

Curriculum Vitae

Name:	Dr. Gul Zareen Ghafoor			
Personal:	Contact #: +92-343-4624022 Email: zareen.sdsc@gcu.edu.pk Sustainable Development Study Center, Government College University Lahore, Pakistan			
Experience	<ul style="list-style-type: none"> Assistant Professor (Environmental Science) 18th Feb 2022-to-date (Sustainable Development Study Center, Government College University, Lahore, Pakistan) Lecturer (Environmental Science) 26th May, 2016-to-17th Feb 2022 (Sustainable Development Study Center, Government College University, Lahore, Pakistan) College Teaching Intern under Punjab Higher Education Department (Sep. 2012 - Jan 2016) 			
Education	<ul style="list-style-type: none"> PhD Environmental Science - Jan 2022 MPhil Environmental Science – 2013 BSc (Hons.) Environmental Science - 2011 			
Research Area	<ul style="list-style-type: none"> Climate Change Forest Ecology Public Health & Environment 			
Academic Assignments	<ul style="list-style-type: none"> BS Program Coordinator (BS Environmental Science and BS Gender and Climate Change Focal Person Turnitin Co-Advisor Environment Protection Society Coordinator SDSC Sports Invited member Curriculum Review Committee, Superior University Lahore 			
Research supervised	Candidate	Degree	Thesis Title	Status
	Ph.D			
	Ifrah Ali	Ph.D Environmental Science	Environmental and health impact analysis of surface mining in Mianwali District	In progress
	Shazana Khan	Ph.D Environmental Science	Socio-Ecological Vulnerability Assessment and Adaptive Responses to Glacier Lake Outburst Floods (GLOFs) in Chitral, Pakistan	In progress
	M.Phil.			
Anam Rafique	MPhil Environmental Science 2023-205	Assessing the organizational resilience to tackle the climate induced waterborne diseases in Lahore: A spatio-temporal analysis	Thesis submitted	
Syed Zain ul Abideen	MPhil Environmental Science	Assessing the carbon footprint of wheat-rice cropping system in Jandiala	In progress	

		2022-2024	Bhagwala village Gujranwala city		
Nimra Khalid	MPhil Environmental Science 2023-2025	Assessing the impact of climatic warming on seedling growth (<i>Prosopis juliflora</i>) and leaf litter decomposition in Hiran Minar Forest Sheikhupura	Completed		
Memuna Tahir	MPhil Environmental Science 2023-2025	Biodiversity of pollinator insects in urban green spaces of Lahore city	In progress		
Rohama Nasir	MPhil Environmental Science 2022-2023	Mapping and valuation of Ecosystem services provided by Hiran Miran, District Sheikhupura	Completed		
Mehvish Shabbir	MPhil Environmental Science 2022-2023	Spatio-temporal analysis of land cover changes and its impact of Land surface temperature in Vehari district	Completed		
Rida Batool	MPhil Environmental Science 2021-2022	Mapping and valuation of Regulatory Ecosystem services of Machhu Forest, District Layyah	Completed		
Kainat Javed	MPhil Environmental Science 2020-2021	Spatio-temporal analysis of land use land cover change and its impact on local temperature of Sialkot city.	Completed		
Amina Shabbir	MPhil Environmental Science 2020-2021	Health risk assessment and spatial distribution of heavy metals contamination in dust and surface soil of parks in Lahore	Completed		
Mehwish Rubab	MPhil Environmental Science 2019-2020	Evaluation of population status and economic valuation of ethnomedicinal flora of District Okara, Punjab Pakistan	Completed		
Khadija Tirmizi	MPhil Environmental Science 2017-18	Mapping and valuation of cultural ecosystem services provided by Hayat-ul-Mir forest Soan valley, Pakistan	Completed		
BS level					
Zuha Noshad & Abeera Awan	BS Environmental Science 2022-2026	Assessing the bioremediation potential of heavy metals tolerant fungi isolated from refuse dumpsite in Lahore.	In progress		
Muhammad Ahmer Tariq Niazi	BS Environmental Science 2022-2026	Spatio-temporal analysis of Land use Land cover changes in District Mianwali, Punjab Pakistan	In progress		

	Zainab Amer & Bisma Saleem	BS Environmental Science 2022-2026	Spatio-temporal mapping of air quality and assessment of community resilience to associated health risks in Lahore	In progress	
	Bareera Khalid	BS Environmental Science 2023-2024	Determination of heavy metals contamination in sand roasted snacks	Completed	
	Amna Naeem	BS Environmental Science 2023-2024	Public perception about temperature extremes and adaptation measures in Lahore city	Completed	
	Hina Nasir & Fiza Zainab	BS Environmental Science 2023-2024	Food safety practices and heavy metal contamination in fried foods in Lahore	Completed	
	Ittiba Fatima & Aimen Shehzadi	BS Environmental Science 2023-2024	Assessing the impact of Sahiwal coal power emissions on surrounding tree flora	Completed	
	Sadia Tabbasum, Syeda Taqdees	BS Environmental Science 2022-2023	Carbon footprint of a poultry farm facility in Punjab	Completed	
	Anam Rafique	Environmental Science 2022-2023	Assessment of occupational health and safety risks of a textile industry in Lahore.	Completed	
	Areej, Rida	Environmental Science 2022-2023	Human health risk assessment from heavy metals contamination in the herbal medicines available in the local market of Lahore, Pakistan	Completed	
	Rizwana Akram	BS Environmental Science 2021-2022	Assessing the heavy metals exposure and occupational health and safety of workers at a metallurgical factory in Lahore.	Completed	
	Tayyaba Tanveer	BS Environmental Science 2021-2022	Effect of air emissions on vegetation in the vicinity of a Matallurgical factor in Lahore	Completed	
	Ayesha Asghar	BS Environmental Science 2021-2022	Effect of air emissions on public health in the vicinity of a Matallurgical factor in Lahore	Completed	
	Mubeen Shoukat & Nimra Safdar	BS Environmental Science 2020-2021	Assessment of tree and soil carbon stock of Jillani Park, Lahore.	Completed	

	Farah Saeed	BS Environmental Science 2019-2020	Assessing response of colleges towards environmental education program sponsorship.	Completed	
	Arshia Ehsan	BS Environmental Science 2019-2020	Assessing response of corporate and social sectors to environmental education program sponsorship	Completed	
	Maria, Aqsa jabeen	BS Environmental Science 2018-19	Investigating the impacts of open dumping of municipal solid waste on environmental quality and public health in the vicinity of gondalanwala dumping site, gujranwala	Completed	
	Laiba Shohail, Rabia Asad	BS Environmental Science 2017-18	Assessment of effect of roadside noise on visitor's health and their attitude towards use of urban green spaces in Lahore	Completed	
	Kainat Khan, ZaibNaeem	BS Environmental Science 2017-18	Assessment Of Tree Biomass Carbon Stock Of Jallo Forest And Wildlife Park, Lahore	Completed	
	Maria Abbas, Maham Sarfraz	BS Environmental Science 2016-17	Evaluation Of Heavy Metal Tolerance Potential Of Strains As Bioremediation Tool	Completed	
	Anam Waheed	BS Environmental Science 2016-17	Public Health and Environmental Impacts of Lahore Orange Line Metro Train Construction Project	Completed	
	Arooj Qaiser	BS Environmental Science 2014-2015	Bioremediation of mercury using filamentous green algae	Completed	
	Ayesha Mughal	BS Environmental Science 2014-2015	Assessment of Antibacterial activity of lemon peel (<i>Citrus limon</i>) extract	Completed	
	Sana Amjad	BS Environmental Science 2013-2014	Effect of Nala daik effluent on the growth of <i>Triticum aestivum</i>	Completed	
	Samina Nazir	BS Environmental Science 2013-2014	Effect of Nala daik effluent on the growth of <i>Solanum melongena</i>	Completed	
	Chanda Tufail	BS Environmental Science 2013-2014	Effect of municipal solid waste compost on the growth of <i>Solanum lycopersicum</i> (tomato)"	Completed	

	Iram Aslam	BS Environmental Science 2013-2014	Effect of municipal solid waste compost on the growth of <i>Okra</i> (<i>Abelmoschus esculentus</i>)	Completed	
	Iqra Azeem	BS Environmental Science 2013-2014	Determination of fecal coliform bacteria in drinking water of recreational parks of Lahore, Pakistan	Completed	
Publications	Research Articles				
	<ol style="list-style-type: none"> 1. Ghafoor, G. Z., Qureshi, E. M. A., Ghafoor, N. & Shehzad, L. (2014). Health Status and Hygiene Practices In Slums: A Case Study Of Lahore, Pakistan. <i>Biologia (Pakistan)</i>, 60(2), 273-278. 2. Qureshi, E. M. A., Vehra, S., Ghafoor, G. Z., Ali, A. S., & Ahmad, F. (2014). Community perception regarding dengue epidemic in Lahore, Pakistan. <i>Pakistan Journal of Science</i>, 66(1), 7. 3. Shahid, M. G., Nadeem, M., Baig, S., Cheema, T. A., Atta, S., & Ghafoor, G. Z. (2016). Screening and optimization of some inorganic salts for the production of ergot alkaloids from <i>Penicillium</i> species using surface culture fermentation process. <i>Pakistan journal of pharmaceutical sciences</i>, 29(2). 4. Shahid, M. G., Baig, S., Saleem, M., Arif, R., Ghafoor, G. Z., & Liaqat, A. (2018). Qualitative and quantitative analysis of ergot alkaloids produced by <i>Aspergillus niger</i> through surface culture fermentation process. <i>Pak. J. Bot</i>, 50(6), 2423-2428. 5. Ghafoor, G. Z., Sarfraz, M., Abbas, M. & Shahid, M. G. (2019). Evaluation of tolerance potential of <i>Aspergillus niger</i> and <i>Trichoderma viridae</i> against hexavalent chromium. <i>International Journal of Biosciences</i>. 14(4), 35-44 6. Hayyat, M. U., Munir, A., Shahzad, L., Farhan, M., & Ghafoor, G. Z. (2019). Assessing the nexus of fast food consumption and childhood obesity in Lahore Metropolitan City of Pakistan. <i>International Journal of Biosciences</i>. 14(4), 95-102 7. Ghafoor, G. Z., Sharif, F., Khan, A. U., Hayyat, M. U., Farhan, M. & Shahzad, L. (2019). Energy consumption and carbon dioxide emissions of residential buildings of Lahore city, Pakistan. <i>Polish Journal of Environmental Studies</i>. 29(2), 1-11 8. Ghafoor, G. Z., Sharif, F., Khan, A. U., Shahzad, L., & Hayyat, M. U. (2019). Assessment Of Tree Biomass Carbon Stock Of Subtropical Scrub Forest, Soan Valley Pakistan. <i>Applied Ecology and Environmental Research</i>. 18(2): 2231-2245. 9. Munir, A., Hayyat, M. U., Shahzad, L., Sharif, F., Farhan, M., & Ghafoor, G. Z. (2020). Assessment of heavy metals concentrations in commercially available lipsticks in Pakistan. <i>Environmental Forensics</i>, 1-8. 10. Shahid, M. G., Nadeem, M., Gulzar, A., Saleem, M., Ghafoor, G. Z., Hayyat, M. U., & Nelofer, R. (2020). Novel Ergot Alkaloids Production 				

from *Penicillium citrinum* Employing Response Surface Methodology Technique. *Toxins*, 12(7), 427.

11. Kanwal, A., Farhan, M., Sharif, F., Hayyat, M. U., Shahzad, L., **Ghafoor, G.Z.** (2020). Effect of industrial wastewater on wheat germination, growth, yield, nutrients and bioaccumulation of lead. *Scientific reports*.
12. Shahzad, L., Shah, M., Saleem, M., Mansoor, A., Sharif, F., Tahir, A., Hayyat, U., Farhan, M. & **Ghafoor, G.** (2021). Livelihood vulnerability index: a pragmatic assessment of climatic changes in flood affected community of Jhok Reserve Forest, Punjab, Pakistan. *Environmental Earth Sciences*, 80(7), 1-16.
13. **Ghafoor, G. Z.**, Sharif, F., Khan, A. U. H., Shahid, M. G., Siddiq, Z., & Shahzad, L. (2021). Effect of climate warming on seedling growth and biomass accumulation of *Acacia modesta* and *Olea ferruginea* in a subtropical scrub forest of Pakistan. *Écoscience*, 1-14.
14. **Ghafoor, G. Z.**, Sharif, F., Shahid, M. G., Shahzad, L., Rasheed, R., & Khan, A. U. H. (2022). Assessing the impact of land use land cover change on regulatory ecosystem services of subtropical scrub forest, Soan Valley Pakistan. *Scientific Reports*, 12(1), 1-12.
15. Shahzad, L., Ali, M., Zubair, H., Sharif, F., Hayyat, M. U., **Ghafoor, G. Z.** (2022). Detection of heavy metals in children playing products and its associated health risk assessment in Lahore, Pakistan. *International Journal of Environmental and Analytical Chemistry*. <http://doi.org/10.1080/03067319.2022.21>
16. **Ghafoor, G. Z.**, Sharif, F., Hayyat, M. U., Shahid, M. G., & Shahzad, L. (2022). Effect of climatic factors on leaf litter decomposition dynamics of a subtropical scrub forest under field and microcosm conditions. *All Life*, 15(1), 1175-1187.
17. Ali, M., Shahzad, L., Hayyat, M. U., Sharif, F., **Ghafoor, G. Z.**, & Nasir, R. (2023). Determination of heavy metals and their associated health risk assessment in the commonly available sunblocks. *International Journal of Environmental Analytical Chemistry*, 1-18.
18. Shahzad, L., Yousaf, S., Riaz, N., Hayyat, M. U., & **Ghafoor, G.** (2023). Effects of the Covid-19 Pandemic on Primary Education System of Lahore, Pakistan. *Pakistan Journal of Medical & Health Sciences*, 17(03), 71-71.
19. Yasin, A., Shahzad, L., Hayyat, M. U., **Ghafoor, G. Z.**, Saeed, S., Sharif, F., Riaz, U. & Saleem, M. B. (2023). Assessing and Mapping the Impact of Tourism and Changing Climatic Conditions in Himalayan Region of Pakistan. *Journal of Environmental Management and Tourism*, 14(3), 605-622.
20. Zahra, K., Farhan, M., Kanwal, A., Sharif, F., Hayyat, M. U., Shahzad, L., & **Ghafoor, G. Z.** (2023). Investigating the role of bulking agents in compost maturity. *Scientific Reports*, 13(1), 16003.
21. Tahir, Z., Hayyat, M. U., Khan, Q. F., Sharif, F., Farhan, M., Shahzad, L., & **Ghafoor, G. Z.** (2023). Phyto-and bio-management of metal (loid)-contaminated soil by inoculating resistant bacteria: evaluating tolerance of

treated rice plant and soil with its efficiency. *Environmental Science and Pollution Research*, 1-13.

22. Javaid, K., **Ghafoor, G. Z.** Sharif, F., Shahid, M. G., Shahzad, L., Ghafoor, N., Hayyat, M. U., Farhan, M. (2023). Spatio-temporal analysis of land use land cover change and its impact on land surface temperature of Sialkot City, Pakistan. *Scientific Reports*. 13,22166. <https://doi.org/10.1038/s41598-023-49608-x>.

23. Shahzad, L., Waheed, A., Sharif, F., **Ghafoor, G. Z.**, & Rafique, A. (2024). Understanding role of climatic parameters and adaptation strategies in agriculture productivity of South Asian countries. *Sustainable Environment*, 10(1), 2345453.

24. Farhan, M., Awan, N., Kanwal, A., Sharif, F., Hayyat, M. U., Shahzad, L., & **Ghafoor, G. Z.** (2024). Dairy farmers' levels of awareness of antibiotic use in livestock farming in Pakistan. *Humanities and Social Sciences Communications*, 11(1), 1-12.

25. Ghafoor, N., **Ghafoor, G. Z.**, & Sharif, F. (2025). An empirical investigation of environmental impacts of agglomeration economies in major cities of Pakistan. *Scientific Reports*, 15(1), 1-10.

26. Aamir, U., Sharif, F., Waheed, S., Aslam, R., Shahzad, M., Shahzad, L., Rasheed, R., **Ghafoor, G.Z.**, Hayyat, M. U., & Naqvi, F. (2025). Profile distribution and ecological risk assessment of organochlorine pesticides (OCPs) in environmental matrices of Uchalli and Khabeki Lakes. *Scientific Reports*, 15(1), 1-20.

Conference paper publication

27. Ghafoor, G. Z., Yousaf, W., Alam, T., Zafar, S., & Alam, Z. (2012). Conceptual zoning scheme and overall land use plan for the threatened thorn forest plant community at Harappa Mounds. *Proceeding of Role of Botanic Gardens in Conserving Natural Vegetation*. Government College University Lahore. ISBN: 978-969-9071-06-5

Book Chapter

28. **Ghafoor, G. Z.**, Shahid, M. G., Ali, M., Ghafoor, N. (2023). Ecosystem services in the changing climate: Calling attention for the conservation of tropical and subtropical forests. In *Tropical Forests – Ecology, Diversity and Conservation Status*. Eds. Carmona, E. C., Musarella, C. M., Ortiz, A. C. IntechOpen.

29. Tahir, Z., Khan, Q. F., Hayyat, U., Sharif, F., Farhan, M., Rasheed, R., **Ghafoor, G.Z.**, Afzaal, M., Azhar, N., Nisa, Z. U., Majeed, H., & Sakandar, H. A. (2024). Isotopic Tools for Tracing Water Pollutants. In Contaminated Land and Water: Remediation and Management (pp. 69-89). Cham: Springer International Publishing.

30. Afzaal, M., Idrees, E., Farooq, M., Abbasi, N. A., Manan, H. A., Farooq, A., Mehboob, H. M., **Ghafoor, G. Z.**, Hayat, M. U., Mazhar, I., Bashir, N., Iqbal, S. S., Abbasi, N.A. Mannan, H.A., Ali, S., Begum, F., & Hashmi, Z. (2024). Contaminated Land/Water Microbial Diversity and Enzymatic Activity in Relation to Pollution. In *Contaminated Land and Water*:

	<p><i>Remediation and Management</i> (pp. 45-57). Cham: Springer International Publishing.</p> <p>31. Khan, Q. F., Shabir, M., Ghafoor, G. Z., Sharif, F., Khurshid, M., Rasheed, R., Hayat, M., Afzaal, M., Khurshid, M., Sakandar, A. H., Azhar, N., Akhtar, M. T. & Barq, M. G. (2024). Biodegradation of POPs in Contaminated Land/Water. In <i>Contaminated Land and Water: Remediation and Management</i> (pp. 101-118). Cham: Springer International Publishing.</p> <p>32. Ghafoor, G. Z., Rafique, A., Maher, U., Tahir, M., Shahid, M. G., Sharif, F., Ghafoor, N., Shahzad, L., Hayyat, M. U. & Afzaal, M. (2025). Microalgae as health and disease prevention agents. In <i>Algae Biotechnology for Biomedical and Nutritional Applications</i> (pp. 69-87). Academic Press.</p>										
Selected Professional Presentations	<p>Participation in conferences</p> <ul style="list-style-type: none"> • Ghafoor, G. Z., Yousaf, W., Alam, T., Zafar, S., & Alam, Z. (2012). Conceptual zoning scheme and overall land use plan for the threatened thorn forest plant community at Harappa Mounds. <i>3rd Botanic Gardens conference on "Role of Botanic Gardens in Conserving Natural Vegetation."</i> In Feb. 2012 at Government College University Lahore. • Ghafoor, G. Z., Khan, A. U. Estimation of carbon footprint from electricity and natural gas consumption in the residential buildings of Lahore. <i>Second International Conference on Global Environmental Changes.</i> Government College University Faisalabad (25-26th February, 2014). • Ghafoor, G. Z., Sharif, F. Assessment of biomass carbon stock of Hayat-ul-Mir forest, Soan Valley Pakistan. <i>4th international conference on "Role of botanic gardens in climate change adaptation and mitigation"</i> organized by GCU Botanic garden on 21-23 Feb. 2018 • Ghafoor, G. Z., Amjad, S., Nazir, S., Saeed, F. Monitoring of plant growth parameters of <i>Triticum aestivum</i> and <i>Solanum melongena</i> irrigated with wastewater. <i>1st International Conference on Science, Technology and innovation</i> 2nd-4th April 2019 at Kinnaird College for Women, Lahore • Ghafoor, G.Z., Safdar, N., Shoukat, M. Assessment of tree and soil carbon stock of Jillani Park Lahore. <i>3rd International Conference on Environment and Development.</i> Sustainable Development Study Center, Government College University Lahore (13-15th September, 2021). • Ghafoor, G.Z., Jabeen, A., Maria, Shoukat, M., Safdar, N. Investigating The Impacts Of Open Dumping Of Municipal Solid Waste On Environmental Quality And Public Health In The Vicinity Of Gondalanwala Dumping Site, Gujranwala. <i>3rd International Conference on Environment and Development.</i> Sustainable Development Study Center, Government College University Lahore (13-15th September, 2021). 										
Trainings attended	<table border="1"> <thead> <tr> <th data-bbox="404 1790 502 1898">Sr. No.</th> <th data-bbox="502 1790 975 1898">Workshops/Trainings</th> <th colspan="2" data-bbox="975 1790 1269 1898">Dates</th> <th data-bbox="1269 1790 1462 1898">Name of Organizing institution</th> </tr> <tr> <th data-bbox="404 1790 502 1898"></th> <th data-bbox="502 1790 975 1898"></th> <th data-bbox="975 1790 1139 1898">From</th> <th data-bbox="1139 1790 1269 1898">To</th> <th data-bbox="1269 1790 1462 1898"></th> </tr> </thead> </table>	Sr. No.	Workshops/Trainings	Dates		Name of Organizing institution			From	To	
Sr. No.	Workshops/Trainings	Dates		Name of Organizing institution							
		From	To								

	1.	Training on Research Grant Proposal Writing especially focused on HEC Call for NRPU Projects	15 th Oct. 2025		ORIC GCUL
	2.	Training on intellectual property rights focused on patent writing/drafting and submission	9 th Oct. 2024		ORIC GCUL
	3.	Citation and literature management using EndNote Software	23 rd May 2024		ORIC GCUL
	4.	Three days Faculty Development Program (FDP) for Batch 3 “Advanced teaching excellence : Strategies for effective higher education instruction and professional development	19 th September 2023	21 st September 2023	Punjab Higher Education Commission (PHEC)
	5.	Training on ‘Advanced teaching and learning Programme 2023’	July 2023	August 2023	Directorate of Academics, GCUL
	6.	One day seminar on intellectual property rights (IPRs).	22 September 2022		Pakistan Scientific & Technological Information Centre and ORIC GCU Lahore.
	7.	Teacher’s training on inclusive education & implementation of the HEC policy for students with disabilities	17 th August 2022	18 th August 2022	Center for Special Students, GCU Lahore
	8.	Quality assurance in higher education institutions	2 nd June 2022		GCU Lahore
	9.	One day Training workshop on Turnitin	25 th Jan 2022		GC University Lahore
	10.	Two days workshop on ‘Promoting Research Excellence in Academics across Pakistan’	1 st Feb 2022	2 nd Feb 2022	HEC Pakistan & Elsevier
	11.	One day workshop on “A successful Journey from Research to Publication”	17 th Feb 2022		ORIC GC University Lahore

	12.	Two days workshop on Assessment in E-Learning and Quality Assurance Challenges	5 th July 2021	6 th July 2021	Virtual University, Lahore
	13.	Seminar on Funding opportunities for scientists under Pakistan Science Foundation	12 th Nov, 2021		ORIC GCUL
	14.	Three days Training workshop on “Outcome based education in higher education institutions”	20 th Nov 2017	22 nd Nov 2017	QEC, GCU Lahore
	15.	Workshop on Social Entrepreneurship	7 th Mar 2017	9 th Mar 2017	British Council, YES Network & GCU Lahore
	16.	Five days training workshop on “In-Service Short Term Training of University Faculty Members”	23 rd May 2016	27 th May 2016	QEC, GCUL & Punjab Higher Education Department