

Mohamed Abdel Monem (PhD)

Senior Expert – Climate Change and Rural Development

Professional Summary

Dr. Mohamed Abdel Monem is an international expert with 35+ years of experience in climate change, management of land and water resources, and ecosystem sustainability. He develops and implements climate adaptation strategies, promotes sustainable land management, and leads ecosystem restoration initiatives. His research focuses on impact of climate change on the agricultural sector, climate-smart agriculture, water management, and biodiversity conservation in the Near East, North Africa, and Mediterranean. He is a member of the Mediterranean Experts on Climate and Environmental Change (MedECC) steering committee under the Union for the Mediterranean (UfM). His work includes novel research and publications on these topics. Now Dr. Abdel Monem is the CEO of the Climate Vision Consulting Company, located in Egypt <https://climatevisionconsulting.com>.

Areas of Expertise

- Climate change vulnerability assessment, smart solutions and finance.
- Sustainable low carbon agriculture and food systems.
- Natural based solutions and ecosystem restoration.
- Capacity building and advisory services.
- Policy integration and governance.

Professional Experience

- **January 2025 to now: Chief Executive Officer** of the Climate Vision Consulting Company, located in Egypt <https://climatevisionconsulting.com>.
- **January 2025 to now:** Member of the Steering Committee of the Mediterranean Experts on Climate and Environmental Change (MedECC), under the Union for the Mediterranean (UfM). <https://www.medecc.org/contributors/abdel-monem/>
- **June 2023 to Now: International consultant for climate change and rural development** contributing to sustainable development in the agrifood system and nexus between Water, Energy, food and Ecosystem in the Mediterranean region under changing climate.
- **August 2016 to June 2023: Senior Advisor of climate change and land management (International Consultant) at the Regional Office for the Near East and North Africa of the FAO, Cairo, Egypt.** Provides technical support for climate change adaptation and sustainable agriculture programs/projects, including funding proposals and regional strategy development. Focuses on climate-smart agriculture, ecosystem restoration, digital

agriculture, and knowledge sharing, contributing to key UN initiatives. Authored major FAO publications on climate change and climate-smart agriculture in the region.

- **July 2014 to July 2016: Consultant with the Minister of Environment in Egypt: Ministry of Environment, Cairo, Egypt.** Supported African environmental leadership (AMCEN, CAHOSCC) and contributed to key initiatives like the African Renewable Energy and Adaptation Initiatives. Engaged with partners (NEPAD, AfDB, UNEP, IRENA) and participated in COP-21. Managed a NEPAD-funded capacity development project.
- **June 2003 to June 2014: Program Officer for Ecosystem Management. Regional Office for Africa (ROA) of the United Nations Environment Program (UNEP) now known as UN Environment, Nairobi, Kenya.** Coordinate UNEP's Ecosystem Management Program in Africa, facilitating program implementation and capacity building for ecosystem management integration. Promoted ecosystem-based adaptation, transboundary resource management, and climate change resilience projects. Supported environmental assessments, post-disaster recovery, and sustainable land use/desertification control programs. Coordinated Africa-China cooperation and provided support to AMCEN and AMCOW. Worked to integrate ecosystem resources management with poverty eradication efforts.
- **Jan 2001 to June 2003: Assistant FAO Representative in Egypt, Food and Agriculture Organization of the United Nations (FAO). FAO Representation in Egypt.** Managed FAO representation office and field projects, covering all aspects from program development and funding to implementation, monitoring, and evaluation. Liaised with government and local entities on sustainable resource use and contributed to project proposal development. Oversaw project staffing, procurement, and contractual arrangements.
- **March 1994 to January 2001: Natural Resources Management Specialist. International Centre for Agricultural Research in the Dry Areas (ICARDA) one of the CGIAR centers.** Provided technical support to the countries of North Africa and West Asia in the areas of land and water management engaging with regional stakeholders (national institutes, NGOs, UN organizations, and developing partners). Developed research programs and conducted assessments of land and water management impacts on agriculture. Published scientific papers and technical reports on related topics.
- **October 1986 to July 1990: Soil Scientist University of Nebraska working with USAID project (MIAC) in Settat, Morocco.** Developed, implemented, and monitored a natural resource management research program at Morocco's Center for Research in Arid and Semi-Arid Regions, focusing on sustainable land and water use. Managed soil and water laboratories and established sustainable land management systems for farmers. Contributed to a regional network on sustainable land and water use in North Africa and West Asia.

- **Engagement with the EU entities in Mediterranean related programs.** Currently a member of the Steering Committee for the Mediterranean Experts on Climate and Environmental Change (MedECC), developing climate change reports for the Mediterranean region. Also serves as a Senior Expert on Climate Change, Environment, and Water for the Union for the Mediterranean (UfM). Served as a member of the PRIMA technical evaluation committee, assessing and selecting projects for funding.

Selected Publications

1. Stumpe, J. and **M. Abdel Monem**. 1986. Greenhouse evaluation of the effect of topsoil moisture and simulated rainfall on volatilization of nitrogen from surface-applied urea, diammonium, and potassium nitrate. *Fertilizer Research*. 9: 229-239.
2. Soltanpour, P.N., M. El Gharous, A. Azzaoui, and **M. Abdel Monem** 1989. A soil test based N recommendation model for dry land wheat. *Commun. in Soil Sci. Plant Anal.* 20 (9 &10) 1053-1068.
3. Soltanpour, P.N., M. El Gharous, A. Azzaoui, and **M. Abdel Monem** 1989. Response of drylands wheat to P rates and placement methods. *Commun. in Soil Sci. Plant Anal.* 20 (5 &6): 597-605.
4. **Abdel Monem, M.** J. Ryan. 1990. Profitability of Hessian Fly resistant wheat in rainfed areas of Morocco: nitrogen and location effects. *Agricoltura Mediterranea*. 120 (1): 429-435.
5. Shroyer, J., J. Ryan, **M. Abdel Monem** and M. El Mourid. 1990. Production of fall-planted cereals in Morocco and technology for its improvement. *Journal of Agronomic Education*. 19 (1): 33-40.
6. Ryan, J., J. Shroyer and **M. Abdel Monem**.1991. Interaction between nitrogen level and Hessian fly protection of wheat in Morocco. *Journal of Farming System Research - Extension*. 2(1): 47- 55.
7. **Abdel Monem, M.** and J. Ryan 1991. Residual Effects of urea nitrogen applied to vertisol in Morocco. *Proceedings of the 2nd African Soil Science Sci. Soc. Conf.* Cairo, Egypt.
8. Margoum, M., J. Ryan, J. Shroyer and **M. Abdel Monem**.1992. Potential for adopting Triticale in Morocco. *J. Nat. Resour. Life Sci. Educ.* 21:137-141.
9. Ryan, J., **M. Abdel Monem** and J. Shroyer 1992. Using visual assessment of Nitrogen deficiency in drylands cereals as a basis for action in morocco. *J. Nat. Resour. Life Sci. Educ.* 21: 31-33.
10. Soliman, S., **M. Abdel Monem**, A. Gadalla, KH. Abbady. 1993. Effect of N-15 fertilizers on wheat plant grown in sandy soil. *Isotopes & Rad. Res.* 25 (1): 59-64.
11. Helal, H. M., Ragab, M. and **M. Abdel Monem**. 1993. N- Balance of Barley under salt stress. In: *Qualitaet und Hygiene von Lebensmitteln in Produktion und Verarbeitung*. Hamburg, Germany : VDLUFA-Verl. (1993), 571 -573 VDLUFA-Schriftenreihe Vol. 37 unvollständig (#77).

12. **Abdel Monem, M.** and A. Gadalla. 1994. Efficiency of Nitrogen fertilizer in crop production in selected countries of the Mediterranean region. *Agricoltura Mediterranea*. 124 (1): 5-10.
13. **Abdel Monem, M.** A. Gadalla, KH. Abbady. 1994. Dry weight and N-uptake by rice plants fertilized with Azolla and N-15 enriched urea. *Isotopes & Rad. Res.* 26 (1): 53-58.
14. Mohamed, A and **Abdel Monem, M.** 1994 . Influence of irrigations regimes on N-15 uptake, yield and root activity distribution of three sesame genotypes. *Proceedings of the International Conference on Land and Water Resources Management in the Mediterranean Region, 4-8 September 1994 , Bari Italy.*
15. **Abdel Monem, M.**, S. Soliman, A. Gadalla, KH. Abbady. 1995. Lysimeter and greenhouse studies using N-15 on N-losses and N- uptake by wheat and corn as affected by soil conditioner and nitrification inhibitor. *Egypt. J. Soil. Sci.* 3: 347-358.
16. Ryan, J., **M. Abdel Monem**, A. Azzaoui and M. El Gharous. 1995. Impact of Phosphorous fertilizer on barley, wheat and triticale in phosphorous deficient zone soil. *Al Awamia* 90: 81-87.
17. **Abdel Monem, M.** and S. Soliman, 1995. Modified N fertilizers: possible solution for the fertilizer's economic and environmental problems in Egypt. In *Proceedings of the Soil Fertility and Fertilizers Management 9th International Symposium of the CIEC , 25-30 September , Kusadasi, Turkey*
18. Helal, H. M., Ragab, M. and **M. Abdel Monem**. 1995. Release and plant availability of N-15 from Leucaena . pp 523-528 in: *Agroforestry and Land Use Changes in Industrialized Nations*. E. Welte et al (Eds.) CIEC, Gottingen, Germany.
19. Elgala, A.M., Y.Z. Ishac, **M. Abdel Monem** , and I. El Ghandour. 1995. Effect of Single and Combined Inoculation with Azotobacter and VA Mycorrhizal Fungi on Growth and Mineral Nutrient of Maize and Wheat Plants, in P. M Huang;(Author). *Environmental Impacts of Soil Component Interactions Metals, Other Inorganics, and Microbial Activities*. LEWIS - CRC - TAYLOR & FRANCIS
20. Abou-Zeid, S. T., **M. Abdel Monem** and Y.A. Abdel Aal. 1996. Interaction between Azolla and N fertilizers under the flooded system: Greenhouse study. *J. Agric. Sci. Mansoura Univ.* 21(3):1203-1209.
21. Helal, H., A. S. Ragab, **M. Abdel Monem**, and E. Schnug. 1996. Evaluation of root mortality by biochemical analysis. *Commun. in Soil Sci. Plant Anal.* 27 (5 -8): 169-1175.
22. Soliman, S. and **M. Abdel Monem**. 1996. Effect of methods of N application and modified urea on N-15 recovery by rice. *Fertilizer Research.* 43: 143-148.
23. El- Ghandour, I., **M. Abdel Monem** and R. Moustafa. 1996. Nitrogen fixation and nutrient uptake by two Chickpea genotypes cultivated in sandy soil. *Folia Microbiol.* 41(3): 267-271.
24. Ryan, J. and **M. Abdel Monem** 1997. Fertilizer for sustainable plant production and soil fertility. *Proceedings of the 11th International World Fertilizer Congress, Sept 7-13 Gent, Belgium.*
25. **Abdel Monem, M.** H. Khalifa and M. Solh. 1998. Building and sustaining the high production capacity of Egypt's irrigated lands: a long- term research program. *Journal of Sustainable Agriculture*, 11(2&3): 7-18.

26. Ryan, J., **M. Abdel Monem**, J. Shroyer, M. El Bouhssini, and M. Nachit. 1998. Potential for nitrogen fertilization and Hessian fly resistance to improve Morocco's drylands wheat yields. *European Journal of Agronomy*. 8: 153-159.
27. Ryan, J. and **M. Abdel Monem** 1998. Soil fertility management for sustainable production in the West Asia and North Africa Region: need for long term research. In: *Soil Quality and Agricultural Sustainability/ R. Lal (editor)*. Sleeping Bear Press. Chelsea, MI.
28. El-Motaium R.A. and **Abdel Monem M.** (2000). Long term effect of using sewage water for irrigation on nitrate accumulation in soil and plants". *Proceeding of the Xth International Colloquium for the Optimization of Plant Nutrition*. April, 2000 Cairo-Egypt
29. **Abdel Monem, M.**, H. Khalifa, M. Beider, I. El Ghandour, and Y. Galal. 2001. Using bio-fertilizers for Maize production: Response and economic return under different irrigation treatments. *Journal of Sustainable Agriculture*. 19 (2): 41-49
30. **Abdel Monem, M.** co-author "Desk study on the Environment in Liberia" 2004, UNEP publication (116 pages), Nairobi, Kenya.
31. **Abdel Monem, M.** co-author "Seychelles: post- Tsunami Environmental Assessment" 2005, UNEP publication (60 pages), Nairobi, Kenya.
32. Elizabeth Khaka, Maimbo Malesu, **Mohamed Abdel Monem**, Alex Oduor and Bancy Mari, 2005 (editors): *Rainwater and the Millennium Development Goals*, UNEP publication (39 Pages), Nairobi, Kenya.
33. **Abdel Monem, M.** co-author "After the Tsunami, Rapid Environmental Assessment" 2005, UNEP publication (140 pages), Nairobi, Kenya.
34. **Abdel Monem, M.** co-author "Africa Environment Outlook: 2 Our Environment, Our Wealth" 2006, UNEP publication (542 pages), Nairobi, Kenya.
35. **M. Abdel Monem** , W. L. Lindsay², R. Sommer³ and J. Ryan 2010. Loss of nitrogen from urea applied to rainfed wheat in varying rainfall zones in northern Syria. *Nutrient Cycling in Agroecosystems* 86: 357-366.
36. **Abdel Monem, M.** co-author "Adaptation to Climate-change Induced Water Stress in the Nile Basin" 2013 UNEP publication (163 pages), Nairobi, Kenya.
37. Hongtao Wang, Tao Wang, Bingru Zhang, Fenfting Li, Brahim Toure, Isaiah Omosa, Thomas Chiramba, **Mohamed Abdel-Monem**, Mahesh Pradhan. *Water and wastewater treatment in Africa: current practices and challenges*. CLEAN-SOIL, AIR, WATER, 2013, (42): 1029-1035.
38. **Abdel Monem, M.** co-author "Atlas of the African Mountains" 2014, UNEP publication, Nairobi, Kenya.
39. **Abdel Monem, M.** co-author "Adaptation to Climate-change Induced Water Stress in the Nile Basin" 2013 UNEP publication (163 pages), Nairobi, Kenya.
40. Hongtao Wang, Tao Wang, Bingru Zhang, Fenfting Li, Brahim Toure, Isaiah Omosa, Thomas Chiramba, **Mohamed Abdel-Monem**, Mahesh Pradhan 2013. *Water and wastewater treatment in Africa: current practices and challenges*. CLEAN-SOIL, AIR, WATER, 2013, (42): 1029-1035.
41. Lewis, P., **Abdel Monem, M.** and Impiglia, A. 2018. Impacts of climate change on farming systems and livelihoods in the near east and North Africa - With a special focus on small-scale family farming. FAO. <http://www.fao.org/3/ca1439en/CA1439EN.pdf>.

42. **Abdel Monem, Mohamed** ; and Phoebe Lewis 2020; Governance and Institutional Structure of Climate Change in Egypt in the E.-S. E. Omran and A.M. Negm (eds.), Climate Change Impacts on Agriculture and Food Security in Egypt, Springer Water, https://doi.org/10.1007/978-3-030-41629-4_3.
43. **Abdel Monem, Mohamed**.; and Ismail A. El Grandeur 2020; Role of Science, Technology and Innovation in Addressing Climate Change Challenges in Egypt in the E.-S. E. Omran and A.M. Negm (eds.), Climate Change Impacts on Agriculture and Food Security in Egypt, Springer Water, https://doi.org/10.1007/978-3-030-41629-4_4.
44. **Abdel Monem, Mohamed** ; and Biljana Radojevic 2020; Agricultural Production in Egypt: Assessing Vulnerability and Enhancing Adaptive Capacity and Resilience to Climate Change in E.-S. E. Omran and A.M. Negm (eds.), Climate Change Impacts on Agriculture and Food Security in Egypt, Springer Water, https://doi.org/10.1007/978-3-030-41629-4_10.
45. Daniel El Chami, Antonio Trabucco, Theresa Wong, **Mohamed Abdel Monem** and Valentina Mereu (2022) Costs and effectiveness of climate change adaptation in agriculture: a systematic review from the NENA region, Climate Policy, 22:4, 445-463, DOI: 10.1080/14693062.2021.1997703. <https://doi.org/10.1080/14693062.2021.1997703>
46. Ziadat, F.M., P. Zdruli, S. Christiansen, L. Caon1, **M. Abdel Monem** and T. Fetsi (2022). An Overview of Land Degradation and Sustainable Land Management in the Near East and North Africa. Journal of Sustainable Agriculture Research; Vol. 11, No. 1; 2022. <https://ccsenet.org/journal/index.php/sar/article/view/0/46488>.
47. **Mohamed Abdel Monem**, Dalia Abulfotuh, Mohamed Al Hamdi, Hichem Charieg, Lionel Dabbadie, Jean-Marc Faurès, Theodora Fetsi, Abdel Hamied Hamid, Jennifer Smolak, Domitille Vallée and Theresa Wong.2022. The State of Land and Water Resources for Food and Agriculture in the Near East and North Africa region. <https://www.fao.org/3/cc0265en/cc0265en.pdf>.
48. Krystal Crumpler, Giulia Gagliardi, Theresa Wong, **Mohamed Abdel Monem**, Sandro Federici, Srijita Dasgupta, Alexandre Meybeck, Olga Buto, Janek Toepper, Mirella Salvatore, Julia Wolf and Martial Bernoux. 2022. Regional analysis of the nationally determined contributions in the Near East and North Africa: Opportunities and gaps in the agriculture, water and land use sectors. <https://www.fao.org/3/cb8662en/cb8662en.pdf>.
49. **Abdel Monem, M.**, Wong, T., Elbadawy, O., Faurès, J., Tawfic, M., Abouzeid, F. & Matteoli, F. 2022. Towards climate-smart agriculture in Egypt: Scaling up sustainable practices for enhancing agrifood system resilience and adaptive capacity. <https://www.fao.org/3/cc2917en/cc2917en.pdf>.
50. FAO. 2022. Framework for Environmental and Social Management. Rome. **Mohamed Abdel Monem** (contributor) <https://doi.org/10.4060/cb9870en>
51. **Abdel Monem, M.** 2024. Transformation to low carbon agrifood value chains in Egypt – Lessons from the Sustainable Agriculture Investments and Livelihoods project. FAO. <https://www.fao.org/documents/card/fr?details=CC9313EN>.
52. **Abdel Monem, M.**, El Ghandour, I., & Abdel-Sabour, M. F. (2024). Advancing Groundwater Management and Seawater Intrusion Monitoring in the Middle East and North Africa: Exploring the Potential of Nuclear Tracer Techniques. In Managed Aquifer

- Recharge (MAR) in the MENA Countries, Developments, Applications, Challenges, Strategies, and Sustainability (M. El-Rawy & A. Negm, Eds., pp. 29–45). Springer. <https://link.springer.com/book/10.1007/978-3-031-58764-1>
53. MedECC, 2024: Interlinking climate change with the Water-Energy-Food-Ecosystems (WEFE) nexus in the Mediterranean Basin. [Drobinski, P., Rivera-Ferre, M.G., **Abdel Monem, M.**, Driouech, F., Cramer, W., Guiot, J., Gattacceca, J.C., Marini, K. (eds.)]. MedECC Reports. MedECC Secretariat, Marseille, France, 264 pp., doi: 10.5281/zenodo.13365388, ISBN: 978-2-493662-09-5. <https://www.medecc.org/medecc-reports/climate-wefe-nexus/>
54. Drobinski, P., **Abdel Monem, M.**, Rivera Ferre, M.G., Santeramo, F., 2024: Introduction: The Water-Energy-Food-Ecosystems (WEFE) nexus concept in the Mediterranean region. In: Interlinking climate change with the Water-Energy-Food-Ecosystems (WEFE) nexus in the Mediterranean Basin. [Drobinski, P., Rivera Ferre, M.G., Abdel Monem, M., Driouech, F., Cramer, W., Guiot, J., Gattacceca, J.C., Marini, K. (eds.)]. MedECC Reports. MedECC Secretariat, Marseille, France, pp. 37-55, doi:10.5281/zenodo.13378552.
55. **Abdel Monem, M.**, Crumpler, K., and Abouzeid, F. 2025. Building resilience in the Egyptian livestock sub-sector: climate change impacts and scaling up solutions. FAO. Cairo. DOI (in press) . <https://doi.org/10.4060/cd4914en>.
56. **Abdel Monem, M.**, Elmoshneb, L., Nelson, S., Ngugi, S. & Abouzeid, F. 2025. Empowering women in Egypt's livestock and dairy subsectors – A gender-transformative approach to climate resilience and economic inclusion. Cairo, FAO. <https://doi.org/10.4060/cd6465en>.
57. **Abdel Monem, M.**, El Sherei, A., Rai, N. & Abouzeid, F. 2025. Investing in climate-smart dairy value chains in Egypt – Risks and opportunities for private sector engagement. Cairo, FAO. <https://doi.org/10.4060/cd7209en>.
58. Drobinski, P., Rivera Ferre, M. G., **Abdel Monem, M.**, Abu Hatab, A., Behnassi, M., Chfadi, T., Cramer, W., Debolini, M., Driouech, F., El-Kenawy, A., García-Vila, M., Guiot, J., Lamonaca, E., López-i-Gelats, F., Malek, Ž., Papadopoulou, M. P., & Santeramo, F. G. (2025). Nexus approach to enhance water-energy-food security and ecosystems resilience under climate change in the Mediterranean. npj Climate Action. <https://doi.org/10.1038/s44168-025-00308-4>.

Education

Ph.D. in Agronomy /Soil Science – **Colorado State University, Fort Collins, Colorado, USA**

M.Sc. in Soil Science – **Ain Shams University, Cairo, Egypt.**

B.Sc. in Agricultural Sciences – **Cairo University, Cairo, Egypt**
