**Curriculum Vitae**



**Personal information**

**Name:** Heman Abdulkhaleq Ahmed

**Affiliation Address:** Forestry Department, College of Agriculture

Engineering Sciences.

Salahaddin University, Erbil Kurdistan Region, Iraq.

**Permanent home address**: 237/7/365// Street No.81-House No.18 Naz Naz, Erbil/Iraq.

**Position:**

**PhD.** in Application of Remote sensing and GIS in Drought at the Salahaddin University, Erbil, Kurdistan region, Iraq**.**

Place and Date of Birth: **ERBIL, Iraq, 1th JULY. 1979.**

Nationality: Iraqi

Gender: **Male**

Marital Status: **Married**

Languages: **Kurdish**, **Arabic and English.**

**Contact information:**

**Mobile No: +964 750 4454367 (Viber, WhatsApp)**

**Gmail:** [**heman.ahmed@su.edu.krd**](mailto:heman.ahmed@su.edu.krd)

[**hemngaznayy@gmail.com**](mailto:hemngaznayy@gmail.com)

**Webpages:**

***Google Scholar:* (Citations= 72)**

<https://scholar.google.com/citations?user=yVgGccAAAAAJ&hl=en>

<https://orcid.org/0000-0002-1549-407>X

<https://www.researchgate.net/profile/Heman-Gaznayee>

<https://www.linkedin.com/in/heman-gaznayee-55422579>

<https://independent.academia.edu/HemanGaznayee>



**Biography**

Heman Abdulkhaleq Ahmed started out his academic career in Agriculture science (plant production) in 2003-2004, He graduated with his BSc in plant production. He acquires his master's degree in 2007 in the field of plant production (Plant Production) where he is complete Ph. D in Drought with a focus on GIS and Remote sensing. A substantial focus of Heman's work is on the Drought areas mapping to improve environmental outcomes and enhance planning capabilities. This work is led to the (Environment & Sustainable Resource Development).

**Education in Full Details:**

1. Ph.D. in Remote Sensing & Drought in January 2020 to date at Salahaddin University, College of Agriculture Engineering Science, Iraq-Erbil.
2. Master of Sciences (MSc)-(2007) at Salahaddin University, College of Agriculture Engineering Science, Plant production Department. Erbil, Kurdistan Region, Iraq December.
3. B.Sc. in Plant production 2004 Salahaddin University, College of Agriculture Engineering Science, Plant production Department Iraq.

**Work Experiences & Positions:**

1. Agricultural Engineer: (Environmental Protection Foundation in Kurdistan, Iraq) : 2004-2006

2. Assist. Lecturer (College **of Agriculture Engineering Sciences, Salahaddin University**): 2006-2020

3. Ph.D. (**College of Agriculture Engineering Sciences, Salahaddin University**): 2020-2022-Up to date

**Scientific Conferences,** **Training courses & Workshops Attended:**

1. Participation in the UNEP Workshop on Biodiversity Conservation and Natural Resources management. (Sep.29th-oct.2nd 2005, Amman, Jordan).

2. Participation in Conference Kurdistan Environment development policy (18-20 march 2006 in Duhok -Iraqi Kurdistan region).

3. Participation in 2nd Conference Let Water Resource of Kurdistan be a mean of wealth and Economy (25-27 April 2007 in Duhok -Iraqi Kurdistan region).

4. Participation in the Environment Training course for MOA and College of Agriculture In KRG- (10-12 November, 2012).

5. Training courses on Going Places with Spatial Analysis 6 weeks Completed on October 11, 2019 -Esri training course) Esri.com/training.

6. Training courses on Cartography 6 weeks Completed on May 23, 2019 -Esri training course) Esri.com/training.

7. Participation in Conference Application of GIS in Spatial Research in Qadisia University (10-11 June2020).

8. Participation in The Second International Conference on Water Resources in Arid Areas 2020” via Zoom Webinar. Organized by Water Research Center at Sultan Qaboos University jointly with the Ministry of Agriculture, Fisheries Wealth & Water Resources

November 9-11, 2020.

9- Participation in The 2nd International Conference of Al-Karkh University of Science **(ISC2/KUS2020)** Baghdad, Iraq, 2-3 December, 2020

<http://www.en.iscgr.kus.edu.iq>.

10- Participation in International Conference International Collaborative Conference of Modern Agricultural Technologies **(ICCMAT)** 2021. The 2nd Conference for College of Agricultural Engineering Sciences, Salahaddin University-Erbil and 6h Conference for College of Agriculture, University of Anbar

11- Participation in International ‎Workshop entitled “Establishing Partnerships & Strengthening Capacities in Efficient Water Management & Climate-Smart Agriculture in Iraq” in Wageningen, The Netherlands from 8th to 12th November 2021.

12- For successful completion of the course: ‎ Climate-smart irrigation strategies to improve salinity control and enhance agricultural production in Iraq

**eTraining course Wageningen, September - December 2021‎**

13- Member of Iraqi technical advisory group/multidisciplinary team (TAG) Steering Committee Structure at country level WaPOR pilot project in Iraq for Monitoring land and water productivity by Remote Sensing **(WaPOR phase 2)**

14- Coordinate Manager in Sapan Organization for Agricultural Extension and ‎Development **(SOAED)**

15- Trainer in Training course on: **‘**Introduction to remote sensing derived FAO WaPOR database’ Training Workshop 15-17 May 2022 Venue: Royal Tulip Al Rasheed Hotel, Baghdad, Iraq.

16- Trainer in Training course on: Monitoring and Implementing Drought Mitigation in Iraq 27 – 29 March 2022 Lead, partner universities: Salahaddin University - Departments of Forestry and Soil and water, College of Agriculture Engineering Sciences.

**Scientific Publications:**

1. Gaznayee, H.A.A., Al-Quraishi, A.M.F ,2019. *Analysis of Agricultural Drought’s Severity and Impacts in Erbil Province, the Iraqi Kurdistan Region based on Time Series NDVI and TCI Indices for 1998 through 2017*.Published in Jour of Adv Research in Dynamical & Control Systems, Vol. 11, No. 11, 2019.
2. Gaznayee, H.A.A; Al-Quraishi, A.M.F,2020. *Analysis of Agricultural Drought, Rainfall, and Crop Yield Relationships in Erbil Province, the Kurdistan Region of Iraq based on Landsat Time-Series MSAVI2.* Published in Jour of Adv Research in Dynamical & Control Systems, Vol. 11, 12-Special Issue, 2019 .
3. Gaznayee, H.A.A.,; Al-Quraishi, A.M.F.; Wu, W,2019. ***Spatiotemporal Characteristics of Drought in the Iraqi Kurdistan Region using Landsat Time - Series Images based on VHI and VCI Indices of 1998 - 2017. 2019***. Accepted in the ICGITA2019 Conference, Nanchang, China.
4. Gaznayee, H.A.A.,; Al-Quraishi, A.M.F,2020***. Identifying Drought Status in Duhok Governorate (Iraqi Kurdistan Region) from 1998 through 2012 using Landsat Time Series Datase.*** Published In Journal of Applied Science and Technology Trends. Vol. 01, No. 01, pp. 17 –23 (2020)
5. Kakakhan, H., Shekhany, A., Gaznayee, H.A.A., 2018. ***The study of chemical composition of gum in Pistacia atlantica in Erbil region***. Zanco Journal of Pure and Applied Sciences 30, 26–32.2018.
6. Osman, S.O., Gaznayee, H.A.A., Yaseen, A.A., 2015. ***Study the Effect of Age on Wood Chemical Compounds of Eucalyptus Camaldulensis and Populus Nigra Growing in Erbil Governorates.*** International Journal of Life Sciences Research 3, 61–66.2015.
7. Gaznayee, H.A.A., Al-Quraishi, A.M.F, Hashim A. Al-Sulttani 7-

**Drought Spatiotemporal Characteristics Based on a Vegetation Condition Index in Erbil, Kurdistan Region, Iraq**

Iraqi Journal of Science, 2021, Vol. 62, No. 11(Special Issue), pp: 4545-4556

DOI: 10.24996/ijs.2021.62.11(SI).34

1. Gaznayee, H.A.A., Al-Quraishi, A.M.F, D Joseph P. Messina.

**Drought severity trend analysis based on the Landsat timeseries**

**dataset of 1998-2017 in the Iraqi Kurdistan Region**

IOP Conf. Series: Earth and Environmental Science 779 (2021) 012083

doi:10.1088/1755-1315/779/1/012083

1. Al-Quraishi, A., Razvanchy, H. and Gaznayee, H., 2021. ***A Comparative Study for Performance of Five Landsat-based Vegetation Indices: Their Relations to Some Ecological and Terrain Variables****. Journal of Geoinformatics & Environmental Research, 1(1), pp.20-37.*
2. Al-Quraishi, A.M., Gaznayee, H.A. and Crespi, M., 2021. ***Drought trend analysis in a semi-arid area of Iraq based on Normalized Difference Vegetation Index, Normalized Difference Water Index and Standardized Precipitation Index.*** Journal of Arid Land, 13(4), pp.413-430.
3. Lorenz Huebner, ‎Al-Quraishi, A.M., Oliver Branch, Gaznayee, H.A‎.

**Afforestation and Simulated Risks of Heatwaves and Flooding Versus Ecological Revegetation That Combines Planting and Succession**

Journal of Geoscience and Environment Protection, 2022, 10, 94-108

https://www.scirp.org/journal/gep

ISSN Online: 2327-4344

ISSN Print: 2327-4336

1. Lorenz Huebner, ‎Al-Quraishi, A.M., Oliver Branch, Gaznayee, H.A.

Review Paper

**New approaches: Use of assisted natural succession in revegetation of inhabited arid drylands as alternative to large‑scale afforestation**

SN Applied Sciences (2022) 4:80 | https://doi.org/10.1007/s42452-022-04951-y -Review Paper.

1. Lorenz Huebner, ‎Al-Quraishi, A.M., Oliver Branch, Gaznayee, H.A. ‎

**BOOK: Sustainable Renaturation in Desertification Control: Expediting the Natural Succession of Large-Scale Vegetation in Drylands.**

Chapter Title: **Sustainable Renaturation in Desertification Control: Expediting the Natural Succession of Large-Scale Vegetation in Drylands**.

Online ISBN:978-3-030-86803-1

Print ISBN:978-3-030-86802-4

1. Heman Abdulkhaleq A. Gaznayee ,Ayad M. Fadhil Al-Quraishi ,Karrar Mahdi and Coen Ritsema, **A Geospatial Approach for Analysis of Drought Impacts on Vegetation Cover and Land Surface Temperature in the Kurdistan Region of Iraq.**Water 2022, 14(6), 927; [**https://doi.org/10.3390/w14060927**](https://doi.org/10.3390/w14060927)
2. Gaznayee, H.A.A. et al. (2022) **‘Drought Severity and Frequency Analysis Aided by Spectral and Meteorological Indices in the Kurdistan Region of Iraq’.** Water 2022, 14, 3024.[**https://doi.org/10.3390/w14193024**](https://doi.org/10.3390/w14193024)

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| ***EDUCATION in full details University or equivalent*** | | | | | |
| **NAME, PLACE AND COUNTRY** | **ATTENDED FROM/TO** | | **DEGREES and ACADEMIC DISTINCTIONS OBTAINED** | | **MAIN SUBJECT OF STUDY** |
| **Month/Year** | **Month/Year** |
| Salahaddin University  College Of Agriculture Engineering Sciences, Soil and water Department.  Erbil, Kurdistan Region, Iraq | January  2020 | Up to date | Ph.D  (Distinction) | | Remote sensing and GIS  Drought,  Spetial topic of soil Sciences,  Statistical analysis and  Multiple Regression models |
| Salahaddin University  College of Agriculture Engineering Sciences Plant Production Department.  Erbil, Kurdistan Region, Iraq | December 2004 | July  2007 | Master of Sciences (MSc)  (Distinction) | | Plant Physiologies, phytochemistry, plant taxonomy, , Forest Harvesting …etc. |
| Salahaddin University  Agriculture College  Plant Production Department  Erbil, Kurdistan Region, Iraq | October  2000 | July  2004 | Bachelor (BSc)  (Good) | | Principle.of Forestry, Plant Physiology, , Ecology and Climate, Forest Protection, Vegetable production(1)and (2), Soli and Water , Silviculture….. |
| 1. ***hool, Preparatory school)*** |  |  |  | |  |
| ***SCHOOLS Secondary*** | | | | | |
| **NAME, PLACE AND COUNTRY** | **TYPE** | | **YEARS ATTENDED** | | **CERTIFICATES OR DIPLOMAS OBTAINED** |
| **FROM** | **TO** |
| karox Secondary School  Erbil, Kurdistan Region, Iraq | General | | 1991 | 1995 | Secondary Certificate from Ministry of Education |
| Rzgari High School  Erbil, Kurdistan Region, Iraq | Scientific Section | | 1995 | 2000 | Preparatory (High School) Certificate from Ministry of Education |
| ***WORK EXPERIENCES AND POSITIONS (Governmental institutions and Private sectors)*** | | | | | |
| NAME, PLACE AND COUNTRY | POSITION | | ATTENDED FROM/TO | | TYPE OF WORK |
| Month, Year | Month, Year |
| Environmental Protection Foundation in Kurdistan | Employment- Agronomist | | August  2004 | July  2006 | Instructor Environmental Protection |
| Salahaddin University  College of Agriculture Engineering Sciences, Forest Department | Assist Lecturer - | | April, 2014 | January 2020 | Academic staff |
| Salahaddin University  College of Agriculture Engineering Sciences, Soil and water Department.  Erbil, Kurdistan Region, Iraq | PhD- Lecturer | | January2020 | Up to date | Academic staff |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *KNOWLEDGE OF LANGUAGES Mother tongue:* **Kurdish** | | | | | | | | |
| OTHER LANGUAGES | READ | | WRITE | | SPEAK | | UNDERSTAND | |
|  | Easily | Not Easily | Easily | Not Easily | Fluently | Not Fluently | Easily | Not Easily |
| **Kurdish** |  |  |  |  |  |  |  |  |
| **Arabic** |  |  |  |  |  |  |  |  |
| **Turkish** |  |  |  |  |  |  |  |  |
| **English** |  |  |  |  |  |  |  |  |