

Dr. Lubna Ghazal
Assistant Professor
Department of Geography, University of Karachi
Karachi – 75270, Pakistan
Ph. 92-21-99261300-6 Ext. 2452, 3292 ,
E-mails: lubnag@uok.edu.pk, geographer.lubna@gmail.com

SPECIALIZATION:

Geography of Environment/ Climate Change

Remote Sensing and GIS Applications in

EDUCATION

Environmental Challenges, Ecology of Landscape ,

Ecology of Natural Resources, Water Resources

Management , Disaster Management.(Specially

Floods and Drought)

YEAR /Session	QUALIFICATION DEGREE	FIELD OF STUDY	INSTITUTION/ UNIVERSITY
2015	<u>Ph.D.</u> Multi-Scale Assessment of the Implications of Climate Change and Human Activities on Land Resources of Sindh	Climate Change and Environmental Hazards	Department of Geography, University of Karachi
2012	<u>MS Remote Sensing and GIS</u> Risk Assessment of Agricultural Drought in Karachi. A GIS and RS Perspective	Desertification and Drought Remote Sensing /GIS	Department of Geography, University of Karachi
1999	<u>Secured First Class Second Position in</u> <u>MSc and BSc Hons</u>		Department of Geography, University of Karachi

PROFESSIONAL EXPERIENCE OF TEACHING AND RESEARCH

1. Karachi International School (O'Levels): March 1999 - July 2000

2. Army Public School (O'Levels): July 2000 - August 2002

3. Generation's School (O' and A'Levels): August 2002- July 2011

- Served as Subject Head of (History, Geography and Environmental Management).
- Monitored academic progress of students and teachers, conducted structured meetings with team members, cascaded workshops
- Taught Syllabus of Cambridge International Examination (CIE) ;
- Environment of Pakistan and History and Culture of Pakistan to O'Level (Grade X) at Generation's School during August 2002- May 2011. My Students secured distinctions in Pakistan (Highest marks in Pakistan Studies) in Cambridge International Examination held in 2003 and 2004 respectively.
- Taught CIE Syllabus: Environmental Management to O'Level (Grade XI)
- Was House Patron of Jinnah House
- Responsible for organizing various co-curricular activities in school
- Was the Patron of **An Nahl Volunteer's Society** , Responsible to organize Fund raising Campaign in School for the needy ones
- Coordinator for outside school Volunteer Programs with the collaboration of following organizations
- **WWF-Pakistan** (World Wide Fund for Nature)
- **TCF** (The Citizens Foundation)
- **SIUT** (Sindh Institute of Urology and Transplantation) and Agha khan hospital
- Charity Based Schools **Zindagi Trust** (Shahzad Roy) and Alkhair School
- **Member "I Own Karachi"** CDGK Project
- Coordinator for arranging Field Trips for the students of class IX_XI in the Senior section.
- Coordinator for Spellathon and nature carnival arranged by WWF-Pakistan during 2003-2010.
- Member Organizing committee for beach cleaning activities arranged by WWF-Pakistan

4. University of Karachi July 7th 2011-Present

University of Karachi: Assistant Professor (T) (BPS-19) September, 2015 till Present

University of Karachi: Lecturer (BPS-18) July, 2011- August-2015

TEACHING ACTIVITIES AT DEPARTMENT OF GEOGRAPHY

Courses Taught to B.Sc, M.Sc, MS/ M.Phil Students

- ✓ **Arid-land: Desertification and Management - Course # (690)**
- ✓ **Climatology – Course # (508)**
- ✓ **Ecology of Natural Resources - Course # (647)**
- ✓ **Economic Geography - Course # (504)**
- ✓ **Field Techniques and Surveying - Course # (661 and 662)**
- ✓ **Geography of Pakistan - Course # (512)**
- ✓ **Geography of Tourism-Lab**
- ✓ **Geomorphology Course # (503)**
- ✓ **Introduction to GIS – (Lab) Course # (607)**
- ✓ **Introduction to Remote Sensing and image Processing - Course # (511) Evening**
- ✓ **Management of Water Resources- Course # (673)**
- ✓ **Map Work and Field Surveying - Course # (404)**
- ✓ **Natural Hazards and Disaster Management - Course # (742)- Evening**
- ✓ **Physical Geography - Course # (301)**
- ✓ **Physical Geography - Course # (302)**
- ✓ **Water Resources and Management - Course # (719)**
- ✓ **Ecology of Land scape – Course # (748)**
- ✓ **Research Method – Course # (712)**
- ✓ **Environmental Impact Assessment (EIA) Course # 747**

Research Students Supervised:

- Six Students are being enrolled in M.Phil.
- Two students are enrolled in Ph.D.

RESEARCH ACTIVITIES

A. PUBLICATIONS IN HEC RECOGNIZED / ISI index/IMPACT FACTOR JOURNALS

**15. A GIS based Assessment of Drinking Water Quality: A Case Study of
Arimabad, District Hunza-Pakistan,**

by Naila Jabeen, Lubna Ghazal, Shaheen Begum, Nousheen Masood, INT.
J.BIO.BIOTECH., 19 (4): 469-482, 2022. (ISI Approved Y- Category)

14. Urban Water Management Issues in Mega City Karachi,

by Lubna Ghazal, Salman Zubair , Anisa Zafar. INT. J.BIO.BIOTECH., 18 (4): 715-
723, 2021. (Y- Category-HEC Recognized)

**13. Ground Water Quality Analysis Using GIS: A Case Study of Bari Doab, Punjab-
Pakistan,** by Falak Naeem and Lubna Ghazal. INT. J. BIO.BIOTECH., 18(4): 701-713,
2021. (Y- Category-HEC Recognized)

**12. Assessment of PhysioChemical Characteristics of Ground Water Quality in
Districts of Punjab: A Geoinformatics perspective,** by Falak Naeem and Lubna
Ghazal. Pakistan Geographical Review, Vol 76.No 1, June 2021.pp191-202.
(Y- Category-HEC Recognized)

11. Remote Sensing of Phytoplankton Fluorescence in Northern Arabian Sea, by

Imran Ahmed Khan, Lubna Ghazal, Mudassar Hassan Arsalan and Muhammad Faheem
Siddiqui. Pakistan Journal of Botany, 51(2): 761-765, 2019. (Impact Factor 0.7)

**10 . Assessment of Transformation of Urban Green spaces and Agriculture Land in
Karachi: a case study of Gutter Bagheechea in and its Surrounding areas, by**

Lubna Ghazal, Salman Zubair, Jamil.H.Kazmi and Hameeda Ghani (2018).

International Journal of Biology and Biotechnology, Vol.15, No.3, Pgs 527-534. 2018.

(Y- Category-HEC Recognized)

9. Satellite based assessment of soil moisture and associated factors for vegetation cover: a case study of Pakistan and adjoining regions.

Imran Ahmed Khan, Mudassar Hassan Arsalan, **Lubna Ghazal**, Muhammad Faheem Siddiqui, Mohammed Raza Mehdi, Ibrahim Zia and Iram us Salam (2018) . Pak. J. Bot., 50(2): 699-709, 2018. (Impact Factor 0.9 & ISI Index)

8. Geo-spatial assessment for monitory burden of road traffic accident victims in Karachi. Salman Zubair, **Lubna Ghazal**, Jamil.H. Kazmi and Rashid Jooma (2016).

Journal of Pakistan Geographical review Volume 71(2) December, 2016. Pages: 120-134. (Y-Category HEC Recognized)

7. Integrated Satellite and GIS based Assessment of Urbanization in Karachi.

Lubna Ghazal, Salman Zubair and Jamil H. Kazmi (2016). Journal of GeoSpace Science, 1(2) September 2016, Pages: 31-42.

6. A GIS based locational analysis of accident risk zones for schools going children of Karachi.

Salman Zubair, **Lubna Ghazal**, Jamil.H. Kazmi and Rashid Jooma (2016). Journal of Pakistan Geographical review Volume 71(1) June, 2016. Pages: 33-46. (Y-Category HEC Recognized)

5. Assessment of human exposure to traffic borne problems in Karachi.

Salman Zubair, Shahid Shoukat, **Lubna Ghazal**, J.H.Kazmi (2016). *International Journal of Biology and Biotechnology*, Vol.13, No.1, Pgs 153-162. (HEC Recognized)

4. Monitoring and Mapping Spatio-Periodic Dynamics of Vegetation Cover in Karachi Using Geoinformatics.

Lubna Ghazal, J.H.Kazmi and Salman Zubair. (2015). *International Journal of Biology and Biotechnology*, Vol.12, No.4, Pgs 621-627. (Y-Category ISI-Index/HEC Recognized)

3. Assessing Spatial and Temporal Variability in Phytoplankton Concentration through Chlorophyll-a Satellite Data: A Case Study of Northern Arabian Sea.

Khan, I. A., **Ghazal, L.**, Arsalan, M. H., Siddiqui, M. F., and Kazmi, J. H. (2015). *Pak. J. Bot*, 47(2), 797-805. (Impact Factor 0.9 & ISI Index)

2. Monitoring and Measuring Surface Water in Semi-Arid Environment Using Satellite Data: A Case Study of Karachi.

Ghazal, L., and Kazmi, S. J. H. (2014). *Journal of Basic and Applied Sciences, Vol.10, pp. 484-491. (Y-Category HEC Recognized)*

1. Spatial appraisal of the Impacts of Droughts on Agricultural patterns in Karachi.

Ghazal, L., Kazmi, J. H. and Afsar, S. (2013) *Journal of Basic and Applied Sciences , Vol. 9, pp. 352-360. (Y-Category HEC Recognized)*

B. PUBLICATIONS AS CONFERENCE PROCEEDINGS:

1. Salman Zubair and **Lubna Ghazal (2016).** “ **Evaluating the road safety design through High Resolution Satellite image: A Case Study of Karachi Metropolitan**” Published in conference Proceeding in the 5th International Conference on Transportation and Traffic Engineering (ICTTE 2016), held during July 6-10, at University of Lucerne, Switzerland. MATEC Web of Conferences 0 (2016) DOI: 10.1051/MATEC mateconf/201 2016 81, 681020 ICTTE 2022 22.
2. **Ghazal, L. and Kazmi, S. J. H. (2013).** **Appraisal of Agricultural Droughts in Karachi through Geospatial Technologies.** *Proceedings of 14th All Pakistan Geographical Conference, pp. 192-204, Department of Geography, University of the Punjab, Lahore, held from March 5- 7, 2013, Department of Press and Publications: Lahore*

C. RESEARCH PRESENTED IN INTERNATIONAL AND NATIONAL CONFERENCES/SEMINARS/WORKSHOPS:

1. Co-Author of research article presented titled: **Spatial Assessment of PM 2.5 in Atmosphere of Karachi Using Geoinformatics during 2019-2020**”. In An International Seminar on Space Science and Technology, World Space Week-2022.Organized by Institute of Space Science and Technology in collaboration with Department of Geography, on 6 Oct,2022 at Arts Auditorium, University of Karachi.
2. Co-Author of research article presented titled: **“Impact of climate change on surface water quality. A case study of Karimabad, Hunza, Pakistan”.** **In International conference on Climate Change: Impacts and Responses** held during 8-9 March 2022, at ICCBS, University of Karachi, Karachi- Pakistan. Organized by Department of Geology, UOK ,PCRWR and PSF in collaboration with Paistan Meteorological Department.

3. Co-Author of research article presented with the title “ Spatial Analysis of Ground Water Quality In District Okara, Punjab-Pakistan” in **3rd International Conference on Emerging Trends in Earth and Environmental Sciences** held during 16-18 November, 2021 at College of Earth and Environmental Sciences, University of Punjab, Lahore, Pakistan.ET
4. Presented research article titled “Impact of Climate Change on Agricultural Activities of Sindh-Pakistan” at the **3rd International Conference on Climate Change and Traditional Agriculture Pattern in Pakistan: Implications and Solution** on dated **26-28, October, 2021, at Shah Abdul Latif University-Khairpur, Sindh Pakistan.**
5. Co-Author of research article presented with the title “Comparision of Pre and Post Pandemic Situation on Tourism Industry and Potential of Agro Tourism in Baltistan Region.” In an **online International Conference on Post Pandemic Ecological Sustainability: Challenges and Role of IT.** Held in October 6 and 7, 2020 organized by Department of Biology, Bioinformatics and Computational Biology, Virtual University of Pakistan.
6. Presented research article titled “GIS based analysis of Ground Water Quality, A Case Study of Districts of Punjab-Pakistan” at **1st International Conference on Sustainable Mineral Resources Development and Utilization (SMRDU-19).**
7. Presented research article titled “Impact of Global Warming and Climate Change on Land cover and Land Use Patterns of Sindh Pakistan” at the **5th International Conference on Environmental Horizon**, Organized by Department of Chemistry, ORIC and ICCBS, University of Karachi.
8. Presented research article titled “Spatio-Temporal Analysis of Physio-chemical characteristics of ground water in North Eastern Districts of Punjab” Institute of Environmental Studies Department of Geography University of Karachi, at the **5th International Conference on Environmental Horizon**, Organized by Department of Chemistry, ORIC and ICCBS, University of Karachi.
9. Presented research article titled “Ground Water Depletion: A Vital Agent for Socio-Economic Transformation of Peri-Urban Areas in Karachi” at the **15th All Pakistan Geographical Conference-2018.** Organized by Department of Geography University of Karachi in collaboration with PGA, Urdu University and HEC.

10. Presented research article titled “ Climate Change and its Impact on Water Resources and Food Production in Sindh-Pakistan” at the **15th All Pakistan Geographical Conference-2018**. Organized by Department of Geography University of Karachi in collaboration with PGA, Urdu University and HEC.
11. Presented research article titled “Assessing the drought Risk and impact of Urbanization on Agricultural land using remotely sensed data: A Case study of Qasimabad, Hyderabad District-Sindh”, at the **15th All Pakistan Geographical Conference-2018**. Organized by Department of Geography University of Karachi in collaboration with PGA, Urdu University and HEC.
12. Presented research article titled “Evaluating the Impacts of Variability in Rainfall and River Discharge on Agricultural land: A Case study of District Sanghar-Sindh Pakistan” at the **15th All Pakistan Geographical Conference-2018**. Organized by Department of Geography University of Karachi in collaboration with PGA, Urdu University and HEC.
13. Presented research article titled “Geographical Assessment of Current Public Transport System of Karachi ” at the **15th All Pakistan Geographical Conference-2018**. Organized by Department of Geography University of Karachi in collaboration with PGA, Urdu University and HEC.
14. Presented research article titled “Geographical Assessment of Current Public Transport System of Karachi ” at the **15th All Pakistan Geographical Conference-2018**. Organized by Department of Geography University of Karachi in collaboration with PGA, Urdu University and HEC.
15. Presented research article titled “Appraisal of Climate Change and its impact on water Resources of Sindh”.
at the **3rd Karachi International Water Conference** on “Future of Water”, Organized by Hisaar Foundation for Food, Water and livelihood, during November 21-22, 2017 at Moven Pick Hotel Karachi.
16. Presented research article titled “Climate Change and hydro-meteorological hazards. A case of Province of Sindh Pakistan”.
1st International conference on global environmental change and the role of geographers
July 25-27, 2017 at University of Peshawar, Baragali Summer Campus.
17. Co-Author of research article titled “Assessing the negative impact on human health due to traffic related problems in Karachi”.

presented at the **1st International conference on global environmental change and the role of geographers** July 25-27, 2017 at, University of Peshawar.

18. Presented research article titled “Need assessment of sustainable urban growth and Peri-urban resilience in mega city Karachi”.

at the **5th International Conference on Infrastructure Engineering** in Developing Countries held in NED University during 14th -15 July 2017.

19. Co-Author of research article titled “Spatial Autocorrelation analysis and sustainability check for urban infrastructure of Karachi”.

presented at the **First South Asian Regional SURE Conference** held on January 18-19, 2017, Karachi, Pakistan at Dr. A.Q Khan Institute of Biotechnology and Genetic Engineering Auditorium, University of Karachi.

20. Presented research article titled “Assessing the impact of Urban amelioration on ecological transformation of arable land in Karachi”. at the **First South Asian Regional SURE Conference** held on January 18-19, 2017, Karachi, Pakistan at Dr. A.Q Khan Institute of Biotechnology and Genetic Engineering Auditorium, University of Karachi.

21. Presented research article titled “Vulnerability of Natural Disaster and Food Security in Sindh-Pakistan”. at the **International Conference on the Challenges of Social and Human Development** held in University of Karachi during 26-27th November, 2016.

22. Presented research article titled “Challenges of Water Scarcity and Sustainable Agriculture in Rural Karachi”. at the **4th International Conference on Energy, Environment and Sustainable Development** held in Mehran University of Jamshoro-Sindh, during 1st -3rd November, 2016.

23. Presented research article titled “Investigation to the impact of water scarcity on food production in the mega city of Karachi.”

at the **International Conference of Managing Mega Cities-2016**. Jointly organized by George Mason University, USA and University of Karachi-Pakistan, during 20-22nd September, 2016.

24. Co-Author of research article titled “Assessing the risk of road crashes on U-Turns of Karachi through Geo-Informatics”.

at the **International Conference of Managing Mega Cities-2016**. Jointly organized by George Mason University, USA and University of Karachi-Pakistan, during 20-22nd September, 2016.

- 25. Trainer and Resource person in the 17th Training Workshop on Conservation and Management of Biodiversity and Ecosystem**, Jointly Organized by Scientific and Cultural Society of Pakistan with the collaboration of **International Union for Conservation of Nature IUCN Commission on Ecosystem Management (IUCN-CEM) and WWF-Pakistan** at Department of Zoology, UoK, during 19th to 22nd July, 2016.
- 26.** Presented poster titled “Assessing the Impact of Climate Change on Traditionally Significant Agricultural Areas of Karachi;
at the **14th National and 5th International Conference of Botany; Climate Change and Phytodiversity Challenges and opportunities**. 15th-18th January, 2016.
- 27.** Presented research article titled “Deterioration of Green spaces Located within Urban and Peri-Urban Environment of Karachi;
at the **Fourth International Conference on Environmental Horizon (ICEH-8 – 10th January, 2016)** Jointly Organized by Department of Chemistry and ICCBS, University of Karachi.
- 28.** Presented research article titled “A GIS based appraisal for projected economic losses involved in road traffic accident victims of Karachi”.
at the **International Conference on Contemporary Social Sciences 12th-13th December (ICCSS-2015)**. Organized by Faculty of Social Sciences, University of Karachi-Karachi-Pakistan.
- 29.** Presented research article titled “Assessing the Impact of Depleting Water resources on food Production in Selected Rural Areas of Karachi”
at the **International Water Conference on Securing Sustainable Water for All Promoting Change Through Inclusion, Integration & Innovation**. 17th & 18th November 2015 conference & exhibition/ Karachi, Pakistan. Organized by Hisaar foundation at Moven Pick Hotel, Karachi.
- 30.** Presented research article titled “Assessing the Transition of the Malir Valley of Karachi through Satellite Imageries: Raising as Pursuit of Conservation”.
at the **Third International Conference on Environmental Horizon (ICEH-1st – 9th-11th January, 2015)** Jointly Organized by Department of Chemistry and ICCBS, University of Karachi.

31. Presented research article titled “Evaluating the Impact of Urbanization on Rural Areas:A Case Study of Karachi, at the **Second International Conference on Environmental Horizon** (ICEH-1st - 3rd January, 2014) Jointly Organized by Department of Chemistry and ICCBS, University of Karachi.

D. RESEARCH PRESENTED AND PARTICIPATION IN NATIONAL CONFERENCES / SEMINARS/ WORKSHOPS

32. Participated in 20 hours international on line module on Role of oceans in preserving climate and sustenance of life, livelihood and food security with special reference to Pakistan. Arranged by International Ocean Institute as part of the IOI Ocean Academy-Pakistan. During 13-23 December 2022
33. Participated in Workshop on Google Scholar and Endnote Referencing organized by ORIC, UOK on September 13, 2022.
34. Participated in **16th All Pakistan Geographical Conference, APGC-2021** and contributed in oral presentation
Titled: Assessing the impact of Urbanization on Agroecological Areas. A case Study of Site Town Karachi
35. Participated in **16th All Pakistan Geographical Conference, APGC-2021** and contributed in oral presentation as co-author:
Titled: **Assessment of PhysioChemical Characteristics of Ground Water Quality in Districts of Punjab: A Geoinformatics perspective.** , by Falak Naeem and **Lubna Ghazal**
36. **Organized/ Co Secretary 15th All Pakistan Geographical Conference, APGC-2018** and contributed in oral presentation:
Titled: Ground water depletion: A vital agent for socio-economic transformation of Peri-urban areas in Karachi
37. **Organized/ Co Secretary 15th All Pakistan Geographical Conference, APGC-2018** and contributed in oral presentation as co-author
Titled: “Evaluating the Impact of Variability in Rainfall and River Discharge on Agricultural Land: A case study of District Sanghar- Sindh-Pakistan.

- 38.** Organized/ Co Secretary 15th All Pakistan Geographical Conference, APGC-2018 and contributed in oral presentation as co-author
Titled: “Assessing Drought Risk and Impact of Urbanization on Agricultural land Using Remotely Sensed Data: A Case of Qasimabad, Hyderabad District Sindh.
- 39.** Organized/ Co Secretary 15th All Pakistan Geographical Conference, APGC-2018 and contributed in oral presentation as co-author:
Titled: “Geographical Assessment of current Public Transport System of Karachi”
Conference was jointly organized by Department of Geography federal Urdu University and University of Karachi on April 21-23, 2018 at Arts Auditorium, University of Karachi-Pakistan.
- 40.** Participated and presented research article titled “Assessing the Potential of Natural Resources in Selected Districts of Pakistan Using Multi Resolution Satellite Data Department of Geography, UOK, at the **4th National Conference of Space Science and Technology 2016**. Organized by ISPA, SUPARCO, HEC and University of Karachi, during 9-10 October, 2017 at Arts Auditorium, University of Karachi-Pakistan.
- 41. Organized Seminar on Earth Day** and contributed in oral presentation:
Titled: “Sindh at the Crossroad of Environmental and Climatic Challenges”. Seminar was jointly organized by Department of Geography and Institute of Space Technology April 22, 2017 at Arts Auditorium, University of Karachi-Pakistan.
- 42. Participated and presented research article titled “Application of Geoinformatics in Climate related hazards. A case of Sindh Province”.**
Department of Geography, UOK, at the **4th National Conference of Space Science and Technology 2016**. Organised by ISPA, SUPARCO, HEC and University of Karachi, during 7-9 October, 2016 at Arts Auditorium, University of Karachi-Pakistan.
- 43.** Participated and presented research article titled “Impact of Infrastructure Development on Road Traffic Accidents: A Case Study of Major Arteries of Karachi Department of Geography, UOK. at the **4th National Conference of Space Science and Technology 2016**. Organized by ISPA, SUPARCO, HEC and University of Karachi during 7-9 October, 2016 at Arts Auditorium, University of Karachi-Pakistan.
- 44. Conducted two days survey and hands on training in 17th Training Workshop on Conservation and Management of Biodiversity and Ecosystem, Jointly Organized**

by **Scientific and Cultural Society of Pakistan with the collaboration of Department of Zoology, UOK, IUCN and WWF-Pakistan on 21-22 July, 2016.**

- 45. Participated and presented a lecture on GPS handling and Mapping Techniques as Resource Person in 17th Training Workshop on Conservation and Management of Biodiversity and Ecosystem**, Jointly Organized by Scientific and Cultural Society of Pakistan with the collaboration of Department of Zoology, UOK, IUCN and WWF-Pakistan on 19-22 July, 2016.
- 46. Presented lecture as Invited guest speaker titled “Think Global Act Local” on world day to combat desertification and drought organized by IST on June, 16, 2016.**
- 47. Presented research paper titled: “Impact of Infrastructure Development on Road Traffic Accidents: A Case Study of Major Arteries of Karachi”.**
at the **First National Conference on Environmental Engineering and Management (NCEEM)** held at Mehran University of Jamshoro during 13-14 April, 2016.
- 48. Presented research paper titled: “Delineating and Quantifying Green Cover in Karachi Using LandSat series Satellite data”.**
at **Third National Conference on Space Sciences (NCSS-2015)** Organized by ISPA (KU), with the collaboration of SUPARCO and HEC on (5-8 October, 2015).
- 49. Presented research paper titled “Spatial Monitoring and Quantification of Surface Water in Karachi Using Space Technologies”**
in the **Second National Conference on Space Sciences (NCSS-2013)** Organized by ISPA (KU), with the collaboration of SUPARCO and HEC on (6-8 October, 2013).
- 50. Presented research paper titled “Appraisal of Agricultural Drought through Geospatial Technologies” at 14th All Pakistan Geographical Conference**, held during 5th -7th March, 2013 at Punjab University, Lahore Pakistan.
- 51. Presented research paper titled “Spatial Monitoring of Agricultural Drought in Karachi Using Space Technologies” at First National Conference on Space Sciences (NCSS-2012)** Organized by ISPA (KU), with the collaboration of SUPARCO and Sir Syed University of Engineering and Technology on (8th & 9th Oct,2012).

E. CONTRIBUTION IN ORGANIZING WORKSHOPS / SEMINARS

1. Celebrated World Water Day, 2023 and Inaugurated Water Conservation Project of Drip Irrigation for Orchard Using AC water
2. **Conference Secretary** for the World Space week Seminar organized by Institute of Space Science and Technology in Collaboration with Department of Geography, UoK, on October, 6 2022 at Arts Auditorium.
3. **Project Head of Water Conservation and Fruit orchard Project** inaugurated on 16 November, 2022 with the collaboration of Team Green at Department of Geography, UoK.
4. **Organized World Water Day Seminar** and Students Activities (Photograph, Poster, and Video Competition) on 22 March, 2022 at Department of Geography.
5. **Organizer and Moderator** of Webinar Series of Seminar on Contribution of Young Geographers to Geography for Water Resources and Management and Ecology of Natural Resources. Held on 30th December, 2020
6. **Was invited as guest speaker** / Panelist for a comprehensive online Course for Professionals in the Water Sector on Gender and Water: Why Women should lead. Held During 14th-24th December, 2020.
7. **Organized Walk and Seminar** on world Water Day as Convener on March 22nd 2019 at Department of Geography, University of Karachi.
8. **Organized 15th All Pakistan Geographical Conference**, APGC-2018 as Co-Secretary. Conference was jointly organized by Department of Geography federal Urdu University and University of Karachi to enlightened Earth Day on April 21-23, 2018 at Arts Auditorium and Department of Geography University of Karachi Pakistan.
9. **Organized Three Days GIS training** from 12-14th April, 2018. Workshop was for beginners with hands on Practice in ArcGIS software. Held in Digital Image Processing Lab of Department of Geography, University of Karachi.
10. Attended Seminar on Road Safety held on 16th December, 2017 at University of Karachi, organized by National Institute of Professional Development.
11. **Represented Karachi University** in the Universities for Water Networking and Youth Sessions in the 3rd Karachi International Water Conference on “Future of Water”,

- Organized by Hisaar Foundation for Food, Water and livelihood, on November 21-22, 2017 at Moven Pick Hotel Karachi.
12. Attended a Seminar on Road Safety Awareness held on October 25, 2017. Organized by Department of Geography, University of Karachi.
 13. Attended series of Lectures: Investment in the Future on the topic: Transform Your Stress into Happiness” held on October 14, 2017. Conducted by Dr. Imran Y. Muhammad (Founder of Transformation International Society) at KIBGE, UOK.
 14. Attended 2nd National Automotive Summit 2017-Karachi.Theme: Mobility Development-Pakistan Standards-Safety-Environment, Organized by Institute of road Safety Traffic Environment Pakistan in collaboration with NED University, Toyota-Indus Motor Company, Ministry of communications Islamabad and Government of Sindh on 17th May-2017, Moven Pick Hotel-Karachi.
 15. Attended 5th National Monsoon forum and heat wave early warning system. Workshop organized by Pakistan Meteorological Department in collaboration with K-electric and ministry of Sindh on 8th May,2017 in Pearl Continental Hotel.
 16. **Represented University of Karachi** in the 5th meeting of Universities for Water Network (UWN), held on 14th April, 2017. Arranged by Hissar Foundation, hosted by University of water Resources Management and Marine sciences Uthal –Lasbela Balochistan.
 17. **Participated in “One day boarding and Sampling to Survey Vessel BEHR PAIMA of Pakistan Navey on March 27, 2017.**
 18. **Organized and Participated** in Post Conference Workshop on “Mapping Spatial Distribution of Species Using MAXENT Software” at the First South Asian Regional SURE Conference-2017 held during 21-22 January, 2017 at the Department of Geography, University of Karachi-Pakistan.
 19. **Organized and Participated** in Pre-Conference Workshop on “3D GIS in Spatial Ecology” at the First South Asian Regional SURE Conference-2017 held during 16-17 January, 2017 at the Department of Geography, University of Karachi-Pakistan.
 20. Participated in one day Workshop on Awareness in scientific Writing, on 24 February, 2016. Organized by Department of Mathematical Sciences, University of Karachi.

21. Participated in 2 days' workshop on Advanced Public Speaking held on 11-12 May, 2015. Organized by Sardar Yaseen Malik Professional Development Centre, University of Karachi.
22. **Represented University of Karachi** in the 2nd meeting of Universities for Water Network (UWN), Arranged by Hissar Foundation at Mehran University Jamshoro on April 24, 2015.
23. Attended one day Seminar on "Management of Irrigation and Agricultural System Using Geospatial Techniques" held at Institute of Space Technology (IST) Karachi, on April, 15th 2015.
24. **Organized and Participated** in the Seminar on EndNote software for Citation, Organized by Karachi University Teachers' Society (KUTS) on 12th February, 2015.
25. **Represented University of Karachi** in the 1st meeting of Universities for Water Network (UWN), Arranged by Hissar Foundation and NED University Karachi on December 14, 2014.
26. Attended a Symposium on Postgraduate Research on 23rd June, 2014 organized by Office of Research Innovation and Commercialization, University of Karachi.
27. Participated in Workshop on Planning, Execution and Successful Accomplishment of research degree held during 24-26 April, 2014 Organized by Dr. A.Q Khan Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi.
28. Participated in a Seminar on academic Integrity and Plagiarism organized by Karachi University Teachers' society (KUTS) on February 12, 2014.
29. Represented Department of Geography for the Workshop on Self -Assessment Report, Organized by Quality Enhancement Cell University of Karachi held at Arts Auditorium on September 28, 2012.
30. Attended a training program on "Human Resource As a Change" held during 2nd to 6th September, 2013 at SYM Sardar Yasin Malik Professional Development Center, University of Karachi.
31. Attended 10th training Workshop on Protected Areas of Pakistan, Organized by The Scientific and Cultural Society of Pakistan in collaboration with Department of Zoology and IUCNP from June 21-27, 2012.
32. Participated in a Workshop on data Analysis Using SPSS-18 Organized by Sardar Yaseen Malik Institute of Professional Development, University of Karachi.

33. Participated in the International Workshop on Sustainable Water Resource Management, Jointly Organized by Institute of Environmental Studies, University of Karachi and University of Innsbruck, Austria in Feb, 2012.
34. Participated in an Online Workshop on, 'How to Write A Winning Scientific Research proposal' held on September 24'2011, Organized by L.E.J. National Science Information Center under the Virtual Education Project Pakistan (VEPP) and Higher Education Commission, Pakistan.
35. Attended the training Course on "Introduction to Statistical analysis and Tools" held on 17th to 19th Oct, 2011 at Arts Faculty Computer lab, University of Karachi.
36. Attended first ever two days educational learning festival organized by Trainers' Resource Group on 8-9 October 2010 in Moven Pick Hotel-Karachi.
37. **Volunteered for 30 hours at (SIUT) Sindh Institute of Urology and Transplantation (SIUT) in February, 2010.**
38. **Hosted 13th All Pakistan Geographical Conference**, arranged by Department of Geography, University of Karachi in Dec, 2008.
39. **Worked for Agha Khan University Examination as Chief Examiner for Commercial Geography Composite Examination held in 2007.**
40. Completed Stage 2 Intermediate online Professional Development Course of O' Level Pakistan Studies Paper 1, Conducted by David Barnes, University of Cambridge International Examinations, UK in 2006.
41. Participant of Training Courses in O' Level Pakistan Studies, (Geography and History) Conducted by University of Cambridge, International Examinations, in 2002 and 2004 in pearl Continental Hotel-Karachi.
42. Attended a Teachers' In - Service Training Program from 25-31 July, 2002 at Army Public School O' Level-Saddar - Karachi.
43. Participant of Office Automation Course for Teachers (40 Hours), Conducted by Fourth R, Institute at Generation's School in June 2005.
44. Participant of Teachers' Training Workshop held in Army Public School S.M.C.H.S., Karachi in July 2001.

F. CONTRIBUTION IN SEMINARS/TRAININGS CONDUCTED/ INVITED SPEAKER:

1. **Subject Expert / Panelist** of Pannel Discussion for a comprehensive online Course for Professionals in the Water Sector on Gender and Water: Why Women should lead? Held During 14th-24th December, 2020.
2. **Organizer and Moderator** of Webinar Series of Seminar on Contribution of Young Geographers to Geography for Water Resources and Management and Ecology of Natural Resources. Held on 30th December, 2020
3. **Convener** of one day Seminar and Awareness walk on World Water Day, Celebrated on March 22nd, 2019 at Department of Geography, University of Karachi.
4. **Event Coordinator and Resource person** for one day seminar on” Water and Earth Day” held on 22nd April, 2017 at the Auditorium of Social Sciences, UOK.
Jointly organized by Department of Geography and Department of Remote Sensing and GISc IST. Title of Presentation was “Sindh at the cross road of hydro-meteorological hazards”.
5. Was Judge at Interschool Pakistan Quiz Competition held on February 8th, 2017, at Happy Home School Karachi – Pakistan.
6. **Conducted two days Survey and hands on Training on Using GPS and GIS Mapping** in 17th Training Workshop on Conservation and Management of Biodiversity and Ecosystem, Jointly Organized by Scientific and Cultural Society of Pakistan with the collaboration of Department of Zoology, UOK, IUCN and WWF-Pakistan held on 21st and 22nd July, 2016.
7. **Presented a Lecture on GPS handling and Mapping Techniques as Resource Person** in the 17th Training Workshop on Conservation and Management of Biodiversity and Ecosystem, Jointly Organized by Scientific and Cultural Society of Pakistan with the collaboration of Department of Zoology, UoK, IUCN and WWF-Pakistan held on 19th to 22nd July, 2016.
8. **Was the invited speaker for half day seminar on Drought in Sindh** to celebrate “World day to Combat Desertification and drought, Title of presentation was “Desertification and Drought: A pertinent Threat to Agro-based Economy” organized by Department of Remote Sensing and GISc IST, sponsored by Higher Education Commission at IST, Auditorium, Suparco on June 16, 2016.
9. **Coordinator, Anchor and Resource Person for one day seminar on Earth Day and Water Day** , Title of Presentation was “ Water Scarcity and Food Security: A

- Global and Local Perspective” Jointly organized by Hisaar Foundation , Department of Geography and Department of Remote Sensing and GISc IST, at Auditorium of KIBGE, UoK on April 22, 2016.
10. **Coordinator and Invited speaker** for one day seminar on “World day to Combat Desertification and drought, Topic presented was “Think Global Act Local” Jointly organized by Department of Geography and Department of Remote Sensing and GISc IST, at IST, Auditorium, Suparco on 16th June 2015.
 11. **Member Seminar Organizing Committee** for one day seminar on EndNote: The citation Management Software held on February 26, 2015 at Pharmacy Auditorium, Organized by Karachi University Teachers’ Society (KUTS-2015).
 12. **Member Seminar Organizing Committee** for one day seminar on Academic Integrity and Plagiarism held on February 12, 2014 at Arts Auditorium, Organized by Karachi University Teachers’ Society (KUTS-2014).
 13. **Resource Person in World GIS day Seminar** held on 2nd November, 2013 Organized by Karachi GIS Society, Department of Geography, University of Karachi.
 14. **Worked as Team Member for World Bank Project on GIS Development for Sindh Education Reform Program (SERP) and Punjab Education Reform Program (PERP) during (2012-2013).**
 15. **Was Invited as guest Speaker** for the Lecture on "Expansion of Islam: The Geographical Perspective" for the students in Islamic History Department, University of Karachi in March 2013.
 16. **Was Invited as guest Speaker** for Special Lecture on "History and Significance of Maps" for the students of Islamic History Department, University of Karachi on 28th August 2013.
 17. **Conducted a Teacher’s Training Workshop** on Methodology of Teaching Regional Geography at Army Public School O’ Level, Karachi on July 31, 2002.

G. INVOLVEMENT IN RESEARCH PROJECTS:

1. Principal Investigator for the proposal submitted and won the Dean's grant on the topic "Appraisal of RO Plants in Urban Core of Karachi". Status: Work in Progress
2. **Principal Investigator** for the project Submitted for Dean's Research Grant , University of Karachi for the year 2017-18 on following topic "Evaluating the Challenges of Water Crises in Karachi".
Status: Applied and Won the Grant. Work in Progress
3. **Principal Investigator** for the Project Funded by Dean, Faculty of Science, University of Karachi-For the session 2016-17 on following topic
"Effects of Urban growth on Land use changes in Site Town (UC-4) Karachi".
4. **Co-Investigator** for the Project Funded by Dean, Faculty of Science, University of Karachi- For the Year 2016-17 on following topic
"Assessing the Role of Mobile Phone use on the occurrence of Road Traffic Accidents in Karachi"
5. **Principal Investigator** for the Project Funded by Dean, Faculty of Science, University of Karachi-For the Year 2014 on following topic
"Spatio -Temporal Evaluation of Arable Land in Karachi"
6. **Subject Expert and Facilitator** in the HEC Funded Project granted to Institute of Space Technology (IST-Suparco) during 2014-16 For Studying Drought in Sindh Using Satellite Data : Status- In Progress
7. **Co-Investigator** for the Project Funded by Dean, Faculty of Science, University of Karachi- For the Year 2013 on following topic
"Identification and Spatial Analysis of Most Vulnerable Age group Victims, Involved in Road Traffic Accident in Karachi: A GIS Perspective".
8. **Team Member for GIS Development program for SERP (Sindh Education Reform Program) and PERP (Punjab Education Reform Program) funded by World Bank as Remote sensing/ GIS specialist from September 1, 2012 to December 1, 2013.**

H. MEMBERSHIP(S) AND OFFICE(S) HELD IN COMMITTEE, BOARDS AND PROFESSIONAL ORGANIZATION:

No	Name of Organization/Office/ Title of Membership	Designation-Post	Since
1	TEAM GREEN	Member	Aug, 2022
2	Karachi University Senate	Elected Member Senate	Sep,2017
3	ORIC,UOK	Focal Person	April, 2017
4	Quality Enhancement Cell-Self Assessment Report of Department of Geography	Member Assessment Team	March, 2017
5	Society for Urban Ecology (South Asia-Chapter)	Member	Jan. 2017
6	Executive Council, KUTS (Karachi University Teachers' Society)	Elected Member, Executive Council, KUTS.	2013-2017
7	Seminar Committee, KUTS	Member Executive Council	2013
8	Karachi-GIS Society, Department of Geography	Joint Secretary	2013
9	Universities for Water Network	Representative Member of Karachi University	2014
10	Admission Committee Karachi University for Bachelors and Masters Students	Member Admission Committee Karachi University	2012
11	Departmental Research Committee (DRC)	Faculty Member	2013
12	All Pakistan Geographical Association, Pakistan (APGA)	Member	2008
13	WWF-Pakistan	Member	2005

Proficiency in Languages

Fluent in English and Urdu.

References:

Will be furnished upon request.