

Curriculum Vitae
Dr. Abbas Ali Vali

1. Personal Information

Full Name: Abbas Ali Vali

Field of Expertise: Natural Resources Management (Desert), Ecogeomorphology, Desert Geomorphology

Work Address: University of Kashan, Faculty of Natural Resources and Earth Sciences, Department of Arid Land Management

Email: vali@kashanu.ac.ir

2. Education

****B.Sc.:**** Natural Resources Engineering (Range and Watershed Management) – Yazd University, Iran

****M.Sc.:**** Natural Resources Engineering (Range Management) – Tarbiat Modares University, Iran

****Ph.D.:**** Geomorphology (Applied Geomorphology) – Isfahan University, Iran

3. Professional Experience

- Faculty Member, Shiraz University
- Faculty Member, University of Kashan

4. Areas of Expertise and Specialization

- Natural Resources Management - Desert (Assessment, Modeling, Management)
- Ecogeomorphology (Assessment, Modeling, Management)
- Natural Hazards Management (Assessment, Modeling, Management)

5. Theses Supervised/Advised

B.Sc. Thesis:

- Comprehensive interdisciplinary study of a watershed (pedology, climatology, vegetation, geology, geomorphology, soil and water conservation, sociology and economics, watershed management) – Yazd University

M.Sc. Thesis:

- Evaluation and determination of appropriate utilization methods for rangelands in arid regions – Tarbiat Modares University

Ph.D. Thesis:

- Geomorphology-based evaluation and modeling of watershed performance – Isfahan University

6. Teaching Experience

Ph.D. Program:

- Quantitative Geomorphology and Numerical Analysis in Desert
- Evaluation and Analysis of Desertification Combat Plans
- Wind Erosion and Its Control
- Formation Sediment Yield Assessment

M.Sc. Program:

- Wind Erosion and Its Control
- Vegetation Assessment and Management
- Desertification Classification and Assessment
- Geomorphological Hazards
- Coastal Hazards
- Quaternary Formations

B.Sc. Program:

- General Geomorphology
- Applied Geomorphology
- Geomorphology of Iran
- Environmental Hazards Management
- Vegetation Measurement and Assessment
- Aerial Photographs
- Range Management
- Range Improvement and Development
- Computer Programming

7. Administrative and Executive Positions

- Head of Range and Watershed Management Department, Shiraz University (1998–2002 & 2009–2010)
- Deputy Dean for Education and Research, Shiraz University (2004–2006)
- Head of Desert Science Engineering Department, University of Kashan (2011–2012)
- Director of Cultural Affairs, University of Kashan (2011–2013)
- Deputy Dean for Research, University of Kashan (2021–2022)
- Head of Arid Land Management Department, University of Kashan (2023–2024)
- Deputy Dean for Cultural Affairs, University of Kashan (2024–2025)

8. Training Courses and Workshops

- Research Methodology Workshop, Shiraz University
- Teaching Methods Workshop, Shiraz University
- Assessment and Measurement in Teaching Workshop, Shiraz University
- GIS Workshop, Isfahan University of Technology

- Artificial Intelligence Workshop, Isfahan University
- Statistical Modeling Workshop, Isfahan University
- Advanced Computer Programming with MATLAB, Isfahan University
- Artificial Neural Networks and Fuzzy Toolbox in MATLAB, Isfahan University

9. Awards and Honors

- Distinguished Faculty Member (Teaching), Shiraz University (2005)
- Distinguished Faculty Member (Research), Shiraz University (2004)
- Distinguished Faculty Member (Teaching), University of Kashan (2012)
- Distinguished Faculty Member (Research), University of Kashan (2012)
- Distinguished Faculty Member (Teaching), University of Kashan (2021)

10. Journal Publications

1. Vali, A., Barabadi, H., & Amirahmadi, A. (2022). Determining the cultivation pattern and evaluating species cultivated with treated urban wastewater for desert land rehabilitation (Case study: Sabzevar wastewater treatment plant). **Geographical Studies of Arid Regions**, 7(25), 37-47.
2. Vali, A., & Roustaei, F. (2022). Trend analysis of drought time series for the recent half-century in central Iran. **Desert Ecosystem Engineering**, 5(11), 79-92.
3. Vali, A., Mousavi, S. H., & Abbasi, H. (2019). Analysis and evaluation of land use change trends in Mobarakeh for sustainable development. **Urban Social Geography**, 6(2), 73-86. doi: 10.22103/JUSG.2019.1992
4. Vali, A., Barabadi, H., & Amirahmadi, A. (2018). Evaluating the efficiency of using municipal wastewater in desertification risk management (Case study: Barabad desert region, Sabzevar). **Ecohydrology**, 5(1), 279-292. doi: 10.22059/ije.2018.228766.494
5. Vali, A., Mousavi, S. H., & Zarepour, M. (2022). Evaluation of desertification combat plans in Aran and Bidgol region based on vegetation cover criteria. **Desert Ecosystem Engineering**, 7(19), 63-80. doi: 10.22052/deej.2018.7.19.45
6. Vali, A., Ebrahimi, Z., Khosrowshahi, M., & Ghazavi, R. (2022). Determining the importance of hydro-climatic parameters on Gavkhuni wetland drying using artificial neural networks and remote sensing data. **Desert Ecosystem Engineering**, 5(12), 79-94.
7. Vali, A., Khamoushi, S., Mousavi, S. H., Panahi, F., & Tamsaki, E. (2014). Climatic analysis and tracking of widespread dust storms in southern and central Iran. **Environmental Sciences**, 40(4), 961-972. doi: 10.22059/jes.2014.53012

8. Nazarian, M. A., Vali, A., & Ranjbar Fardoei, A. (2025). Multi-criteria assessment of desert ecosystem sustainability (Case study: Mehriz county, Yazd). **Ecohydrology**, 12(2), 762-778. doi: 10.22059/ije.2025.386072.1852
9. Hosseini Khezr Abad, A. S., Vali, A., Halabian, A., & Mokhtari, M. H. (2023). Projection of climatic elements based on radiative forcing scenarios in Yazd province. **Geographical Studies of Arid Regions**, 14(52), 1-23. doi: 10.22034/jargs.2023.385861.1015
10. Mousavi, S. A., Vali, A., & Yazdani Ardastani, N. (2025). Strategic desert management analysis in Ardestan county. **Desert Management**, 13(1), 63-86. doi: 10.22034/jdmal.2024.2040437.1479
11. Hosseini Khezr Abad, A. S., Vali, A., Halabian, A., & Mokhtari, M. H. (2024). Modeling and projection of climatic parameters in northwest Yazd using general circulation models and radiative forcing scenarios. **Climatological Research**, 1403(57), 1-17. doi: 10.22034/jcr.2024.207712
12. Karimi, Z., Mousavi, S. H., & Vali, A. (2024). Feasibility study of tourism village project with sustainable ecotourism approach in Fereydunshahr county. **Geography and Human Relations**, 7(3), 412-434. doi: 10.22034/gahr.2024.455026.2111
13. Afshari, M., & Vali, A. (2023). Efficiency of remote sensing and machine learning algorithms in zoning dust-prone areas of Isfahan province. **Desert Management**, 11(3), 73-88. doi: 10.22034/jdmal.2023.2011344.1438
14. Afsharinia, M., Vali, A., Panahi, F., & Monshi, H. (2023). Monitoring land surface temperature using MODIS products and remote sensing techniques (Case study: Kashan plain). **Geographical Explorations of Desert Regions**, 11(1), 161-178. doi: 10.22034/grd.2023.19993.1575
15. Aramesh, M., Vali, A., & Ranjbar, A. (2023). Investigating geomorphological indices and their relationship with vegetation cover in sand dunes (Case study: Aran and Bidgol and Kashan). **Quantitative Geomorphological Research**, 12(1), 114-131. doi: 10.22034/gmpj.2023.375286.1393
16. Vali, A., & Roustaei, F. (2018). Investigation of the wind erosion trend in central Iran using Dust Storm Index in the last fifty years. **JWSS**, 21(4), 189-200. URL: <http://jstnar.iut.ac.ir/article-1-3326-fa.html>
17. Hosseini Khezr Abad, A. S., Vali, A., Halabian, A., Mokhtari, M. H., & Mousavi, S. A. (2024). Investigating the impact of climate change on the effective indicators in desertification and predicting its spatial changes. **Desert**, 29(2), 194-215. doi: 10.22059/jdesert.2024.100148
18. Afshari, M., & Vali, A. (2024). Application of Maximum Entropy Model and remote sensing technique to predict susceptible areas to dust storms in Isfahan Province, Iran. **ECOPERSIA**, 12(1), 25-37. doi: 10.22034/ecopersia.12.1.25
19. Hosseini Khezr Abad, A., Vali, A., Halabian, A., & Mokhtari, M. (2023). Assessment of the desertification intensity based on soil, vegetation, and wind erosion criteria in the northwest of Yazd. **JWSS**, 27(4), 169-186.

20. Ghomeshion, M., Vali, A., Ranjbar, A., & Mousavi, S. H. (2023). Investigation of spatio-temporal changes of dust storms and its relation to climatic factors in Khuzestan Province, Iran. **Desert**, 28(2), 205-215. doi: 10.22059/jdesert.2023.95505
21. Ghazavi, R., & Vali, A. (2013). The effect of planted saltbush (*Atriplex lentiformis*) on edaphic factors in grazed and ungrazed area. **ECOPERSIA**, 1(2), 113-122.
22. Vali, A. A., & Ghazavi, Gh. R. (2004). The study of relationships between plant-density and soil salinity and texture in Koria saline area in Darab. **J. Desert**, 53, 35-48.
23. Vali, A. A., & Ghazavi, Gh. R. (2003). The study effects of flood spreading on plant cover and production in Darab. **Journal of Agricultural Sciences and Natural Resources**, 7, 44-51.
24. Vali, A. A., & Ghazavi, Gh. R. (2005). The relationship between plant density and soil salinity and texture in Koriah saline area in Darab region. **Desert**, 8, 236-248.
25. Ghazavi, R., Vali, A. A., & Eslamian, S. (2010). Impact of flood spreading on infiltration rate and soil properties. **Water Resources Management**. doi: 10.1007/s11269-010-9579-y

11. Thesis Supervision and Advisory

Ph.D. Theses:

1. Spatial modeling of dust source areas using machine learning models and MaxEnt model (Case study: Isfahan province) – Majid Afshari
2. Assessment of mining development impacts on desert ecosystem degradation (Case study: Tabas county) – Seyed Mohammad Mehdi Mousavian
3. Assessment of desertification status and trends for desert management and control (Case study: Northeast of Isfahan province) – Zahra Eslamian
4. Monitoring land cover changes and their effect on dust phenomenon in southern Khuzestan province – Marzieh Ghomeshion
5. Desertification simulation using time series analysis through wavelet and Box-Jenkins methods – Sareh Hashem Galougardi
6. Evaluation of factors affecting resilience of local communities in desert ecosystems (Case study: Gol Cheshmeh carbon sequestration project, Mahalat) – Hamidreza Moradi
7. Investigating the impact of climate change on desertification indicators and predicting spatial changes – Azam Sadat Hosseini
8. Meteorological drought study using statistical and artificial intelligence models (Case study: Isfahan province) – Hadi Zarepour
9. Assessment of sand dune stability in relation to vegetation cover in desert environments (Case study: Kashan and Aran & Bidgol) – Meysam Aramesh

M.Sc. Theses:

1. Investigating the effect of climatic elements and vegetation cover changes on dust storms using remote sensing (Case study: Central and southern Iran)

2. Investigating land use effects on soil degradation using soil quality indices in Abuzidabad region
3. Desertification process assessment with emphasis on vegetation cover and soil salinity using remote sensing
4. Assessment of land cover changes on dust phenomenon (Case study: Kashan and Aran & Bidgol)
5. Evaluation of desertification combat plans based on vegetation cover criteria in Aran & Bidgol
6. Assessment and analysis of comprehensive strategic desert management (Case study: Ardestan county)
7. Investigation of physical-ecological degradability of pre-Quaternary desert formations (Case study: Kashan plain)
8. Remote sensing assessment of desertification status in Haj Ali Gholi desert (Isfahan University)
9. Ecogeomorphological investigation of nebkas in Sirjan plain (Isfahan University)
10. Modeling of barchan dunes in Haj Ali Gholi desert (Isfahan University)
11. Investigation and prediction of climatic drought indices in Ilam province (University of Kashan)
12. Determining appropriate method for urban runoff estimation (University of Kashan) - Advisor
13. Quantitative and qualitative simulation of groundwater in Kashan plain (University of Kashan) - Advisor
14. Assessment of the relationship between teleconnection patterns and precipitation and drought parameters (University of Kashan) - Advisor
15. Evaluation of saline soil remediation potential using *Atriplex* (University of Kashan) - Advisor
16. Phytogeomorphology of steppe regions (Isfahan University) - Advisor
17. Scale study in geomorphology (Isfahan University) - Advisor
18. Sediment yield trend study in Nourabad Lorestan watershed (Isfahan University) - Advisor

12. Personal Interests and Activities

- Agriculture and Horticulture
- Mountaineering and Nature Tourism
- Landscape Planning and Green Space Design