

PERSONAL INFORMATION



Shakeel Ahmad

Mailing Address: Office No: 901, Division of Environmental System Analysis, School of Environment, Tsinghua University, Beijing 100084 China.
Current Address: Quarter No G-112, Telephone Industry of Pakistan (TIP) Colony, Haripur Khyber Pakhtunkhwa, Pakistan
China (+86) 18801-072036
Pakistan (+92) 300-9885388 Phone: 0995-355582
Email: ahmad18@mails.tsinghua.edu.cn; shakeel.env@gmail.com; shakeel.env@hotmail.com
Skype: shakeel.daffodil **Passport:** QY1158753
WeChat: shakeel-env1431

Sex: Male | **Date of Birth:** 18/03/1988 | **Nationality:** Pakistani

PROFILE LINKS

<https://rb.gy/n5gfid>
<https://bit.ly/3vsRZHa>
<https://bit.ly/2Pz9XZa>

WORK EXPERIENCE

Current Working in Projects
Since September 2018 till
now

1. Study on the rate setting and validation of SWMM and MIKE model in Zhuhai Sponge City Pilot Area in China
2. Environmental Model-based monitoring and impact assessment study of the project sponge of urban scale construction in China
3. Reducing Stormwater pollution loading Downstream Aquatic Environment (Canada and China Joint Project)
4. Water-energy nexus

2020. 01 – 2020.10

GIS Specialist

The University of Agriculture Peshawar, Pakistan
Worked under HEC funded research project no. HEC/ACAD/TRGP/2018/412.
Main responsibilities were:

1. Assign tasks from the Principal Investigator of the project.
2. Digitize the field data in ArcGIS and ENVI.
3. Create and implement standards for the quality of geographic data.
4. Preparing maps for the project activities and field visits.
5. Visualization of spatial data for field-based GIS.
6. Design and develop systems and databases for storing and accessing geospatial data.
7. Standardize and define metadata for geographic data and data format conversion.

2018. 09– 2019.12

Research Assistant

School of Environment, Tsinghua University, Beijing China
Main responsibilities were:

1. Study on the rate setting and validation of SWMM and MIKE model in Zhuhai Sponge City Pilot Area in China
2. Environmental Model-based monitoring and impact assessment study of the project sponge of urban scale construction in China
3. Reducing Stormwater pollution loading Downstream Aquatic Environment (Canada and China Joint Project)
4. Water-energy nexus

2017. 08 – 2018. 07

Research Assistant

Pakistan Meteorological Department, Climate Research Unit (Research and Development Division), Islamabad Pakistan
Worked Under USAID's Partnerships for Enhanced Engagement in Research (PEER) program, on a project "Understanding our Joint Water-Climate Change Challenge and Exploring Policy Options for Cooperation on the Afghan-Pak Transboundary Kabul River Basin".

Main responsibilities were:

1. Analysis of CMIP5 21 Models data, with respect to Historical, RCP4.5 and RCP8.5.
2. Analysis of big data through LINUX and GrADS. Working on CORDEX Snow Melt and Runoff data
3. Mapping the current status of surface water availability and river flow/discharge in the transboundary Kabul River Basin; including future demands and competing uses of Kabul River Basin waters.
4. Projected impact of climate change on the Kabul River Basin waters through changes in glacial melt, snowmelt, rainfall and temperature.

2014. 02 – 2015. 02

Research Assistant

COMSATS Institute of Information Technology, Abbottabad, PAKISTAN (www.ciiit-atd.edu.pk)
Main Responsibilities: To visit different sites for data collection, Analysis of field data, Sample analysis, To conduct different experiments in lab, Report writing, Spatial data analysis through ArcGIS.

EDUCATION

2015.02 – 2017.02

Master of Science in Environmental Sciences

COMSATS Institute of Information Technology, Abbottabad, PAKISTAN

Principal Subjects: Environmental Technologies, Water Quality and Treatment, Environmental Policies, Planning and Regulations, Energy and Environment, Environmental Impact Assessment, Environment and Development, Toxic Organics and Trace Metals in Ecosystem, and Research Methodology, Geographic Information System.

Topic of Research

“Spatiotemporal Trends in the Snow Cover and its Association to the Hydrological Regime of Chitral River Basin, Hindukush Region, Pakistan”

2008.04 – 2012.08

Bachelor of Science in Environmental Sciences

Hazara University, Mansehra, Pakistan

Principal subjects: Environmental Impact Assessment, Environmental Monitoring, Environmental Policies, Planning and Management, Sustainable Development, Environmental Chemistry, Environmental Microbiology, Water Resource Management, Environmental Technologies, Human Geography, Applied Forestry and Geographic Information System.

Topic of Research

“Assessment of River Shahpur for Flood Risks in Northern Pakistan”

Licenses & certifications

Issued Aug 2020

Maps and the Geospatial Revolution –
Penn State University, USA
Credential ID 6LL8RHZN64LS



Issued Jul 2020

Spatial Analysis and Satellite Imagery in a GIS –
University of Toronto, Canada
Credential ID JTPBY4JP4RAL



Issued Jun 2020

Cartography. – Esri



Issued Jun 2020

The Sustainable Development Goals – A global, transdisciplinary vision for the future
University of Copenhagen, Denmark
Credential ID JU9YNG9JHWZJ



Issued Jul 2020

AfriAlliance MOOC on Social Innovation in Water and Climate Change in Africa
- IHE Delft Institute for Water Education



PUBLICATIONS

Peer-Reviewed

1. **Shakeel Ahmad**, Muhammad Israr, Muhammad Amin, Muhammad Sadiq Hashmi, Nafees Ahmad, Rasheed Ahmad. (2021). *Two-decade spatio-temporal land use and cover changes in district Shangla of Khyber Pakhtunkhwa, Pakistan*. *Sarhad Journal of Agriculture*, 37(4): 1230-1237.
2. **Shakeel Ahmad**, Chen Zhengxia, Qian Li, Dingkun Yin, Muhammad Israr, Waseem Hayat, Hazrat Bilal, Rasheed Ahmed, and Anam Ashraf. *Effects of Climate and Land Use Changes on Stream Flow of Chitral River Basin of Northern Highland Hindu-Kush Region of Pakistan*. *Journal of Hydro-environment Research* (2021).
3. Waseem Hayat, Salman Khan, Malik Tahir Hayat, Rashid Pervez, and **Shakeel Ahmad**. *Insight into effect of deforestation on selected physical and chemical properties of soil in Lesser-Himalayan community forests of Abbottabad, Pakistan*. *Arabian Journal of Geosciences*. (2021).
4. Li Qian, Yang Yu, Michela Rose Catena, **Shakeel Ahmad**, Haifeng Jia, and Yuntao Guan. *Multifactor-based spatio-temporal analysis of effects of urbanization and policy interventions on ecosystem service capacity: A case study of Pingshan River Catchment in Shenzhen city, China*. *Urban Forestry & Urban Greening* (2021): 127263.
5. **Shakeel Ahmad**, Haifeng Jia, Zhengxia Chen, Qian Li, and Changqing Xu. *Water-energy nexus and energy efficiency: A systematic analysis of urban water systems*. *Renewable and Sustainable Energy Reviews* 134 (2020): 110381.
6. Dingkun Yin, Barry Evans, Qi Wang, Zhengxia Chen, Haifeng Jia, Albert S. Chen, Guangtao Fu, **Shakeel Ahmad**, Linyuan Leng. (2020). *Integrated 1D and 2D model for better assessing runoff quantity control of low impact development facilities on community scale*. *Science of The Total Environment*, 137630.
7. Jawaria Gul, Sher Muhammad, Shi-yin Liu, Siddique Ullah, **Shakeel Ahmad**, Huma Hayat & Adnan Ahmad Tahir (2020). *Spatio-temporal changes in the six major glaciers of the Chitral River basin (Hindukush Region of Pakistan) between 2001 and 2018*. *Journal of Mountain Science*, 17(3), 572-587.
8. Muhammad Israr, Helen Ross, **Shakeel Ahmad**, Nafees Ahmad, and Urooba Pervaiz. (2020). *Measuring multidimensional poverty among farm households in rural Pakistan towards sustainable development goals*. *Sarhad Journal of Agriculture*, 36(1), 130-142.
9. Pervez, Rashid, Yonghong Wang, Imran Ali, Jawad Ali, and **Shakeel Ahmad**, (2020). *The analysis*

of the accumulation of solid waste debris in the summer season along the Shilaoren Beach Qingdao, China. *Regional Studies in Marine Science*: 101041.

10. Ahmed, Rasheed, Yuzhong Li, Lili Mao, Chunying Xu, Wei Lin, **Shakeel Ahmad**, and Waseem Ahmed, (2019). *Biochar Effects on Mineral Nitrogen Leaching, Moisture Content, and Evapotranspiration after 15N Urea Fertilization for Vegetable Crop*. *Agronomy* 9, no. 6: 331.
11. Waseem Hayat, **Shakeel Ahmad**, Imtyaz Hussain, Yongqing Zhang, Saima Fazal, and Salman Khan. (2019). *Analysis of the People Forests Relationship in Lower Galliyat, Abbottabad Pakistan*. *Small-scale Forestry*. 18(2), pp.235-253.
12. **Shakeel Ahmad**, Muhammad Israr, Shiyin Liu, Huma Hayat, Jaweria Gul, Sara Wajid, Muhammad Ashraf, Siddique Ullah Baig, and Adnan Ahmad Tahir, (2018). "Spatio-temporal Trends in Snow Extent and their Linkage to Hydro-climatological and Topographical Factors in the Chitral River Basin (Hindukush, Pakistan)". *Geocarto International*: 1-35.
13. Bokhari, Syed Ahsan Ali, Burhan Ahmad, Jahangir Ali, **Shakeel Ahmad**, Haris Mushtaq, and Ghulam Rasul. (2018) "Future Climate Change Projections of the Kabul River Basin Using a Multi-model Ensemble of High-Resolution Statistically Downscaled Data." *Earth Systems and Environment*: 1-21.
14. Hazrat Bilal, Chamhuri Bin Siwar, Mazlin Bin Mokhtar, **Shakeel Ahmad** (2018). "Recent Development and Sustainability of Wind Power Sector In Pakistan". *International Journal of Biomass & Renewables*. V. 7, No. 1. Pp 24-34
15. Muhammad Israr, Saeed Ullah, **Shakeel Ahmad**, Asif Yaseen, Urooba Pervaiz and Nafees Ahmad, (2018). "Perceptions Vulnerability Index: A Measure of Land Degradation Process in Northern Irrigated Plains of Pakistan". *Sarhad Journal of Agriculture*. V. 34, No 4. Pp 840-849
16. **Shakeel Ahmad**, Muhammad Israr, Asif Yaseen, Nafees Ahmad, (2017). "Climate change trend analysis on selected food crops at central Khyber Pakhtunkhwa of Pakistan". *International Journal of Development and Sustainability*, Vol. 6 No. 12, pp. 2082-2093.
17. **Shakeel Ahmad**, Muhammad Israr and Muneeb Ur Rehman, (2017) "Agronomic practices and adaptative strategies of the farmers to climate change in central Pakhtunkhwa, Pakistan". *Pure and Applied Biology*. V.6, N.4, p.1132-1150.
18. **Shakeel Ahmad**, Muhammad Israr, Rasheed Ahmad, Hazrat Bilal, and Waseem Hayat. (2015) "Assessment of River Shapur for Flood Risk in Northern Pakistan". *Civil and Environmental Research*. Vol: 7 (4), 20-27.
19. Muhammad Israr, Asif Yaseen, and **Shakeel Ahmad**, (2017). "Sustainable Rural Development and Livelihood Sources of the Rural Households in Mountainous Pakistan". *American Journal of Rural Development*, vol. 5, no. 4: 97-102.
20. Muhammad Israr, Anas Faraz, and **Shakeel Ahmad**, (2017). "Determinants of Safe Drinking Water Supply in Nowshera District of Khyber Pakhtunkhwa". *American Journal of Water Resources*, vol. 5, no. 3: pp 63-71.
21. Muhammad Israr, Muhammad Faraz, Dawood Jan, Nafees Ahmad, and **Shakeel Ahmad**, (2016). "Farming Community Perceptions about Climate Change in Khyber Pakhtunkhwa Pakistan" *World Journal of Agricultural Research*, vol. 4, no. 3: 70-76.
22. Muhammad Israr, Naila Awan, Dawood Jan, Nafees Ahmad, and **Shakeel Ahmad**, (2016). "Patients' Perception, Views and Satisfaction with Community Health Center Services at Mardan District of Khyber Pakhtunkhwa". *American Journal of Public Health Research*, vol. 4, no. 3: 79-87.
23. Israr, Muhammad, M. Sadiq Hashmi, Nafees Ahmad, Gauhar Rahman, **Shakeel Ahmad** and Shamsheer Ali, (2015). "Devastating Flood of 2010, Effect on Potable Water Supply in Rural Swat". *American Journal of Water Resources* 3, no. 4: 118-123.

Conference Papers

1. **Shakeel Ahmad**, and Jia Heifeng, (2019). Effects of Climate and Land Use Changes on Stream Flow of Chitral River Basin of Northern Highland Hindu-Kush Region of Pakistan. *International Symposium on Sustainable Urban Drainage (SUD 2019)* held on October 17-20, 2019 in Ningbo, Zhejiang, China. (Page no 122-126 of SUD 2019 Proceeding)
2. Muhammad Israr, Asif Yaseen and **Shakeel Ahmad**, (2017). Land Degradation a Threat to Sustainable Rural Development in Northern Highlands of Pakistan. *Conf. Proce. pp. 124-136. Rural Development Conference 2017, 9-11 JULY 2017 Bangkok Thailand, Tomorrow people organization Dusana vukasovica 73, Belgrade, Serbia www.tomorrowpeople.org.*
3. Hazrat B, Chamhuri S, Mazlin M and **Shakeel Ahmad**, (2017). Sustainability Assessment of Wind Energy for Power Generation in Pakistan. *International conference on Sustainable Cities, Communities and Partnership for the Sustainable Development Goals (SDGs)*, Malaysia.

TRAININGS & WORKSHOPS

1. Attend and delivered two days' workshop on "Analyzing Global Climate Datasets using Grid Analysis & Display System (GrADs)" from 3-4 April 2018 at AIOU Islamabad, Pakistan
2. Attend four days' workshop on Geo-Spatial Application in Climate Change
3. One-day Workshop on "High mountains Research of Pakistan" Delivered by: Mathia Winiger, Department of Geology, University of Bonn, Germany
4. One-day workshop on "Updating the Revised Environmental Profile of the Khyber Pakhtunkhwa" on 16th March 2016 at Pakistan Forest Institute Hall, Peshawar. Organized by Environmental Protection Agency Pakistan (EPA).

ACADEMIC ACTIVITIES

Journal Reviewer

1. Science of the Total Environment, ISSN (0048-9697)
2. Renewable & Sustainable Energy Reviews (ISSN: 1364-0321)

International Membership

1. Member of “**Surveying and Spatial Sciences Institute**” (SSSI) www.sssi.org.au/ (Australia). Since 2015 till to date.
2. Member of “**The International Society for Photogrammetry and Remote Sensing**” (ISPRS) <http://www.isprs.org/>. Since 2015 till to date.
3. Member of “**International Society for Development and Sustainability**” (ISDS) Japan. Membership ID: M007727. Since January 2018 till to date

National Memberships

1. Savetheenvironmentclub
2. WWF Pakistan
3. World Youth Parliament for Water

HONOURS & AWARDS

1. Awarded the Full tuition scholarship for Master degree program from Prime Minister of Pakistan (March 2015 to February 2017).
2. Awarded third (2nd) position in Bachelor Degree
3. Student Chief Proctor, Hazara University
4. Elected as a Vice Chairman of Environment Protection Society at Hazara University Pakistan from 2009-2012.

PERSONAL SKILLS

Mother tongue(s)

Pushto

English

Excellent in Reading, Listening, Speaking and Writing

Urdu/Hindko

Excellent in Reading, Listening, Speaking and Writing

Chinese

Basic

Communication skills

Good communication skills gained through my 18 years of education as English was and is a medium of teaching, listening, writing and reading.

Organisational / managerial skills

Good Management Skills as being the Coordinator Academics of a Secondary Level School as well as through involvement in Co-curricular and Extra-curricular Activities during educational career.

Job-related skills

1- Time Management 2- Leaderships Qualities 3- Working under Harsh Conditions without assistance of anybody 4- Efficient Administrative skills

Computer and programming skills

CMIP (IPCC) Models data analysis, CORDEX data analysis, Snow Runoff Modelling, ArcGIS, AutoCAD, ENVI, Surfer, LINUX, GrADS, R-Language, Satellite Remote Sensing and MODIS data Analysis, Mapping and Modeling, Hydrus, SigmaPlot, Endnote, Xlstate, Microsoft Office 2010, Windows 2007 and 2010, Report Writing, Mendeley Desktop, Printing, and Scanning

ADDITIONAL INFORMATION

Presentations

1- Disaster Risk Management. 2- Landslides and their control. 3- Climate Change and Environment
4- Land Use and Land cover change 5- Snow cover change and Cryosphere

Seminars

1- Community Based Disaster Risk Management, 2- District Volunteerism Workshop,
3- Sustainable development through Ethical Fitness.

2013.01 – 2014.01

Safety Supervisor (Diploma Certificate)
Peshawar Technical Board, Khyber Pakhtunkhwa, Pakistan

REFERENCES

1. Dr. Haifeng Jia Professor,

Division of Environmental System Analysis, Department of Environmental Science and Engineering, Tsinghua University, Beijing 100084 China Email: jhf@tsinghua.edu.cn

2. Dr. Muhammad Irshad, Professor,

Department of Environmental Sciences, COMSATS Institute of Information Technology Abbottabad Pakistan. Email: mirshad@ciit.net.pk

3. Dr. Adnan Ahmad Tahir Associate Professor,

Department of Environmental Sciences, COMSATS Institute of Information Technology Abbottabad Pakistan. Email: adnantahir@ciit.net.pk

4. Dr. Muhammad Israr Associate Professor,

Head of Department. (Rural Development). The University of Agriculture Peshawar, KP-Pakistan.
Email: misrar@aup.edu.pk