

# CURRICULUM VITAE

## i. Personal Details

**Name:** Hadi Memarian Khalilabad

**Date of Birth:** 21/03/1978

**Place of Birth:** Kashmar, Iran

**Marital Status:** Married

**Phone:** 00989155320032

Email: [hadi\\_memarian@yahoo.com](mailto:hadi_memarian@yahoo.com);

[hadi\\_memarian@birjand.ac.ir](mailto:hadi_memarian@birjand.ac.ir)



### Work Address:

1- Dept. Rangeland and Watershed Management, Fac. Natural Resources and Environment, University of Birjand, Birjand, Iran; +985632254068

2- Head, Kashmar Higher Education Center, Kashmar, Iran; +985155258801

## ii. Education and Qualifications

### Educational Records:

Degree	Institute	Field	GPA	Date
B.Sc.	Faculty of Agriculture, University of Birjand, Iran	Agriculture Engineering	16.8 (of 20)	2001/9/22
M.Sc.	Faculty of Natural Resources, University of Tehran, Iran	Natural Resources Engineering	17.63 (of 20)	2004/5/12
Ph.D	Faculty of Agriculture, Universiti Putra Malaysia (UPM)	Land Resource Management- Soil Conservation Engineering	4.0 (of 4)	Jan 2013

### Ph.D. thesis title:

Analysis and modeling an urbanizing tropical watershed for sustainable land use planning

### Scientific Awards:

- First grade, M.Sc. entrance exam, Iran (2001)
- First grade of graduates, University of Tehran (2004)
- First grade of graduates, Universiti Putra Malaysia (2012)
- Top researcher, University of Birjand (2016)
- Top researcher with highly cited article, University of Birjand (2017)

- Top researcher, Kashmar Higher Education Center (2018; 2019; 2020)
- Academic position of Associate Professor (2018)

**Member of:**

- Engineering Organization of Agriculture and Natural Resources of Iran
- Association of Construction and Installation Companies of Khorasan, Iran
- Association of Consulting Engineers of Iran
- Iranian Rainwater Catchment Systems Association
- Watershed Management Association of Iran
- Hydrology Association of Iran

**iii. Skills and Work Experiences**

**Skills:**

- ✓ Skilled in GIS and Remote Sensing and related software such as ArcGIS, ArcView, ERDAS, ENVI, IDRISI, ...
- ✓ Skilled in Project Management and MS Project software
- ✓ Especially skilled in wind/water erosion modeling (empirical and physical models) and aeolian sediments source finding
- ✓ Experienced on Artificial Neural Networks, Fuzzy Logic, Genetic Algorithm, Particle Swarm Optimization, Decision Support System and related software such as Matlab, NeuroSolutions and R
- ✓ Specialist in planning and execution of soil and water conservation programs/designs
- ✓ Skilled in HydroGIS and water resource modeling and related software such as HEC-GeoHMS, WMS, SWAT, KINEROS2, HEC-GeoRAS, SWMM, and WEAP
- ✓ Skilled in optimization methods of hydrological models and related software such as SWAT-CUP, PEST code, and HydroPSO
- ✓ Skilled in land use optimization methods such as Fuzzy Multi Objective Programming, Linear Programming, Goal Programming and Genetic Algorithm
- ✓ Skilled in land use simulation models such as CA-Markov, DINAMICA, and GEOMOD and the latest validation analysis approaches
- ✓ Skilled in statistical hydrology, time series analysis and related software such as R, SAS, SPSS, MINITAB and XLSTAT
- ✓ Familiar with Game Theory and its application in water resource management
- ✓ Familiar with ordination techniques, vegetation community analysis, and related software such as PCORD
- ✓ Skilled in uncertainty analysis and related software like Matlab, SWAT-CUP, @Risk, ...
- ✓ Skilled in distribution modeling and related software like MaxEnt
- ✓ Skilled in soil conservation planning and environmental impact assessment (EIA)

**Work Experiences:**

- ✓ Senior expert in the Soil and Water Engineering Facilities Company of Iran-Khorasan region, since 21/1/2004 until 21/6/2005.
- ✓ Chairman, planning expert and project manager of Abkhizgostar-e-shargh Consulting Engineers Company (counselor on the ground of Agriculture, Natural Resources, Livelihood, GIS, Remote sensing and Water resources) since 23/10/2005 until 6/5/2007, Mashhad, Iran.
- ✓ Managing director, project manager, and planning expert of Abkhizgostar-e-Shargh Consulting Engineers Company since 6/5/2007 until 20/12/2008, Mashhad, Iran.
- ✓ Lecturer in Scientific and Applied Comprehensive University of IRAN, 2007-2008.
- ✓ Research Assistant, Faculty of Agriculture, Universiti Putra Malaysia, 2012-2013.
- ✓ Academic Member, Faculty of Natural Resources and Environment, University of Birjand, Iran, since March 2013.
- ✓ Deputy Director, Department of Watershed Management, University of Birjand, Iran, since September 2013.
- ✓ Head, the research group on "Future Studies in Natural Resources", University of Birjand, since January 2017.
- ✓ Inspector, Iranian Rainwater Catchment Systems Association, since 2015.
- ✓ Scientific Secretary of the 10th National Conference on Watershed Management Science and Engineering, University of Birjand, 2014.
- ✓ Member of the Scientific Committee of the National Conference on Rainwater Catchment Systems in Iran, since 2015.
- ✓ Member of the Scientific Committee of the International Conference on Civil Engineering, Architecture, Urban Management and Environment in the Third Millennium, Rasht, Iran, 2016.
- ✓ Scientific Secretary of the Conference on Natural Resources and Environment in South Khorasan, Challenges and Prospects, Birjand, 2016.
- ✓ Scientific Secretary of the Conference on Future Studies in the Field of Natural Resources and Environment of South Khorasan, Birjand, 2017.
- ✓ Head, Office of Entrepreneurship and Industry Relations, Faculty of Natural Resources and Environment, Birjand University, 2017.
- ✓ Vice President of the National Conference on Sustainable Development with the Approach to Investment Opportunities and Challenges in Torshiz Region, Kashmar, Iran, 2017.
- ✓ Member of the working group on Kashmar city flood damage investigation, 2019.
- ✓ Member of the Research and Technology Committee of the General Department of Environmental Protection of Khorasan Razavi, Iran, since 2017.
- ✓ Head of the specialized working group for assessing the scientific ability of the faculty members of Kashmar Higher Education Center, since 2017.
- ✓ Responsible for setting up the Torshiz Innovation and Acceleration Center, and Chairman of the Innovation Center Management Council, Kashmar, Iran, since 2018.
- ✓ Member of the Board of Trustees of Khorasan Razavi Universities (Ferdowsi University of Mashhad), since 2017.
- ✓ Member of the Audit Board of the Hakim Sabzevari University, Iran, 2021.
- ✓ Head, Kashmar Higher Education Center, Iran, since 2018.

## iv. Selected Publications



Hadi Memarian

FOLLOWING

Associate Prof. Watershed Management, [University of Birjand](#), Iran  
Verified email at birjand.ac.ir - [Homepage](#)

[Land Resource Management](#) [Soil Conservation Planning](#) [Hydrological Modeling](#)  
[Model Optimization](#) [Expert Systems & Land Use...](#)

Cited by

[VIEW ALL](#)

	All	Since 2016
Citations	612	492
h-index	14	12
i10-index	16	14

- [Validation of CA-Markov for simulation of land use and cover change in the Langat Basin, Malaysia](#) 2012  
H Memarian, SK Balasundram, JB Talib, CTB Sung, AM Sood, ...  
Scientific Research Publishing
- [SWAT-based hydrological modelling of tropical land-use scenarios](#) 2014  
H Memarian, SK Balasundram, KC Abbaspour, JB Talib, CT Boon Sung, ...  
Hydrological sciences journal 59 (10), 1808-1829
- [Comparison between multi-layer perceptron and radial basis function networks for sediment load estimation in a tropical watershed](#) 2012  
H Memarian, SK Balasundram  
Journal of Water Resource and Protection 4 (10), 870
- [Trend analysis of water discharge and sediment load during the past three decades of development in the Langat basin, Malaysia](#) 2012  
H Memarian, SK Balasundram, JB Talib, AM Sood, KC Abbaspour  
Hydrological Sciences Journal 57 (6), 1207-1222
- [KINEROS2 application for land use/cover change impact analysis at the H ulu L angat B asin, M alaysia](#) 2013  
H Memarian, SK Balasundram, JB Talib, C Teh Boon Sung, A Mohd Sood, ...  
Water and Environment Journal 27 (4), 549-560
- [Hydrologic analysis of a tropical watershed using KINEROS2](#) 2012 <sup>32</sup>  
H Memarian, SK Balasundram, J Talib, CTB Sung, AM Sood, ...
- [Drought prediction using co-active neuro-fuzzy inference system, validation, and uncertainty analysis \(case study: Birjand, Iran\)](#) 2015  
H Memarian, MP Bilondi, M Rezaei  
Theoretical and Applied Climatology 125, 541-554
- [Analyzing and modeling urban sprawl and land use changes in a developing city using a CA-Markovian approach](#) 2016  
M Tajbakhsh, H Memarian, Y Shahrokhi  
Global Journal of Environmental Science and Management 2 (4), 397-410
- [Comparison between pixel-and object-based image classification of a tropical landscape using Système Pour l'Observation de la Terre-5 imagery](#) 2013  
H Memarian, SK Balasundram, R Khosla  
Journal of Applied Remote Sensing 7 (1), 073512
- [Estimating oil palm yields using vegetation indices derived from Quickbird](#) 2013  
SK Balasundram, H Memarian, R Khosla  
Life Sci. J 10 (4), 851-860

- [Application of swat for impact assessment of land use/cover change and best management practices: a review](#) 2013  
H Memarian, M Tajbakhsh, SK Balasundram  
International Journal of Advancement in Earth and Environmental Sciences  
1 ...
- [Integration of analytic hierarchy process and weighted goal programming for land use optimization at the watershed scale](#) 2014  
AMS Hadi MEMARIAN, Siva K. BALASUNDRAM, Karim C. ABBASPOUR, Jamal B. TALIB ...  
Turkish Journal of Engineering and Environmental Sciences
- [Incorporation of GIS based program into hydraulic model for water level modeling on river basin](#) 2012  
H Ali, S Lee Teang, M Majid, M Hadi  
Journal of Water Resource and Protection 2012
- [Accuracy of GeoWEPP in estimating sediment load and runoff from a tropical watershed](#) 2011  
M Ebrahimpour, SK Balasundram, J Talib, AR Anuar, H Memarian  
Malaysian Journal of Soil Science 15, 25-33
- [A GIS-based integrative approach for land use optimization in a semi-arid watershed](#) 2018  
SM Tajbakhsh, H Memarian, A Kheyrkha  
Global Journal of Environmental Sciences and Management, DOI: 10.22034/gjesm ...
- [An expert integrative approach for sediment load simulation in a tropical watershed](#) 2013  
H Memarian, SK Balasundram, M Tajbakhsh  
Journal of Integrative Environmental Sciences 10 (3-4), 161-178
- [Toward a combined Bayesian frameworks to quantify parameter uncertainty in a large mountainous catchment with high spatial variability](#) 2019  
Y Hassanzadeh, AA Afshar, M Pourreza-Bilondi, H Memarian, ...  
Environmental monitoring and assessment 191 (1), 1-22
- [Estimating river suspended sediment yield using MLP neural network in arid and semi-arid basins Case study: Bar River, Neyshaboor, Iran](#) 2009  
KZ H. Memarian, S. Feiznia  
DESERT 14, 43-52
- [Performance comparison of land change modeling techniques for land use projection of arid watersheds](#) 2018  
SM Tajbakhsh, H Memarian, AH Moradi, K, Aghakhani Afshar  
Global Journal of Environmental Science and Management 4 (3), 263-280
- [Monitoring desertification processes using ecological indicators and providing management programs in arid regions of Iran](#) 2020  
M Akbari, MJ Shalamzari, H Memarian, A Gholami  
Ecological indicators 111, 106011
- [Prioritizing policies and strategies for desertification risk management using](#) 2020

- [MCDM–DPSIR approach in northeastern Iran](#)  
M Akbari, H Memarian, E Neamatollahi, MJ Shalamzari, MA Noughani, ...  
Environment, Development and Sustainability, 1-21
- [Determining Range Suitability Using Fuzzy and Hierarchical Method \(Case Study: Bagheran Birjand Watershed, South Khorasan Province, Iran\)](#) 2017  
E Rouhi Moghaddam, H Joloro, H Memarian  
Journal of Rangeland Science 7 (3), 232-241
- [Kinematic runoff and erosion model efficiency assessment for hydrological simulation of semi-arid watersheds](#) 2018  
SM Tajbakhsh, H Memarian, M Sobhani, AH Aghakhani Afshar  
Global Journal of Environmental Science and Management 4 (2), 127-140
- [Investigation Performance of Rooftop Water Harvesting Systems and Reservoir Volume Optimization \(Case Study: Birjand, Iran\)](#) 2015  
Z Koumeh, H Memarian, M Tajbakhsh  
Iranian Journal of Rainwater Catchment Systems 7 (2), 23-32
- [The source studying of eolian sediments in the Fadisheh-Neyshebor region](#) 2008  
H Memarian Khalilabad, A Safdari, MR Ekhtesasi  
Iranian journal of Range and Desert Research 15 (1), 26-41
- [The comparison of fuzzy and maximum likelihood methods in preparing of land use layer using ETM+ data \(case study: kameh watershed\)](#) 2006  
A Akbarpour, MB Sharifi, H Memarian Khalilabad  
Iranian Journal of Range and Desert Research 13 (1), 27-38
- [Provide strategic plans to manage the desertification crisis using futures Studies](#) 2019  
F Feyzi Koushki, M Akbari, H Memarian  
Disaster Prevention and Management Knowledge (quarterly) 8 (4), 401-414
- [Health and environmental considerations of rooftop catchment systems \(Case study: Aq Ghala, Golestan Province, Iran\)](#) 2016  
H Memarian, A Hossein Nia, A Tavasoli, Z Koumeh, SM Tajbakhsh, ...  
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- [Health and environmental considerations of rooftop catchment systems \(Case study: Aq Ghala, Golestan Province, Iran\)](#) 2016  
H Memarian, A Hossein Nia, A Tavasoli, Z Koumeh, M Tajbakhsh, A Abbasi, ...  
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- [Application of Rainfall Time Series and Climatic Indices for Drought Prediction using Co-Active Neurofuzzy Inference System \(Case Study: Birjand, Southern Khorasan\)](#) 2015  
M Rezaei, H Memarian  
Arid Biome Scientific and Research Journal 5 (2), 51-67
- [Emission and environmental goals in decision making modeling for load dispatch](#) 2020  
MH Karim, H Memarian, Y Valitabar  
Pollution 6 (3), 491-501

- [Prioritizing effective indicators of desertification hazard using factor-cluster analysis, in arid regions of Iran](#) 2020  
M Akbari, F Feyzi Kushki, H Memarian  
Arabian Journal of Geosciences 13
- [Identifying and ranking important factors of desertification in Khorasan Razavi Province using Delphi method](#) 2019  
F Feyzi Koushki, M Akbari, H Memarian, M Azamirad  
Journal of Geography and Environmental Hazards 8 (3), 225-205
- [Comparison of genetic algorithm and linear programming to solve land use optimization problems at the watershed scale](#) 2019  
A Kheyrkhah  
Watershed Engineering and Management 11 (1), 252-263
- [Analysis of climate in the megacity of Istanbul based on Human Bioclimatic Comfort Index](#) 2019  
M Abbasnia, H Toros, H Memarian  
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- [Parameter Optimization of KINEROS2 Using Particle Swarm Optimization Algorithm Within R Environment for Rainfall–Runoff Simulation](#) 2019  
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- [Reservoir volume optimization and performance evaluation of rooftop catchment systems in arid regions: A case study of Birjand, Iran](#) 2017  
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Water Science and Engineering
- [A Study on the Impact of Climatic Factors on Groundwater Resources Using Spatio-Temporal Analysis of Statistical Time Series \(Case Study: Mashhad Plain, Kasahfroud Basin\)](#) 2017  
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- [Socio-economic considerations of rooftop catchment systems \(Case study: Golestan Province, Iran\)](#) 2017  
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- [Statistical trend analysis of suspended sediment load \(Case study: Bar watershed, Neyshabur, Iran\)](#) 2017  
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JWMSEIR 11 (37), 69-84
- [Examination of Relationship between Species Diversity and Environmental Variables in Arid and Semi-arid Rangelands of Iran](#) 2017  
S Ghollasimod, H Memarian, M Hoseinpour, MJ Vahidi  
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- [Determining rangeland suitability model for sheep grazing using GIS \(Case study: Baqeran watershed\)](#) 2016  
H Joloroo, ME ROUHI, H Memarian

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- [Hydrological Trend Analysis Integrated with Landscape Analysis at the Watershed Scale \(Case Study: Langat Basin, Malaysia\)](#)  
H Memarian, SK Balasundram 2016  
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- [Multivariate Analysis of Soil-Vegetation Interaction and Species Diversity in a Natural Environment of \*Rhus coriaria\* L. \(Case Study: Bideskan Habitat, Southern ...\)](#)  
S Ghollasimod, H Memarian, J Shamshiri 2021  
Spatial Modeling in Forest Resources Management, 125-152
- [Accuracy assessment of GPM-IMERG satellite precipitation data on half-hourly and daily time scales \(Case study: Gorganroud Basin\)](#)  
M Ordouni, H Memarian, M Akbari, M Pourreza 2020  
Journal of Water and Soil Conservation 27 (4), 149-166
- [Ecological capability assessment of watershed hydrological units to prioritize watershed management executive operations using Fuzzy TOPSIS approach \(Case study: Mokhtaran ...\)](#)  
B Ebrahimi, H Memarian, SM Tajbakhsh, A Aghakhani Afshar 2020  
Geographical Planning of Space 10 (36), 123-146
- [An assessment of active tectonic by morphometric factors in north of Birjand plain watershed](#)  
A Shafiei Bafti, Z Abbasi, SM Tajbakhsh, SM Moussavi, H Memarian 2020  
Quantitative Geomorphological Research 9 (1), 117-133
- [An assessment of active tectonic by morphometric factors in south of Birjand plain watershed](#)  
Z Abbasi, A Shafiei, SM Tajbakhsh, H Memarian, SM Mousavi 2020  
Journal of Tectonics 3 (9), 69-81
- [Impact assessment of climate change on hydro-climatic conditions of arid and semi-arid watersheds \(case study: Zoshk-Abardeh watershed, Iran\)](#)  
M Rahimpour, M Tajbakhsh, H Memarian, A Aghakhani Afshar 2020  
Journal of Water and Climate Change
- [Comparative Study of Climate and Satellite Indices in the Process of Sandy Zones Change in Sarakhs](#)  
Z Gohari, H Ara, H Memarian 2020  
Environmental Erosion Research Journal 9 (4), 52-69
- [Compilation of a model for hazardous waste disposal site selection using GIS-based multi-purpose decision-making models](#)  
M Hajibigloo, V berdi Sheikh, H Memarian 2020  
JOURNAL OF RS AND GIS FOR NATURAL RESOURCES (JOURNAL OF APPLIED RS AND GIS ...
- [Determination of quantity and allocation disagreement indices in selection of appropriate algorithm for land use classification in pixel and objected base in Gorganroud river basin](#)  
2020



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 JOURNAL OF RS AND GIS FOR NATURAL RESOURCES (JOURNAL OF  
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- [Using SWAT and SWAT-CUP for hydrological simulation and uncertainty analysis in arid and semi-arid watersheds \(Case study: Zoshk Watershed, Shandiz, Iran\)](#) 2019  
 S Hosseini, H Memarian, H Memarian  
 Iranian Journal of Rainwater Catchment Systems 7 (2), 35-44
- [Multimodel combination techniques for analysis of Hydrological simulations \(Case study: Gharesou sub-basin, Kermanshah province\)](#) 2019  
 M Pourreza Bilondi, H Memarian, A Shahidi, S Rahnama  
 Journal of Water and Soil Conservation 26 (3), 193-206
- [Comparison of Performance in Image Classification Algorithms of Satellite in Detection of Sarakhs Sandy zones](#) 2019  
 Z Gohari, H Ara, H Memarian  
 Environmental Erosion Research Journal 9 (2), 19-36
- [Comparing pixel-based and object-based algorithms for classifying land use of arid basins \(Case study: Mokhtaran Basin, Iran\)](#) 2019  
 Z Rafieemajoomard, M Rahimi, S Nikoo, H Memarian, SH Kaboli  
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- [Prioritization of Landslide Effective Factors using Logistic Regression \(Case Study: A part of KopeDagh-HezarMasjedZone\)](#) 2019  
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 Journal of Watershed Management Research 10 (19), 154-170
- [Parameters Optimization of KINEROS2 using Particle Swarm Optimization Algorithm for Single Event Rainfall-Runoff Simulation \(Case Study: Tamar Watershed, Golestan, Iran\)](#) 2019  
 M Pourreza Bilondi, ZK Zinat Komeh  
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- [Impact investigation of suspended loads on the morphological changes of Hirmand River, case study: Sistan River](#) 2019  
 M Jahantigh, SM Tajbakhsh, SG MIRAB, H Memarian  
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- [Effect of Suspended Load on the Physico-Chemical Characteristics of Soil on the Hirmand Flood Plain](#) 2018  
 M Jahantigh, M Jahantigh, SM Tajbakhsh, H Memarian  
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- [A Comparison of Fuzzy Analytic Hierarchy Process, Artificial Neural Network and Area Density in Quantitative Evaluation and Landslide Susceptibility Mapping within GIS ...](#) 2018  
 M Bakhtiyari, Z Komeh, H Memarian  
 Journal of Geography and Environmental Hazards 7 (3), 40-19
- [Performance Comparison of the Neural Networks CANFIS, MLP and](#) 2018

- [Optimized MLP using Genetic Programming for Suspended Sediment Load Simulation \(Case study: Zoshk-Abardeh ...\)](#)  
SM Tajbakhsh, H Memarian, F Mohammadi  
Journal of Watershed Management Research 9 (17), 119-131
- [Edaphically investigation of the Somaq habitat and its relationship with biological diversity \(Case study: Bideskan habitat, Ferdows, Southeastern Khorasan, Iran\)](#) 2018  
S Ghollasimod, H Memarian  
Desert Ecosystem Engineering Journal 7 (19), 17-32
- [Identification and separation of flooding source regions and investigating the impact of watershed management operations on the peak discharge \(Case study: Bar watershed ...\)](#) 2018  
H Memarian Khalil Abad, M Yousefi, A Aghakhani Afshar  
Journal of Water and Soil Conservation 25 (1), 35-59
- [Mapping the flood-prone areas for developing a flood risk management system in the northeast of Iran](#) 2017  
M Hajibigloo, AA Ghezelsolfloo, H Memarian, V Berdi Sheikh  
Water Harvesting Research 2 (2), 1-12
- [Statistical trend analysis of suspended sediment load \(Case study: Bar watershed, Neyshabur, Iran\)](#) 2017  
M Tajbakhsh  
Iranian Journal of Watershed Management Science and Engineering 11 (37), 69-84
- [Landscape Ecology: The Influences of Land Use and Anthropogenic Impacts of Landscape Creation](#) 2016  
A Almusaed  
BoD–Books on Demand
- [Runoff extraction from rock outcrops for supplementary irrigation \(Case study: Zoshk-Abardeh watershed, Iran\)](#) 2016  
M Rahimpour, M Tajbakhsh, H Memarian  
Journal of Rainwater Catchment Systems 4 (3), 73-83
- [KINEROS2 calibration using particle swarm optimization in hydroPSO environment \(Case study: Tamar watershed, Golestan, Iran\)](#) 2016  
H Memarian, BM POURREZA, Z Komeh
- [Watershed Modeling for Sustainable Land Use Planning- A study on Langat basin, Malaysia](#) 2016  
H Memarian  
LAP LAMBERT Academic Publishing
- [Potential assessment of water harvesting in arid and semi-arid watersheds using multi-criteria hierarchy decision making \(Case study: Roodsarab watershed, Khooshab, Iran\)](#) 2015  
mohammad yousefi, samira noormohmadi, hadi memarian  
Iranian Journal of Rainwater Catchment Systems 3 (3), 59-72
- [Determination of suitable locations for rainwater harvesting using analytic](#) 2015

- [hierarchy process in GIS framework \(Case study: Roodsarab watershed, Khooshab, Khorasan Razavi, Iran\)](#)  
A Kheyrkhah, F Mohamadi, H Memarian  
Iranian Journal of Rainwater Catchment Systems 8 (3), 1-13
- [Site selection of water harvesting projects in arid and semi-arid watersheds using multi-criteria hierarchy decision making in GIS environment \(Case study: Roodsarab watershed ...\)](#) 2015  
M Yousefi, S Noormohamadi, H Memarian  
Iranian Journal of Rainwater Catchment Systems 8 (3), 59-72
- [technical report: A guideline for designing and optimizing rainwater reservoirs in buildings \(Case study: Golestan province, Iran\)](#) 2015  
H Memarian, A Tavasoli, M Tajbakhsh, Z Komeh, A Abasi, L Parsayi  
Iranian Journal of Rainwater Catchment Systems 5 (4), 55-68
- [Slope Stability Analysis using SINMAP \(Case Study: Havenan's Landslide Zone, Birjand, Iran\)](#) 2015  
M Tajbakhsh, H Memarian, M Asiaye  
Geography and Environmental Hazards 12, 19-34
- [The Evaluation of the Impact of Development on The Quantity and Quality of Runoffs Using SWAT \(Case study: The Langat urban watershed, Malaysia\)](#) 2014  
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Iranian Journal of Rainwater Catchment Systems 3 (2), 51-60
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M Mirzaei, H Memarian, A Haghizadeh, LT Shui  
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- [Analyzing and modeling an urbanising tropical watershed for sustainable land use planning](#) 2012  
H Memarian  
Universiti Putra Malaysia (UPM)
- [Natural Slopes Stability and its Analysis in ArcView GIS \(SINMAP\)](#) 2009  
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- [SITE-SELECTION NOMADIC DEVELOPING CENTERS WITH THE APPROACH OF EQUIPMENT AND DEVELOPMENT OF RESOURCE IN GEOGRAPHIC INFORMATION SYSTEMS CASE STUDY: WINTER RESTING OF AB TALKH E ...](#) 2009  
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JOURNAL OF GEOGRAPHICAL SCIENCES 11 (14), 105-124
- [The study of eolian sediment origin \(case study: Mokhtaran-Birjand plain\)](#) 2008  
A Safdari, Z Mahmodi, H Memarian Khalilabad  
Iranian journal of Range and Desert Reseach 15 (3), 304-319
- [Source Studying of Eolian Sediments in Rafsanjan Region](#) 2005  
H Memarian Khalilabad, H Ahmadi, MR Ekhtesasi, SK Alavipanah  
Iranian Journal of Natural Resources 58 (3), 531-543

**Books and book chapters:**

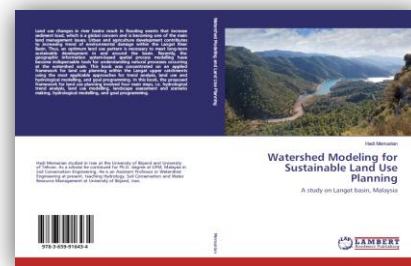
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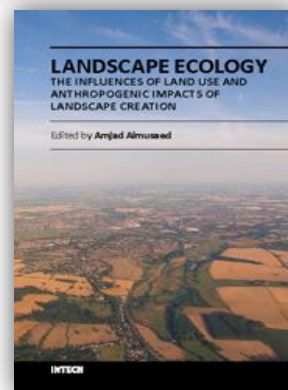
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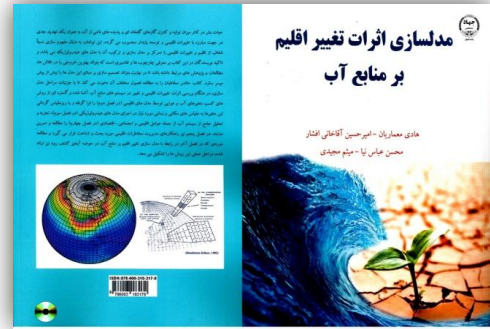
- 4) **Memarian, H., Balasundram, S.K.,** 2016. Hydrological trend analysis integrated with landscape analysis at the watershed scale (Case study: Langat Basin, Malaysia), in Landscape Ecology-The influence of land use and anthropogenic impacts of landscape creation, Almusaed, A. (Ed.), InTechOpen Publishing, ISBN 978-953-51-2514-3.



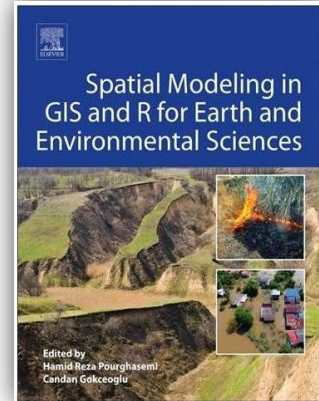
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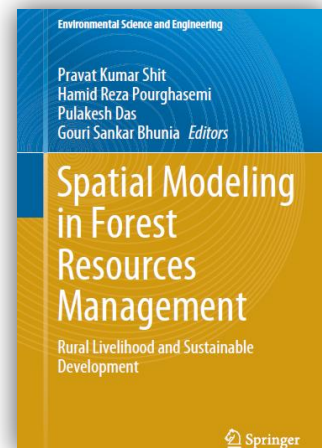
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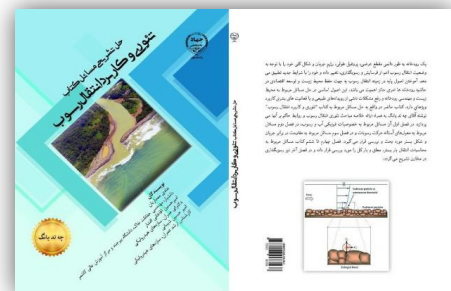
- 7) **Memarian, H., Bilondi, M. P., & Komeh, Z.** (2019). Parameter Optimization of KINEROS2 Using Particle Swarm Optimization Algorithm Within R Environment for Rainfall–Runoff Simulation. In Spatial Modeling in GIS and R for Earth and Environmental Sciences (pp. 117-146). Elsevier.



- 8) Ghollasimod, S., **Memarian, H., & Shamshiri, J.** (2020). Multivariate Analysis of Soil-Vegetation Interaction and Species Diversity in a Natural Environment of Rhus coriaria L.(Case Study: Bideskan Habitat, Southern Khorasan, Iran). In Spatial Modeling in Forest Resources Management (pp. 125-152). Springer, Cham.



- 9) **Memarian et al.** 2020. Descriptive solution of the problems of the book "Theory and application of sediment transport". Jahad Daneshgahi publications, Isfahan, Iran, in Persian.



## **v. Research Projects**

- Instability of small mountainous settlements, North of Khorasan, Iran. Shahid Beheshti University, project cooperater, 2004.
- Pesticides efficiencies, Cameron Highland, Malaysia. UPM, project expert on geostatistical analysis, 2011.
- Increasing the precision of on-farm fertilizer experiments via removal of spatial effects, UPM, project expert, 2012.
- Edaphically investigation of the Somaq habitat and its relationship with biological diversity (Case study: Bideskan habitat, Ferdows, Southeastern Khorasan, Iran), University of Birjand, Iran, 2016.
- Application of Rainfall Time Series and Statistical Climatic Indices for Drought Prediction using CoActive Neurofuzzy Inference System (Case Study: Birjand-Southern Khorasan), University of Birjand, Iran, 2015.
- Parameters optimization of KINEROS2 using Particle Swarm Optimization (PSO) algorithm for single event rainfall-runoff simulation (Case study: Tamar watershed, Golestan, Iran), University of Birjand, Iran, 2016.
- Investigating the Effects of Watershed Management Projects on Groundwater Level of the Chenaran-Mashhad Plain (Case study: Jamab Project), University of Birjand, Iran, 2015.
- Edaphically Investigation of the *Rhus coriaria* L. Habitat and its Relationship with plant Species Diversity (Case study: Bideskan Habitat, Ferdows, Iran), University of Birjand, Iran, 2017.
- Site Suitability and Environmental Impact Assessment of the Bardaskan Solid Waste Landfill Area, Kashmar Higher Education Center, Iran, 2021.

## **vi. Reviewer/Member of scientific committee**

- International Journal of Remote Sensing
- World Journal of Agricultural Sciences
- Journal of Water Resource and Protection
- Hydrological Sciences Journal
- WETLANDS
- Iranian Journal of Rainwater Catchment Systems
- Natural Science
- Journal of Environmental Science and Management
- Plant Researches
- Ecohydrology
- Watershed Engineering and Management
- Irrigation Engineering and Water Journal
- Journal of Watershed Management Research
- Aridbiom Journal
- Water Harvesting Research
- Remote Sensing and Geographic Information System in Natural Resources
- Meteorology and Atmospheric Physics
- AUT Journal of Civil Engineering
- GEODERMA

- 1<sup>st</sup> National Conference on Rainwater Catchment Systems (2012)
- 2<sup>nd</sup> National Conference on Rainwater Catchment Systems (2013)
- 3<sup>rd</sup> International Conference on Rainwater Catchment Systems (2014)
- 4<sup>th</sup> National Conference on Rainwater Catchment Systems (2016)
- 10<sup>th</sup> National Conference on Watershed Management Sciences and Engineering (2014)
- 11<sup>th</sup> National Conference on Watershed Management Sciences and Engineering (2016)
- 3<sup>rd</sup> International Conference on Rainwater Catchment Systems (2014)
- 4<sup>th</sup> National Conference on Rainwater Catchment Systems (2016)
- 10<sup>th</sup> National Conference on Watershed Management Sciences and Engineering (2014)
- 11<sup>th</sup> National Conference on Watershed Management Sciences and Engineering (2016)
- 5<sup>th</sup> National Conference on Rainwater Catchment Systems (2017)
- Regional Seminar on Natural Resources and Environment in South Khorasan Province (2017)
- Regional Seminar on Future Studies in Natural Resources and Environment of South Khorasan Province (2017)
- International Conference on Graphics and Image Processing (ICGIP 2020)
- ...

**and the presenter/speaker of more than 100 papers/topics in national and international conferences.**