Dr. Anila Kausar

Assistant Professor Students' Advisor Senior Focal Person ORIC Department of Geography University of Karachi Karachi-75270, Pakistan

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Job Duties:

Teaching/Research/ Student Advisor/Senior Focal Person ORIC/ Board of Science Faculty member/ Board of Arts Faculty member/ Member HEC curriculum Revision committee for GIS/ Member HEC curriculum Revision committee for Geography/ Member Department Research Committee (DRE), Head Examiner B.A Part I and ADA Examination, Member Industrial Linkage Program.

Professional Experience:

Total Teaching Experience in the Department of Geography, University of Karachi:

20 Years and 1 Month 19 Days

• **Assistant Professor** 10.07.2015 till date

• **Lecturer** 14-09-2006 to 09-07.2015

Full-time Cooperative Teacher July 2003-13.09.2006

Qualification:

• M. Phil /Ph.D.

With A+ 4.0 GPA

University of Karachi, Pakistan. (Degree Awarded on **10.07.2015**) Dissertation: Spatial Assessment of Truck Farming and its Potential in Karachi through SRS/GIS Techniques.

 M.Sc. Department of Geography, University of Karachi, Pakistan.
 Gold Medallist (1st Class 1st Position in 2002 from Science Pre-Engineering Group)

• **B.Sc.** (Hons.) University of Karachi, Pakistan 2001 **Subjects:** Geography, Mathematics, and Physics

• **H.S. C.** Government Science Collage Malir Cantt. Karachi 1996 **Subjects:** Mathematics, Physics, and Chemistry

• S.S.C. Government Girls Secondary School, Malir Cantt. Karachi. 1994

Memberships and Offices Held in Committees, Boards and Professional Organizations:

- 1. Member Board of Faculty Department of Geography, University of Karachi
- 2. Member Board of Faculty of Science, University of Karachi
- 3. Member Board of Faculty of Arts, University of Karachi
- 4. Member National Curriculum Revision Committee of Remote Sensing and GIS
- 5. Member National Curriculum Revision Committee of Geography
- 6. Focal Person of ORIC
- 7. Member SURE
- 8. Member Board of Industrial Linkage Program, University of Karachi

Awards, Shields, Letter of Appreciation:

- Received Shield of Organizer on successfully organizing a 3 days GIS workshop in Zoology Department on October 24th, 2022.
- 2. Received a **Letter of Appreciation** from the Director General, Soil and Water Conversation- Khyber Pakhtunkhwa on **Keynote Speaker** of World Water Day Conference) dated 23 march 2022.
- 3. Received a **Shield of Appreciation** on conducting GIS 5 days Workshop on 22.08.2019.
- 4. Received a **Performance** Shield in 15th All Pakistan Geographical Conference in 2018.
- 5. Received a **Shield of Appreciation** on Presenting a Research work in Mehran University of Technology in April 2016.
- Received a Shield of Appreciation from Office of Research, Innovation and Commercialization (ORIC), University of Karachi for conducted a Training Workshop on Application of Geo-Spatial Techniques in Different Sciences 15.03.
 2016
- 7. Received Excellence award as GIS expert from The Scientific and Cultural Society of Pakistan in Collaboration with Department of Zoology, University of Karachi on conducting a Training Workshop on Bio-Diversity Survey Techniques with Geographical Information System on February 17. 2016.
- 8. Received **Performance Award** by Chairperson Department of Geography, University of Karachi in March 2013.

- 9. Received shield in recognition of **Presented a Paper** titled "Monitoring Spatial and Temporal Transformation in Cultivated Land Coverage in Karachi Using Geo-Spatial Techniques" in 4th International symposium infrastructure engineering in developing countries (IEDC-2013 held 26-27 Dec. 2013 at Karachi Expo Centre.
- 10. Flood Relief Excellence Award 2010 in appreciation of services during KUDMC Flood Relief Activities 2010-11 presented by Vice Chancellor Prof. Dr. Pirzada Qasim Raza Siddiqui and Pro-Vice Chancellor Prof. Dr. Shahana Urooj Kazmi on March 26, 2011.
- 11. **Recognition** awarded by Department of Geography university of Karachi on **outstanding performance as a coordinator** in the development of Geo Mag on 23rd December 2008.
- 12. **Gold Medal** awarded by University of Karachi in appreciation of taking 1st Class First Position in M.Sc. 2002.
- 13. **Gold Medal** awarded by Anjuman e Araian in Appreciation of taking 1st Class First Position in M.Sc. 2002.

Paper Presented:

- 1. **Presented a Paper** titled "Application of object based technique for assessment of urban land-use/land cover and air quality in International Scientific and Practical Conference held at Ukraine.
- 2. **Presented a Paper** titled "Land-Use and Land Cover Analysis of Sharah-e-Faisal and Impact of Infrastructure on the Environment of Karachi Metropolis". in 1st International Pak-Turk Symposium on "HISTORICAL AND GEOGRAPHICAL CONNECTIONS BETWEEN TURKEY AND PAKISTAN: Past, Present and Future Prospects" held June 3-4, 2022.
- 3. **Presented a Paper** titled "A Comparative Analysis of Urban and Peri-Urban Agriculture in Karachi Through RS/GIS Techniques: (2014-2021)" in 17th International Geographical Conference on Impact of Climate Change on Water and Agricultural Sustainability held 23-26 May 2022 at Baragali Summer Campus, University of Peshawar.
- 4. **Presented a Paper** titled "Urban Heat Wave and Climate Change: A Case Study of Karachi" in 17th International Geographical Conference on Impact of Climate Change on Water and Agricultural Sustainability held 23-26 May 2022 at Baragali Summer Campus, University of Peshawar.
- 5. **Presented a Paper** titled "Spatial Review and Analysis of Solid Waste Management Which Impacts Health, Climate and Environment: A Case Study of Larkana City" in 17th International Geographical Conference on Impact of Climate Change on Water and Agricultural Sustainability held 23-26 May 2022 at Baragali Summer Campus, University of Peshawar.
- 6. **Presented a Paper** titled "Temporal Analysis of Environmental Changes Due to Urban Infrastructure in Karachi Metropolitan Area for Years 2017-2021" in 17th

- International Geographical Conference on Impact of Climate Change on Water and Agricultural Sustainability held 23-26 May 2022 at Baragali Summer Campus, University of Peshawar.
- 7. **Presented a Paper** titled "Impact of Climate Change and Urbanization on Transformation of Urban and Peri-Urban Agricultural Land-use/Land Cover: A Case Study of Murad Memon Goth- Karachi Metropolitan" in 17th International Geographical Conference on Impact of Climate Change on Water and Agricultural Sustainability held 23-26 May 2022 at Baragali Summer Campus, University of Peshawar.
- 8. **Presented a Paper** titled "A Catastrophic View of Karachi Through Different Lens and Future Flood Assessment" in International Conference on Climate Change: Impacts and Responses held 8 & 9 March 2022 at ICCBS, University of Karachi, Karachi- Pakistan.
- 9. **Presented a Paper** titled "Landuse/Land Cover Analysis for the adjoining land of Kotri Barrage" held 11-13, March 2021 16th All Pakistan Geographical Conference organized by Department of Geography, Punjab University, Lahore.
- 10. **Presented a Paper** titled "An Ecological Evaluation of BRT (Green Line) Karachi through Geo-Spatial Techniques" held 11-13, March 2021 16th All Pakistan Geographical Conference organized by Department of Geography, Punjab University, Lahore.
- 11. **Presented a Paper** titled "Assessment of Temporal Changes of Urban Agricultural Land-use/ Land cover in Eleven Urban Administrative Localities of Karachi: 2005-2018" in 15th All Pakistan Geographical Conference held 21-23/04/2018 Organized by Department of Geography, University of Karachi.
- 12. **Presented a Paper** titled "Implementation of Integrated Land-use Planning Strategies to Improve Air Quality in Baldia Town" in 15th All Pakistan Geographical Conference held 21-23/04/2018 Organized by Department of Geography, University of Karachi.
- 13. **Presented a Paper** titled "The Impact of Water Resources on Agriculture: An Integrated Approach- The Case Study of Gadap, Karachi" in First International conference on Modern Trends in Science, Engineering and Technology, Road Map for Sustainable and Collaborative Development held April 27th ,28th , 2017 organized by MTSET at Pearl Continental Hotel. Karachi.
- 14. **Presented a Paper** titled "Urban Agriculture and its Ecological Impact on Karachi Metropolitan: A Case Study of Eleven Contiguous Administrative Localities in First South Asian Regional SURE conference 2017 held January 18-19, 2017 organized by Society for Urban Ecology.
- 15. **Presented a Paper** titled "Sustainable Adaptation to Climatic Variability in Agricultural Production across Uthal" in First South Asian Regional SURE conference 2017 held January 18-19, 2017 organized by Society for Urban Ecology.
- 16. **Presented a Paper** titled "Flood Monitoring and Damage Assessment using difference Water Indices: A Case Study of Sindh, Pakistan" in First South Asian Regional SURE conference 2017 held January 18-19, 2017 organized by Society for Urban Ecology.
- 17. **Presented a Paper** titled "Object-Based Change Analysis of Natural Vegetation using Landsat Satellite Images" in First South Asian Regional SURE conference 2017 held January 18-19, 2017 organized by Society for Urban Ecology.
- 18. **Presented a Paper** titled "The Impact of Water Resources On Agriculture: A Qualitative And Quantitative Approach-The Case Study of Gadap, Karachi" in

- Seminar on Earth Day held 21-22 April 2016 organized by Department of Geography, University of Karachi.
- 19. **Presented a Paper** titled "Urban and Peri-Urban Agriculture in Karachi: an integrated approach in Sustainable Environment" in 1st National Conference on Environmental Engineering & Management held 13-14 April 2016 organized by Institute of Environmental Engineering & Management at Mehran University of Engineering & Technology, Jamshoro.
- 20. **Presented a Paper** titled "Monitoring Spatial and Temporal Transformation in Cultivated Land Coverage in Karachi Using Geo-Spatial Techniques" in 4th International symposium infrastructure engineering in developing countries (IEDC-2013 held 26-27 Dec. 2013 at Karachi Expo Center.
- 21. **Presented a Paper** titled "Temporal Changes in Urban and Peri-Urban Agriculture in Malir Valley in Years 2001, 2004 and 2008 through Geo-Spatial Techniques, in 4th International Conference: Environmentally Sustainable Development ESDev-2011 held from 24-26 July 2011 at Comsat University Abbottabad.
- 22. **Presented a Paper** titled "Spatial Assessment of Urban and Peri-Urban Agriculture in Malir Valley, in International Conference "Biodiversity is our life" held from 29th December 2010 to 31st December 2010 at Shah Abdul Lateef University Khairpur.
- 23. **Presented a Paper** titled "Spatial Assessment of Urban Agriculture and its Commercial Potential in Karachi through GIS/ SRS Techniques", held from 21st December 2008 to 23rd December 2008 at University of Karachi.
- 24. **Presented a Paper** titled "Voting Behavior in provincial and National Assembly: Election 2008, held from 21st December 2008 to 23rd December 2008 at University of Karachi.

Trainings/Workshops Conducted:

- 1. Organized and conducted "3 Days Workshop on Introduction to GIS" at Department of Zoology, University of Karachi on October 20,21 and 24, 2022.
- 2. Organized "04 Days Workshop on UAV Remote Sensing" at Department of Geography, University of Karachi in collaboration with OCLITS and ORIC on November 09-12, 2021.
- 3. Facilitated "04 Days Workshop on UAV Remote Sensing" at Department of Geography, University of Karachi in collaboration with OCLITS and ORIC on November 09-12, 2021.
- 4. Conducted "GIS 5 DAYS WORKSHOP" at Applied Economics Research Centre (Institute of National Capability in Applied Economics on August, 22-26, 2019.
- 5. Conducted 3 days Hands on Training Course on Foundation of GIS organized by Department of Geography, University of Karachi at 24, 25th September and 15th October 2016.
- 6. Conducted "3-day Training Workshop on Bio-Diversity Survey Techniques with Geographical Information System organized by The Scientific and Cultural Society of Pakistan in Collaboration with Department of Zoology, University of Karachi held on February 15-17. 2016.
- 7. Conducted Workshop on Application of Geo-Spatial Techniques in Different Sciences organized by Office of Research, Innovation and Commercialization (ORIC), University of Karachi held on 15th March, 2016.

- 8. Conducted eleven days Introductory GIS course as Course coordinator of Introduction to GIS course from 21st November, 2014 to 1st December, 2014 at Applied Economics Research Centre (AERC), University of Karachi.
- 9. Supervised Introduction to GIS Course from 18th March 2009 to 2nd April 2009 through HEC STEP Program in Shah Abdul Latif University, Khairpur.
- 10. Conducted short course as a senior instructor on Geographical Information System (GIS) from 12 to 16 June, 2008.
- 11. Conducted short course on Digital Cartography from 16 to 22 December, 2006.

Organizer and Speaker of Seminars and Days:

- 1. Organized an "International Seminar on Agriculture" on Agricultural Day 2022 Theme: Agriculture and Sustainability on 21st April 2022.
- 2. Organized the Earth Day on 21st April 2022.
- 3. Organized 3 days workshop on Introduction to GIS on October, 21,22 and 24th 2022.
- 4. Speaker of 3 days workshop on Introduction to GIS on October, 21,22 and 24th 2022.
- 5. Speaker of "International Seminar on Agriculture" on Agricultural Day 2022 Theme: Agriculture and Sustainability on 21st April 2022.
- 6. Organized GISday Seminar on November, 13th, 2021
- 7. Speaker of GISday Seminar on November, 13th, 2021
- 8. Conducted an online seminar as session moderator, on CONTRIBUTION OF YOUNG GEOGRAPHERS TO GEOGRAPHY Session 3: Urban Land-use & Planning, Agricultural Geography, Eco-Tourism on December, 28-31, 2020.
- 9. Speaker of an online seminar as session moderator, on CONTRIBUTION OF YOUNG GEOGRAPHERS TO GEOGRAPHY Session 3: Urban Land-use & Planning, Agricultural Geography, Eco-Tourism on December, 28-31, 2020.
- 10. Organized GISday Seminar 2019 on December 7th 2019.
- 11. Moderator of a session 15th All Pakistan Geographical Conference April 21-23-2018 held at Department of Geography, University of Karachi.
- 12. Organizer of 15th All Pakistan Geographical Conference April 21-23-2018 held at Department of Geography, University of Karachi.
- 13. Organizer of Earth Day on 15th All Pakistan Geographical Conference April 22nd 2018 held at Department of Geography, University of Karachi.
- 14. Speaker of Earth Day on 15th All Pakistan Geographical Conference April 22nd -2018 held at Department of Geography, University of Karachi.
- 15. Member of Organizing Team of First South Asian Regional SURE conference 2017, Organized by Society for Urban, Ecology at KIBGI.
- 16. Organized a Lecture of A well-known Personality of Dr. Zoltan Takacs on May 4th, 2016 at Pharmacy Auditorium.
- 17. Organized a GIS Day Exhibition as Director south held at, Punjab on November 20, 2013.

PROJECTS:

1. Worked as a **Principal Investigator** of Dean of science, University of Karachi project on "**Monitoring Spatio-Temporal Transformation of Urban Agriculture in Karachi by Using Geo-spatial Techniques**" in 2014.

- 2. Working as a **Co-principal Investigators** of Dean of science, University of Karachi project on "**Monitoring & Evaluating Water Quality in Agricultural Zones of Karachi**" in 2014.
- Worked as a Principal Investigator of Dean of science, University of Karachi project on "A Spatial Distribution of Urban Orchard Farming in Malir Valley and Gadap Plain: Karachi" in 2013.
- 4. Worked as a Co-principal Investigators of Dean of science, University of Karachi project on "A Comparative Study of Agricultural Practices and Problems in Deh Kathore and Deh Shahi Chib, Karachi" in 2013.
- 5. Worked as a **Principal Investigator** of Dean of science, University of Karachi project on "Impact of Urban and Peri-Urban Agriculture on Socio- Economic Conditions of Rural Areas of Karachi" in 2011-2012.
- 6. Worked as a **Principal Investigator** of Dean of science, University of Karachi project on "Spatial Assessment of Truck Farming in the Rural Areas of Karachi" in 2008-2009.
- 7. Worked as a **Principal Investigator** of Dean of science, University of Karachi on "Spatial distribution of Crime and role of Geo Informatics" in Karachi in 2007-08.
- 8. Worked as a **Research Associate** of Dean of science, University of Karachi on "Spatial Distribution of Industrial Activity and it Role in the Economic Development of Karachi in 2007-08.
- 9. Worked as a **Research Associate** of Dean of science, University of Karachi on Assessment of Quality of Life and Cause and Effect Relationship with Facilities and Resources: Case Study of selected Towns in Karachi (A Remote Sensing /GIS perspective Phase-III in 2004-2005.

Popular Publications:

- 1. Air Quality of Karachi Published in Maritime Magazine in March 2022.
- 2. "Chloroflouro carbons are damaging Earths shield" published in Daily Express on 8th February 2010.
- **3.** "Experts caution against increasing Air pollution in Pakistan" Published in "The News" on 23rd March 2008.
- **4.** "Global Warming and Sea Level Rise" Published in Geo Mag in Dec 2008.

Publications:

1. Title of the Chapter: APPLICATION OF OBJECT BASED TECHNIQUE FOR ASSESSMENT OF URBAN LAND-USE/LAND COVER AND AIR QUALITY. Challenges and Threats to Critical Infrastructure. (pp 306-310)

Published in: Peer-Reviewed Monograph, NGO Institute for

Cyberspace Research Detroit-Michigan, USA

Impact Factor/Category:

Publication Type: International

Year: 2023

2. Title of the Article: Impact of Urbanization on River Ecology-A GIS Technologies Perspective.

Published in: Ecological Questions, 34, 4

Impact Factor/Category: 1.10

Journal Type: International

Year: 2023

3. Title of the Article: Exploring the Complexities of Urbanization and Socio-Ecological Challenges in the High Mountainous Region of Chitral, Khyber

Pakhtunkhwa (KPK)

Published in: Pakistan. Proceedings of the Pakistan Academy of

Sciences: A Pakistan Academy of Sciences Physical and

Computational Sciences, 60(1), 41–48

Impact Factor/Category: 0.116

Journal Type: International

Year: 2023

4. Title of the Article: Land-Use/Land Cover Analysis Through Object Based

Technique: A Case Study of Shahrah-e-Faisal

Published in: Ecological Questions. 34(2)

Impact Factor/Category: 1.10

Journal Type: International

Year: 2023

5. Title of the Article: Geospatial techniques for comparative case study of spatiotemporal changes in New Karachi and North Karachi parks

Published in: Ecological Questions. 34(4):1-33.

Impact Factor/Category: 1.10

Journal Type: International

Year: 2023

6. Title of the Article: Land-Use/Land Cover Analysis Through Object Based

Technique: A Case Study of Shahrah-e-Faisal

Published in: Ecological Questions. 34(2)

Impact Factor/Category: 1.10

Journal Type: International

Year: 2023

7. Title of the Article: Land Use Analysis of Central Business District (CBD) of Metropolis Saddar Karachi through SRS/GIS Techniques.

Published in: Ecological Questions. 27 33(1):1-25.

Impact Factor/Category: 1.10

Journal Type: International

Year: 2022

8. Title of the Article: Assessment of Spatial Distribution of Waste Bins in Karachi

Through GIS Techniques

Published in: Int. J. Econ. Environ. Geol. Vol. 12 (1) 09-13, 2021

Impact Factor/Category: 0.325 (Peer Reviewed)

Journal Type: International

Year: 2021

9. Title of the Article: Estimation of Various Tidal Parameters And Possibility For Harnessing Tidal Energy Along The Southeast Coastal Area Of Karachi, Pakistan

Published in: Sci.Int.(Lahore),28(1),179-185

Impact Factor/Category:1.852Journal Type:NationalYear:2016

10. Title of the Article: Spatio-Temporal Transformation in Agricultural Land-Use Pattern in Karachi Using Geo-Spatial Techniques: A Case Study along West Bank of Malir River

Published in: Journal of Basic & Applied Sciences

Impact Factor/Category: Y Category
Journal Type: National
Year: 2014

11. Title of the Article: Socio-Agricultural Correlation and Regionalization: A Case of

the Districts of Pakistan

Published in: Journal of Basic & Applied Sciences

Impact Factor/Category: Y Category
Journal Type: National
Year: 2014

MPhil/MS/ PhD Students: 21

M.Phil. Students: 10 (Registered)

3 (Synopsis Submitted in ASBR)

4 (Synopsis in Progress)

M.Phil Thesis: 3 (Thesis Submitted)

Ph.D.: 1 (Registered)

Review the Articles:

- 1. Geospatial Analysis of Reversal of Desertification in Bahawalpur City of Cholistan desert for the Sindh University Research Journal (Science Series) in 2023.
- 2. Geospatial Land Use Land Cover changes across Pakistan- A review for the Sindh University Research Journal (Science Series) in 2023.

Attended HEC Meetings:

At NED: Purpose: For Curriculum Revision Committee Meeting

Subject Area: GIS and Remote Sensing

Dated: December 2016

At Lahore: Purpose: For Curriculum Revision Committee Meeting

Subject Area: GIS and Remote Sensing

Dated: 17,18 April 2017

At Lahore: Purpose: For Curriculum Revision Committee Meeting

Subject Area: Geography

Dated: 7,8 December 2017

Courses/Workshop Attended:

1. Road Safety Seminar on November 10, 2022.

- 2. Road Safety Seminar on
- Consultation Workshop on Strategic Environmental & Social Assessment (SESA) and Land use Plan (LUP), Environmental and Social Studies, Landuse Plan including Resettlement Frameworks for Thar Coal Fields organized by Mott MacDonald in collaboration with Sindh Coal Authority Energy Department Government of Sindh held at Arena, Main Karsaz Road, Karachi on May 28th, 2015.
- 4. Higher Education Commission Indigenous on Campus Training (IOT) on Quality Assurance jointly organized by University of Karachi and Higher Education Commission, Pakistan under Modern University Governance Program at Institute of Environmental Studies, University of Karachi from May 12-15,2015.
- 5. Seminar on "Academic Integrity & Plagiarism" presented by Vice Chancellor Prof. Dr. Muhammad Qaiser on February 12, 2014.
- 6. Organic **Gardening** from 24-25 April 2010 held at Department of Agriculture, University of Karachi from 24-25 April 2010.
- 7. Customization and VBA Programming in ArcGIS from Department of Geography, University of Karachi held from 15-09-2006 to 15-10-2006.
- 8. Staff Development course under the scheme of National Academy of Higher Education held from December 12 to January 7, 2006 at university of Karachi, Karachi.
- 9. Advanced Geographic Information System (GIS) from NED University of Engineering & Technology, Karachi held from 16-12-2005 to 18-12-2005.

Co-Curricular Activities:

- 1. Organized 14th August Celebration event as student advisor 2022.
- 2. Organized Student Week as student advisor in November 2021
- 3. Organized All Pakistan Study Tour from 10th July 2016 to 20th July 2016.
- 4. Worked as a Member Core Committee of Geographers Annual Dinner (2013) and prize recognition ceremony.
- 5. Worked as a KUDMC Volunteer in Flood Relief Activities 2010.

- 6. Organize student's week from 12-17 October 2009.
- 7. Working as Coordinator in Geo Mag, 2nd Issue.
- 8. Worked as a Coordinator in Establishing and Publishing 1st issue of Geo Mag under the supervision of Research Group.
- 9. Organized All Pakistan Study Tour from 15th June 2007 to 4th July 2007.
- 10. Secured 1st position in high jump on District Level in the year 1993-94.
- 11. Secured 3rd position in high jump on District Level in the year 1997.
- 12. Secured 2nd position in high jump in the year 1992.
- 13. Secured 1st position in Relay Race in the year 1993.
- 14. Secured 1st position in high jump in the year 1993.
- 15. Secured 3rd position in Relay Race in the year 1994.
- 16. Participated in student week as a volunteer in the year 1997.
- 17. Working as a member in Anjumun-e- Araian Pakistan, Karachi.
- 18. National women guards' course.

Community Service:

Service: Services during KUDMVC Flood Relief Activities 2010-11

Main Task: The main task was to gather students for flood relief activities.

For this under the umbrella of Karachi University Disaster Management Volunteer Corp (KUDMVC), we gathered and distributed food and other important stuff for flood victims under the direction of Vice Chancellor Pir Zada Qasim and Pro

Vice-Chancellor Dr. Shahana Urooj Kazmi.

Participants: Students and Teachers of the University of Karachi/ Governor

House/ Shah Abdul Lateef University Khairpur, Pakistan

Army.

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