

CURRICULUM VITA

PERSONAL INFORMATION

Family name Makhamreh
First name Zeyad
Date of Birth 25/08/1969
Marital status Married
Nationality Jordanian
Languages English, German and Arabic
Gender Male



CONTACT ADDRESS

University of Jordan
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CURRENT POSITION AND SPECIALISATION

Current Position:

Associated professor in the Department of Geography at the University of Jordan

Specialist:

Ph.D. degree in Applied Environmental Science: Specialist in applied remote sensing and GIS science in land degradation, land use and natural resource management. I am currently an Associated professor in the Department of Geography at the University of Jordan.

EDUCATION

Ph.D. University of Trier - Faculty of Geosciences - Environmental Remote Sensing, Remote Sensing Department, Germany, 2006.
M.Sc. University of Jordan - Faculty of Agriculture - Department of Land, Water and Environment, Jordan, 1996.
B.Sc. University of Jordan - Faculty of Agriculture - Department of Soil and Irrigation Jordan, 1992.

PROFESSIONAL AND ACADEMIC EXPERIENCE

Since 2006 Associated professor at Geography Department, University of Jordan: The main tasks are teaching and research activities.
2001 – 2005 Researcher in the Remote Sensing Department at Trier University, Germany: Engaged in analysis and modeling of remote sensing and physical and socio-economic data to assess and monitor land use change,

soil erosion and land degradation processes and their impact in Mediterranean regions.

- 1999 – 2000** Researcher in the national centre for agricultural research and technology transfer (NCARTT). Department of Water Management and Environment, Ministry of Agriculture, Jordan. The research engaged in analysis and developing water resources management and sustainable land use in Jordan.
- 1996 – 1998** Research associate in Department of Land, Water and Environment, University of Jordan. Research centered on the analysis of the land and water resources, potential land use suitability and sustainable development in Jordan.
- 1994 – 1996** Graduate research assistant, in the Soil Science and Irrigation Department, University of Jordan. Research centered on survey, analysis and management of natural resources in Jordan.

PROFESSIONAL ACTIVITIES and PROJECTS

- 2013** UNDP – AHDR 2012: Arab Human Development Report: Team member of the Arab human development report – Environmental problems, challenges and mitigations in the Arab world. (AHDR series to be published in 2013).
- 2011** ICARDA –Land Use Classification for Watershed Management in Ethiopia Using High Resolution Satellite Images and GIS.
- 2010** 15th Jordan science week: Science and Technology: Drivers of Change. **Analysis the environmental and social effect of the Urbanization process, Climate Change, and technology development in Jordan using GIS.** (Oral presentation): May 10-12, Amman-Jordan.
- 2009** Post-Graduate Scholarship Program: **Analysis of the Environmental and Socio-economic Impact of Land Use Changes in Jordan Using GIS and Remote Sensing techniques:** Supervised by Professor J. Hill – Department of Geo-science at Trier University – Germany.
- 2008** DAAD - Post-Graduate summer Program 2008, Cultural and Educational Challenges of Higher Education in the Arab Countries in the Context of the Globalization Process. DAAD alumni program at the Department of Education of the University of Heidelberg, Germany: "Social, Cultural and Economic Aspects of Education in Conflict" online publications, 2008.
- 2008** Research project: **Assessment and Analysis of the Seasonal Agricultural Productivity of the Highland Areas in Jordan using Multi-temporal Series of SPOT Images;** funded by University of Jordan.
- 2007** Post-Graduate Scholarship Program funded from the British Academy: **The Environmental Impact of Agricultural Policy Changes on Land Use and Household in Jordan using GIS and Remote Sensing;** supervised by Professor R. Hudson – Department of Geography at Durham University - England.
- 2005** Participant in the regional study for monitoring and assessment of environmental and socio-economic impact of land degradation in the Middle East countries. (GTZ-ACSAD, Syria).

- 2000** Participant in the Bio-diversity project – land use changes and biodiversity assessment. GIS and Remote Sensing unit, National Centre for Agricultural Research and Technology Transfer (NCARTT), Ministry of Agriculture, Amman, Jordan.
- 1998** Main participant in the JAZPP project activities, land use planning and sustainability development of natural and human resources in semi-arid areas in Jordan, University of Jordan.
- 1997** Supervisor of the GIS unit including training activities and management responsibility in department of land, water and environment at University of Jordan.
- 1996** Main participant in setting and management of the GIS unit activities in JAZPP project, Faculty of Agriculture, University of Jordan. Development of GIS based methodological approach for land suitability analysis.

PUBLICATIONS

- Almanaseya, N and **Makhamreh, Z.**, 2012, Regional Land Use Patterns and Water Consumption in the Jordan Valley Using Geographic Information Systems. (**Journal of Agricultural Science and Technology, Volume 2 Number 5A, May 2012**). (**published**).
- Makhamreh, Z.**, and Almanasyeh, N., 2011, Analyzing the State and Pattern of Urban Growth and City Planning in Amman Using Satellite Images and GIS. European Journal of Social Sciences, issue 24: Vol 2. (**published**).
- Makhamreh, Z.**, 2011, Using remote sensing approach and surface landscape conditions for optimization of watershed management in Mediterranean regions. Physics and chemistry of the earth, 36: 213-220. (**published**).
- Makhamreh, Z.**, 2010, Alternatives Regional Water Management for Conflict Resolution in the Middle East: Case Study of Jordan (Book Chapter) in **Water and Culture in the Eastern Mediterranean**, Edited by Gail Holst-Warhaft, Tammo Steenhuis and Keith Porter (**published**).
- Bilbisi, H and **Makhamreh, Z.**, 2010, A Comparison of pixel- based and object-based classification approaches in arid and semi-arid areas of Dead Sea region using Landsat imagery. Dirasat issue 37 no. 3 (**published**).
- Makhamreh, Z.**, 2010, Monitoring the vegetation characteristics and dynamic as a response to climatic variability in the Eastern Mediterranean region of Jordan. International conference for climate change and food security in dryland regions, 1-4 february Amman, Jordan. (**published**).
- Makhamreh, Z.**, 2008, Cultural and Educational Challenges of Higher Education in the Arab Countries in the Context of the Globalization Process. Presented at DAAD alumni program at the Department of Education of the University of Heidelberg: "Social, Cultural and Economic Aspects of Education in Conflict" online publications, 2008.
- Makhamreh, Z.**, 2007, The Environmental Impact assessment of Agricultural Policy Changes on Land Use and Household in Jordan Using GIS and Remote Sensing: Durham University, department of Geography, Britisch Academy publications.
- Makhamreh, Z.**, 2006, Analysis of spectral reflectance for estimation of soil quality along a climatic gradient in the eastern Mediterranean region. (Presented at the 14th conference

of ISCO, International Soil Conservation Organization). May 14–19, 2006 in Marrakech, Morocco.

Makhamreh, Z., 2006, Evaluation of soil quality and development stage using spectral reflectance of soils: Case study in Eastern Mediterranean region. (Presented at the „scientific workshop of AK BoGeo and Desert*Net: Soil and Desertification“. May 5-6, 2006, Hamburg, Germany).

Makhamreh, Z., and Hill, J., 2005, Detection of sensitive areas for degradation risk by analyzing of seasonal vegetation density along climatic gradient (International Conference on Remote Sensing and Geoinformation Processing in the Assessment and Monitoring of Land Degradation and Desertification: state of the art and operational perspectives. September 7th to 9th, 2005, Trier, Germany).

Udelhoven, T., Jarmer, T., Catlan, B., Al-Abed, M., Assad, N., **Makhamreh, Z.**, and Hill, J., 2005, Surface degradation and recovery indicators in the Eastern Mediterranean region derived from long-term monthly 1 km AVHRR/NDVI data (International Conference on Remote Sensing and Geoinformation Processing in the Assessment and Monitoring of Land Degradation and Desertification: state of the art and operational perspectives. September 7th to 9th, 2005, Trier, Germany).

Makhamreh, Z., and Hill, J., 2005, Spectral mixture analysis for characterization of seasonal vegetation dynamics in northern Jordan. Ist Göttingen GIS & Remote Sensing Days, Environmental Studies, 7-8 October, 2004, Göttingen, Germany, (Göttinger Geographische Abhandlungen, Heft 113).

Makhamreh, Z., 2005, Optical remote sensing and Geo-spatial analysis for assessing and monitoring of land degradation in the northern Jordan. Remote Sensing Department, University of Trier, Germany. (Ph.D. Thesis).

Makhamreh, Z., 1996, Optimal land use alternatives for arid and semi-arid areas in Jordan. Soil and Water Department, University of Jordan, Jordan. (M.Sc. Thesis).

PROFESSIONAL ORGANIZATIONS

1. Member of the Scientific Community Board of the Jordan Environmental Society (**JES**): Amman Jordan. www.jes.org.jo
2. Agricultural Engineering Associations, Amman Jordan. www.agrieng.org.jo
3. Member of the International Jurist Organization Board (**IJO**); UNDP India: www.ijo.org.in

REVIEWERS FOR ACADEMIC JOURNALS

1. Arid Land Research and Management
2. International Journal of Digital Earth
3. African Journal of Agricultural Research

COMPUTER SKILLS

1. Digital image processing (Imagine ERDAS and ENVI);
2. GIS analysis and modeling (ARCGIS, Arc/Info and SPANS);
3. Programming languages (IDL, AML and FoxPro);
4. Statistical analysis (SPSS);

AREA OF SPECIALTY

1. Desertification assessment and monitoring;
2. Land use analysis;
3. Applications of remote sensing and GIS;
4. Watershed management;
5. Sustainable development.

TEACHING COURSES

1. Advanced Geographic Information System;
2. Environmental Remote Sensing;
3. Natural Resources Management;
4. Land Degradation and Desertification;
5. Land use;
6. Terrain analysis;