

# Curriculum vitae



## Marzban Faramarzi

Date of birth: 23.09.1975

Place of birth: Gilangharb, Kermanshah, Iran

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### Position and address

Associate Professor of Rangeland Management (lecturer and researcher), Rangeland and Watershed Management Group, Faculty of Agricultural Sciences, Ilam University, Ilam, Iran  
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### Research interests

- Rangeland management, inventory and monitoring
- Biodiversity in relation to management and environmental factors
- Using Remote Sensing (RS) and Geographic Information Systems (GIS) for studying rangeland inventory and monitoring, detection and simulation of land use/cover changes, biodiversity assessment and water resources management
- Integrated watershed/rangeland management using system dynamic model

### School Education

1983-1991 Primary and guidance school (Gilangharb, Kermanshah, Iran)  
1991-1994 High school (Islamabad-Gharb, Kermanshah, Iran)

### University Education

1994-1998 B.Sc. at Gorgan University of Agricultural Sciences and Natural Resources, Golestan, Iran  
1998-2000 M.Sc. at Department of Desert Zones Management, University of Tehran, Tehran, Iran  
2004-2009 Ph.D. at Institute of Grassland Science, Department of Crop Sciences, Georg-August-University, Göttingen, Germany.

### Appointments

2009 - Present Assistant/Associate Professor, Rangeland and Watershed Management Group, Faculty of Agricultural Sciences, Ilam University, Ilam, Iran.  
2012 Visiting Scholar: DAAD Fellow, Institute of Grassland Science, Department of Crop Sciences, Georg-August-University, Göttingen, Germany.  
2018 Visiting Scholar: Institute of Grassland Science, Department of Crop Sciences, Georg-August-University, Göttingen, Germany.

### Student Supervision

2010 - Present 18 M.Sc. students.  
17 students at Ilam University and one student at the University of Tehran.

### Co-Supervised Thesis

2010 - Present 3 Ph.D. students and 11 M.Sc. students.

## Teaching

- Since 2009 The courses for BSc Rangeland and Watershed Management, such as Statistics and Probability, Applied Statistics, Remote Sensing, Geographic information systems, Relationship between livestock and rangeland, Rangeland management, Rangeland inventory and monitoring, Rangeland ecology, Expertise English language
- Since 2010 The courses for MSc Water resources, Watershed Management, Combat Desertification, and Agro-ecology: Remote sensing, Geographic information systems, Wind erosion control, Water erosion control, Research methodology

## Research project

### Completed project

- Impacts of climate change, management and environmental variables on biodiversity in semi-arid rangeland in western Iran. Funded by The German Academic Exchange Service, 2011-2012.
- Effect of environmental and management factors on the weed species richness of crops in Ilam Province. Funded by Ilam University, Ilam, Iran, 2009-2011.
- Investigation of desertification trend in Dehloran plain. Funded by Ilam University, Ilam, Iran, 2011-2013.
- Assessment of relationships among groundwater level, drought and land-use changes. Funded by Ilam University, Ilam, Iran, 2014-2016.
- Assessing greenhouse gases emission resulting from field operations for crop production in Ilam Province. Funded by Ilam University, Ilam, Iran, 2015-2017.

### Ongoing project

- Committee member of the project of National Report of Floods, Funded by the Government of the Islamic Republic of Iran, Tehran, Iran, 2019.
- Integration of field data and satellite imagery for detecting the effects of gas pipelines on vegetation cover, erosion and soil characteristics. Funded by Ilam University, Ilam, Iran, 2019.
- Modelling biodiversity and land cover changes and detecting their driving forces: an integration of satellite imagery and field inventory data. A collaborative project between University of Goettingen in Germany and Ilam University in Iran.
- Spatial and temporal variations of beta diversity in response to environmental and management factors in a semi-arid rangeland. Funded by Ilam University, Ilam, Iran, 2018.

## Publications

- Omidipour, R., Tahmasebi, P., Faizabadi, M. F., **Faramarzi, M.**, & Ebrahimi, A. (2021). Does  $\beta$  diversity predict ecosystem productivity better than species diversity?. *Ecological Indicators*, 122, 107212.
- Heydari, M., Aazami, F., Omidipour, R., Lucas Borja, M. E., & **Faramarzi, M.** (2021) Components of plant diversity as ecological indicators reflecting the effects of conservation management and degradation in different climatic conditions. *Land Degradation & Development*. Doi: 10.1002/ldr.4062
- Ebtehaj, I., Soltani, K., Amiri, A., **Faramarzi, M.**, Madramootoo, C. A., & Bonakdari, H. (2021). Prognostication of Shortwave Radiation Using an Improved No-Tuned Fast Machine Learning. *Sustainability*, 13(14), 8009.
- Azizi, E., Tavakoli, M., Karimi, H., & **Faramarzi, M.** (2019). Evaluating the efficiency of the neural network to other methods in predicting drought in arid and semi-arid regions of western Iran. *Arabian Journal of Geosciences*, 12(15), 489.
- Shahbazian, Z., **Faramarzi, M.**, Rostami, N., & Mahdizadeh, H. (2019). Integrating logistic regression

- and cellular automata-Markov models with the experts' perceptions for detecting and simulating land use changes and their driving forces. *Environmental monitoring and assessment*, 191:422, 1-17.
- Yaghobi, S., **Faramarzi, M.**, Karimi, H., & Sarvarian, J. (2019). Simulation of land-use changes in relation to changes of groundwater level in arid rangeland in western Iran. *International Journal of Environmental Science and Technology*, 16(3), 1637-1648.
- Heydari, M., Aazami, F., **Faramarzi, M.**, Omidipour, R., Bazgir, M., Pothier, D., & Prévosto, B. (2019). Interaction between climate and management on beta diversity components of vegetation in relation to soil properties in arid and semi-arid oak forests. *Journal of Arid Land* 11(1), 43-57.
- Faramarzi, M.**, Heidarizadi, Z., Mohamadi, A., & Heydari, M. (2018). Detection of Vegetation Changes in Relation to Normalized Difference Vegetation Index (NDVI) in Semi-Arid Rangeland in Western Iran. *Journal of Agricultural Science and Technology*, 20(1), 51-60.
- Heydari, M., **Faramarzi, M.**, & Pothier, D. (2016). Post-fire recovery of herbaceous species composition and diversity, and soil quality indicators one year after wildfire in a semi-arid oak woodland. *Ecological Engineering*, 94, 688-697.
- Erfanzadeh, R., Omidipour, R., & **Faramarzi, M.** (2015). Variation of plant diversity components in different scales in relation to grazing and climatic conditions. *Plant Ecology & Diversity*, 8(4), 537-545.
- Fathizad, H., Rostami, N., & **Faramarzi, M.** (2015). Detection and prediction of land cover changes using Markov chain model in semi-arid rangeland in western Iran. *Environmental monitoring and assessment*, 187(10), 629.
- Faramarzi, M.**, Kesting, S., Isselstein, J., & Wrage, N. (2010). Rangeland condition in relation to environmental variables, grazing intensity and livestock owners' perceptions in semi-arid rangeland in western Iran. *The Rangeland Journal*, 32(4), 367-377.
- Omidipour, R., Erfanzadeh, R., & **Faramarzi, M.** (2021). Study of the impact of climatic conditions on the components of plant diversity in the western Iran grasslands using multiplicative partitioning methods. *Caspian Journal of Environmental Sciences*. 19(1), 1-10.
- Faramarzi, M.**, Amini, D., Mirzaei, N., & Mosavi, M. (*in press*). Assessment of Relationships among Groundwater Level, Drought and Land-Use Changes (Case Study: Eyvan County, Ilam Province). *Journal of Environmental Science and Technology (JEST)*. (In Persian; abstract in English).
- Nouri, H., Shahedi, K., Habibnezhad Roshan, M., Kavian, A., **Faramarzi, M.** (2019). Susceptibility to flooding in the Razavar Watershed using analytical hierarchy process method. *Journal of Natural Environmental Hazards*, 8(19), 35-50. (In Persian; abstract in English)
- Vafa, P., Barari, M., Alizadeh, Y., & **Faramarzi, M.** (2018). Agro-ecological Zoning of Irrigating Wheat by using Geographic Information Systems and Analytical Hierarchy Process in Ilam province. *Journal of Agroecology*, 8(1), 61-74. (In Persian; abstract in English)
- Haghighi, K., Rostami, N., Heshmati, M., & **Faramarzi, M.** (2017). Investigation of Desertification Potential Using IMDPA Model (Case Study: The Gandomban Plain, Qasr-e-Shirin). *Geography and Sustainability of Environment*, 7(22), 21-33. (In Persian; abstract in English)
- Kaei, Z., **Faramarzi, M.**, Karimi, H., & Mehdizadeh, M. (2017). Investigating the Effects of Land Use Change on Quantitative and Qualitative Parameters of Groundwater (Case Study: Mehran Plain-Ilam). *Journal of Wetland Ecobiology*, 9(3). (In Persian; abstract in English)
- Karimi, K., Zehtabian, Gh., **Faramarzi, M.**, & Khosravi, H. (2016). Land Use/Cover Change Monitoring and Prediction Using Markov Chain (Case Study: The Abbas Plain). *Journal of Rangeland and Watershed Management*, 96(3), 711-724. (In Persian; abstract in English)
- Yaghobi, S., **Faramarzi, M.**, Karimi, H., & Sarvarian, J. (2016). Assessment of efficiency of artificial neural network in predicting the trend of desertification processes by using GIS (Case study:

- Dehloran plain, Ilam). *RS and GIS for Natural Resources*, 7(3), 61-77. (In Persian; abstract in English)
- Omidipour, R., Erfanzadeh, R., & **Faramarzi, M.** (2016). Effects of grazing impacts on the pattern of species diversity in different spatial scale. *Journal of Rangeland*, 4(9), 367-377. (In Persian; abstract in English)
- Kordi, R., **Faramarzi, M.**, Karimi, H., Geraei, P., & Yarmohamadi, E. (2016). Mapping groundwater dam in arid and semi-arid area in western Iran (Case study: Mehran, Ilam province). *Journal of Watershed Management Research*, 7(13), 164-171. (In Persian; abstract in English)
- Faramarzi, M.**, Fathizad, H., Pakbaz, N., & Golmohamadi, B. (2014). Application of Different Methods of Decision Tree Algorithm for Mapping Rangeland Using Satellite Imagery (Case Study: Doviraj Catchment in Ilam Province). *Journal of Rangeland Science*, 3(4), 321-330.
- Barary, M., Baghestani, M. A., Amouzadeh, M., & **Faramarzi, M.** (2014). Effects of environmental and management factors on the weed species richness of winter crops in Ilam province. *Journal of Crop Improvement*, 16(2), 303-320. (In Persian; abstract in English)
- Heidary, M., Potherer, D., **Faramarzi, M.**, & Merzaei, J. (2014). Short-term abandonment of human disturbances in Zagros Oak forest ecosystems: Effects on secondary succession of soil seed bank and aboveground vegetation. *Biodiversitas*, 15(2), 147-161.
- Heydari M, **Faramarzi M.** (2014). The Short Term Effects of Fire Severity on Composition and Diversity of Soil Seed Bank in Zagros Forest Ecosystem, Servan County. *Applied Ecology*, 3 (9): 57-69. (In Persian; abstract in English)
- Hadidi, M., Ariapour, A., & **Faramarzi, M.** (2013). Study on the Trend of Range Cover Changes Using Fuzzy ARTMAP Method and GIS. *Journal of Rangeland Science*, 3(2), 129-144.
- Fathizad, H., Nohegar, A., **Faramarzi, M.**, & Tazeh, M. (2013). An Investigation of Changes in land Use According to the Analysis of Landscape Ecology Metrics by Using Remote Sensing and GIS in Arid and Semi-arid Region of Dehloran. *Town and Country Planning*, 5(1), 79-99. (In Persian; abstract in English)
- Mahdavi, A., **Faramarzi, M.**, & Karami, O. (2013). ANP Application in Evaluating Ecological Capability of Range Management (Case Study: Badreh Region, Ilam Province). *Journal of Rangeland Science*, 3(2), 95-107.

#### **Keynote speaker**

- Faramarzi, M.** (2010). Biodiversity in relation to management and environmental variables, the National Conference of Natural Resources (Challenges, Applied researches, Practical approaches), Ilam, Iran.

#### **Selected conference papers**

- Faramarzi, M.** (2018). Application of field data and satellite images for studying dust storm in rangeland ecosystem of western Iran, the 2nd International Conference on Dust, Ilam University, Ilam, Iran.
- Fathizad H., **Faramarzi, M.**, & Tazeh, M. (2013). Landscape metrics analysis of land-use changes (case study: Dehloran), the first International Conference of IALE-Iran, Isfahan University of Technology, Iran.
- Faramarzi, M.**, Kesting, S., Wrage, N., & Isselstein, J. (2012). Palatability of herbage, and woody plant encroachment in relation to grazing intensity in semi-arid rangeland in western Iran. In *Grassland-a European resource? Proceedings of the 24th General Meeting of the European Grassland Federation, Lublin, Poland, 3-7 June 2012*. (pp. 234-236). Polskie Towarzystwo Łakarskie (Polish Grassland Society).
- Faramarzi, M.**, Kesting, S., Wrage, N., & Isselstein, J. (2010). Influence of management and environmental factors on species composition and species richness in semi-arid rangeland in western Iran, EGF (European Grassland Federation), Kiel, Germany, Mecke Druck und Verlag 15, 791-793.
- Faramarzi, M.** (2010). Influence of management and environmental variables on encroachment of woody plants in semi-arid rangeland in western Iran, the National Conference of Natural Resources

(Challenges, Applied Researches, Practical approaches), Ilam, Iran

**Faramarzi, M.,** Kesting, S., Wrage, N., & Isselstein, J. (2007). Biodiversity and plant- environmental interaction in semi-arid rangeland in western Iran, AGGF, Goettingen, Germany

### **Presentation of invited workshops**

“Geographic information systems (GIS) and global positioning system (GPS): introduction and applications”, Agricultural and Natural Resources Engineering Organization, Kermanshah, Iran, three courses: July 24-26, August 2-5, and August 17-19, 2010.

“Geographic information systems (GIS): introduction and applications”, Scientific staff of Ilam University, Ilam, Iran, December 24-26, 2010.

“Geographic information systems (GIS): introduction and applications”, Scientific staff of Razi University, Kermanshah, Iran, June 21-24, 2012.

“Geographic information systems (GIS): introduction and applications”, Scientific staff and M.Sc. students of Technical faculty, Ilam University, Ilam, Iran, January 4-5, 2011.

### **Language Skills**

Persian, English (fluent in speaking and writing)

German (speaking)

### **Professional Career**

2002-2004	Head of and lecturer at Education Centre of Natural Resources, Jihad-e-Agricultural Organization of Kermanshah Province, Iran
2002-2004	Scientific staff of Watershed Management Department (GIS Division), Jihad-e-Agricultural Organization of Kermanshah Province, Iran
2000-2002	Scientific staff of Education and People Participation Management (Research Division), Jihad-e-Agricultural Organization of Kermanshah Province, Iran
2000-2002	Research Executor, Jihad-e-Agricultural Organization of Kermanshah Province, Iran
2000-2002	Research Consultant, Jihad-e-Agricultural Organization of Kermanshah Province, Iran