil al-Assad for Best Student Damascus University (2009) (**Syria**).

### Contact

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