## **Irfan Ahmad Rana**

#### Associate Professor

NUST Institute of Civil Engineering

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Since 2017

## **About**

**PCATP** 

Dr. Irfan Ahmad Rana is working as Associate Professor in the NUST Institute of Civil Engineering. Dr. Irfan Ahmad Rana has a PhD in Disaster Risk Reduction And Climate Change Adaptation. Dr. Irfan Ahmad Rana has published 90 research articles & conference papers having a citation count of 2330, carried out 3 projects and filed 0 intellectual property.

#### **Qualifications**

PhD in Disaster Risk Reduction And Climate Change Adaptation Asian Institute of Technology, Thailand , Thailand	2014 - 2017
MS in Urban Planning Asian Institute of Technology, Thailand , Thailand	2012 - 2014
BSc in Urban Planning UET Lahore , Pakistan	2006 - 2010
Experience	
Associate Professor  NUST Institute of Civil Engineering	2025- Present
Assistant Professor  NUST Institute of Civil Engineering	2024 - 2024
Assistant Professor  NUST Institute of Civil Engineering	2023 - 2024
Assistant Professor  NUST Institute of Civil Engineering	2022 - 2023
Assistant Professor  NUST Institute of Civil Engineering.	2017 - 2022
Assistant Professor  NUST Institute of Civil Engineering.	2017 - 2017
Assistant Director Lahore Development Authority, 467 J-II Johar Town, Main Boulevard Johar Town, Lahore	2010 - 2012
Awards	
University Best Researcher Awards- 2021	2022
Overseas Scholarship Prog Higher Education Overseas Scholarship Award for Ms Leading PhD.	2017
Professional Memberships	

# **Research Projects**

National Projects	
"Private Sector led Best Practices for Environmental Protection and Tackling the Issue of Climate Change in Pakistan" Funding Agency: HEC, NRPU Amount: PKR 2,315,000.00	2017
Status: Completed  Assessing physical and infrastructural vulnerability to urban flooding: A Case study of Pakistan	2018
Funding Agency: HEC  Amount: PKR 285,000.00  Status: Completed	2010
Performance based seismic evaluation of existing high-rise buildings in pakistan Funding Agency: HEC Amount: PKR 450,500.00 Status: Completed	2018
International Projects	
Research Articles	
Quantifying urban adaptation planning in flood-prone communities of Islamabad, Pakistan: An index- based approach	2025
Hassam Bin Waseem Irfan Ahmad Rana International Journal of Disaster Risk Reduction, Volume 128, Article Number 105762 Impact Factor: 4.500   Quartile: 1	
<b>DOI:</b> https://doi.org/10.1016/j.ijdrr.2025.105762	
A holistic approach for assesssing multidimensional adaptive capacity to floods: From conceptualization to empirical assessment  Hassam Bin Waseem Irfan Ahmad Rana International Journal of Disaster Risk Reduction, Volume:128, Article Number 105729	2025
Impact Factor: 4.500   Quartile: 1  DOI: 10.1016/j.ijdrr.2025.105729	
Investigating the adaptation strategies and constraints in flood risk reduction of urban communities of Islamabad, Pakistan  Hassam Bin Waseem Irfan Ahmad Rana  Mitigation and Adaptation Strategies for Global Change, Volume:30, Issue:6, Article Number 51	2025
Impact Factor: 2.700   Quartile: 3  DOI: https://doi.org/10.1007/s11027-025-10245-6	
Prerequisites for the adoption of nature-based solutions in local communities using the NbS  Assessment Tool (NAT): A case study of Lahore, Pakistan  Aimen Feroz Irfan Ahmad Rana  Environmental Impact Assessment Review, Volume:115, Article Number 108066  Impact Factor: 11.200   Quartile: 1	2025
<b>DOI:</b> https://doi.org/10.1016/j.eiar.2025.108066	
A meta-review of disaster research  Hassam Bin Waseem Irfan Ahmad Rana  Natural Hazards , Pages 1-34	2025
Impact Factor: 3.300   Quartile: 2 DOI: 10.1007/s11069-025-07296-y	
Exploring needs, choices, and preferences of homebuyers in Islamabad, Pakistan  Nida Naeem Irfan Ahmad Rana  Journal of Property Research, Pages:19  Impact Factor: 2 100   Quartile: 2   Citations: 2	2024
Impact Factor: 2.100   Quartile: 2   Citations: 2  DOI: 10.1080/09599916.2023.2286244	
Multi-Phase Residential Fire Vulnerability Assessment	2024

Irfan Ahmad Rana Muhammad Awais Nisar Rida Hameed Lodhi Hassam Bin Waseem Adnan Nawaz Ayman Aslam Abdul Muqeet Shah

Fire Technology, Pages 1-31 Impact Factor: 2.300 | Quartile: 2 | Citations: 1 DOI: https://doi.org/10.1007/s10694-024-01673-y A systematic review of urban terrorism literature: Root causes, thematic trends, and future directions 2024 Muhammad Noor E Elahi Mirza Irfan Ahmad Rana Journal of Safety Science and Resilience, Volume 5, Issue 3, Pages 249-265 Impact Factor: 3.70 | Quartile: 1 | Citations: 3 DOI: https://doi.org/10.1016/j.jnlssr.2024.03.006 Adaptation planning for climate change: An application of the advanced bibliometric analytical 2024 framework Hassam Bin Waseem Muhammad Noor-E-Elahi Mirza Irfan Ahmad Rana Abdul Waheed Natural Hazards Research, Volume 4, Issue 3, Pages 459-469 Impact Factor: N/A | Citations: 6 DOI: https://doi.org/10.1016/j.nhres.2023.11.005 Assessing the vulnerability of selected coastal informal settlements to floods in the Old Brahmaputra 2024 River floodplain, Bangladesh Md. Bayezid Islam Tahmina Sultan Irfan Ahmad Rana Hassam Bin Waseem Pamela Murray-Tuite Tawatchai Tingsanchali Mahzabeen Mahfuz Urban Climate . Volume 56 . Article Number 102078 Impact Factor: 6.000 | Quartile: 1 | Citations: 6 DOI: https://doi.org/10.1016/j.uclim.2024.102078 Assessing smog risk perception in Lahore metropolitan: A survey-based analysis 2024 Amna Ali Irfan Ahmad Rana Urban Climate, Volume 56, Article Number 102080 Impact Factor: 6.000 | Quartile: 1 | Citations: 2 DOI: 10.1016/j.uclim.2024.102080 Seismic evaluation of non-seismically detailed RC buildings in Pakistan: performance and damage 2024 accumulation under repeated earthquakes. Saima Munir Fawad Ahmed Najam Asad ur Rahman Umair Jalil Malik Irfan Ahmad Rana Ather Ali Bulletin of Earthquake Engineering, Volume: 22, Pages 4547–4579, Impact Factor: 4.600 | Quartile: 1 DOI: https://doi.org/10.1007/s10518-024-01935-8 Assessing Multidimensional Vulnerability of Rural Areas to Flooding: An Index-Based Approach 2024 Samavia Rasool Irfan Ahmad Rana Hassam Bin Waseem International Journal of Disaster Risk Science, Volume 15, Pages 88-106 Impact Factor: 4.00 | Quartile: 1 | Citations: 4 DOI: 10.1007/s13753-024-00547-9 A bibliometric and systematic review of the Methods for the Improvement of Vulnerability Assessment 2023 in Europe framework: A guide for the development of further multi-hazard holistic framework Ali Jamshed Irfan Ahmad Rana Joern Birkmann Joanna McMillan Stefan Kienberger Jamba-Journal of Disaster Risk Studies, Volume 15, No. 1, Article Number a1486 Impact Factor: 1.300 | Quartile: 2 | Citations: 4 DOI: 10.4102/jamba.v15i1.1486 2023 Exploring the role of social capital in flood risk reduction: Insights from a systematic review Hassam Bin Waseem Muhammad Noor E Elahi Mirza Irfan Ahmad Rana Environmental Impact Assessment Review, Volume:105, Article Number: 107390 Impact Factor: 7.9 | Quartile: 1 | Citations: 16

DOI: 10.1016/j.eiar.2023.107390

#### Flood resilience assessment from the perspective of urban (in)formality in Surat, India: Implications for sustainable development

2023

Ali Jamshed Chirag Patel Anshul Puriya Nimra Iqbal Irfan Ahmad Rana Joanna M. McMillan Rajiv Pandey Shahbaz Altaf Rana Tahir Mehmood Umair bin Saad

Natural Hazards, Pages 1-30

Impact Factor: 3.7 | Quartile: 2 | Citations: 8 DOI: https://doi.org/10.1007/s11069-023-06267-5

Nida Naeem Irfan Ahmad Rana Abdur Rehman Nasir Smart Construction and Sustainable Cities, Volume: 01, Article Number: 15, Pages: 21 Impact Factor: N/A | Citations: 16 DOI: 10.1007/s44268-023-00016-0 A novel framework to assess multidimensional disaster resilience of children: From conceptualization 2023 to quantification Irfan Ahmad Rana Ihtisham Ul Haq Khan Niazi Zainab Khalid Adnan Nawaz Fawad Ahmed Najam International Journal of Disaster Risk Reduction, Volume:96, Article Number: 103914 Impact Factor: 4.2 | Quartile: 1 | Citations: 4 DOI: 10.1016/j.ijdrr.2023.103914 Actions, beliefs, and perceptions during COVID-19 lockdown: A comparative study of urban and rural 2023 communities of Rawalpindi, Pakistan Irfan Ahmad Rana Iqra Kamil Hassam Bin Waseem International Journal of Disaster Risk Reduction, Volume:96, Article Number: 103918 Impact Factor: 5.0 | Quartile: 1 DOI: 10.1016/j.ijdrr.2023.103918 Multi-hazard risk perception: An empirical study of the remote Gilgit city, Hindukush-Karakorum-2023 Himalayan (HKH) region, Pakistan Syed Samad Shah Irfan Ahmad Rana Ather Ali International Journal of Disaster Risk Reduction, Volume 96, Article Number 103996 Impact Factor: 5.0 | Quartile: 1 | Citations: 3 DOI: 10.1016/j.ijdrr.2023.103996 Floods in Pakistan: A state-of-the-art review 2023 Hassam Bin Waseem Irfan Ahmad Rana Natural Hazards Research, Volume:3, Issue:3, Page:359-373 Impact Factor: 0 | Citations: 56 DOI: 10.1016/j.nhres.2023.06.005 2023 Monsoon flood risks in urban areas of Pakistan: A way forward for risk reduction and adaptation planning Azka Zia Irfan Ahmad Rana Hafiz Syed Hamid Arshad Zainab Khalid Adnan Nawaz Journal of Environmental Management, Volume 336, Article Number 117652 Impact Factor: 8.910 | Quartile: 1 | Citations: 36 DOI: 10.1016/j.jenvman.2023.117652 Evacuation decision making and risk perception: flooded rural communities in Pakistan 2023 Abdul Muqeet Irfan Ahmad Rana Rida Hameed Lodhi Fawad Ahmed Najam Ather Ali Environmental Hazards, Vol:23, No. 1, Pages:54-71 Impact Factor: 4.0 | Quartile: 2 | Citations: 9 DOI: 10.1080/17477891.2023.2220947 Multidimensional poverty vis-à-vis climate change vulnerability: Empirical evidence from flood-prone 2023 rural communities of Charsadda and Nowshera districts in Pakistan Irfan Ahmad Rana Muhammad Mubashir Khan Rida Hameed Lodhi Shahbaz Adnan Nawaz Fawad Ahmed Najam World Development Sustainability, Volume 2, Article Number 100064 Impact Factor: N/A | Citations: 14 DOI: https://doi.org/10.1016/j.wds.2023.100064 2023 The impact of psychological distance to climate change and urban informality on adaptation planning Irfan Ahmad Rana Hafiz Syed Hamid Arshad Ali Jamshed Zainab Khalid Zahid Irshad Younas Saad Saleem Bhatti Junaid Ahmad Urban Climate, Volume 49, Article Number 101460 Impact Factor: 6.663 | Quartile: 1 | Citations: 13 DOI: 10.1016/j.uclim.2023.101460 Institutional challenges in reducing disaster risks in the remote city of Hindukush-Karakorum-2023 Himalayan (HKH) region, Pakistan

Syed Samad Shah Irfan Ahmad Rana

DOI: 10.1016/j.ijdrr.2023.103581

Impact Factor: 4.842 | Quartile: 1 | Citations: 10

International Journal of Disaster Risk Reduction, Volume 88, Article Number 103581

Psychological resilience of children in a multi-hazard environment: An index-based approach	2022
Ihtisham UI Haq Khan Niazi Irfan Ahmad Rana Hafiz Syed Hamid Arshad Rida Hameed Lodhi Fawad Ahmed Najam Ali Jamshed International Journal of Disaster Risk Reduction, Volume 83, Article Number 103397	
Impact Factor: 4.842   Quartile: 1   Citations: 10 DOI: 10.1016/j.ijdrr.2022.103397	
Climate change and glacial lake outburst flood (GLOF) risk perceptions: An empirical study of Ghizer District, Gilgit-Baltistan Pakistan	2022
Atif Bilal Aslam Irfan Ahmad Rana Syed Samad Shah Ghulam Mohiuddin	
International Journal of Disaster Risk Reduction, Volume 83, Article Number 103392	
Impact Factor: 4.842   Quartile: 1   Citations: 12  DOI: 10.1016/j.ijdrr.2022.103392	
Quantifying the role of social capital for enhancing urban resilience against climate crisis: Empirical	2022
evidence from formal and informal settlements of Pakistan	
Maheen Shahid Irfan Ahmad Rana Ali Jamshed Fawad Ahmed Najam Ather Ali Ayman Aslam Cities , Volume 130, Article Number 103851	
Impact Factor: 6.077   Quartile: 1   Citations: 19	
DOI: 10.1016/j.cities.2022.103851	
Estimation of Water Balance for Anticipated Land Use in the Potohar Plateau of the Indus Basin Using SWAT	2022
Muhammad Idrees Shakil Ahmad Muhammad Wasif Khan Zakir Hussain Dahri Khalil Ahmad Muhammad Azmat Irfan Ahmad Rana	
Remote Sensing, Volume 14(21), Article Number 5421	
Impact Factor: 5.349   Quartile: 1   Citations: 11  DOI: https://doi.org/10.3390/rs14215421	
Gendered mode choice preferences and characteristics for educational trips in Abbottabad, Pakistan:  An empirical investigation	2022
Rida Hameed Lodhi Irfan Ahmad Rana Abdul Waheed	
Case Studies on Transport Policy, Volume 10, Issue 4, Pages 2102-2110	
Impact Factor: N/A   Citations: 7	
<b>DOI:</b> https://doi.org/10.1016/j.cstp.2022.09.010	
A localized index-based approach to assess heatwave vulnerability and climate change adaptation	2022
strategies: A case study of formal and informal settlements of Lahore, Pakistan  Irfan Ahmad Rana Laila Sikander Zainab Khalid Adnan Nawaz Fawad Ahmed Najam Sibghat Ullah Khan Ayman Aslam	
Environmental Impact Assessment Review, Volume 96, Article Number 106820	
Impact Factor: 4.549   Quartile: 2   Citations: 33	
<b>DOI:</b> 10.1016/j.eiar.2022.106820	
Three-step neural network approach for predicting monsoon flood preparedness and adaptation:	2022
Application in urban communities of Lahore, Pakistan  Dr. Irfan Ahmad Rana Rida Hameed Lodhi Azka Zia Ali Jamshed Adnan Nawaz	
Urban Climate , Volume 45, Article Number 101266	
Impact Factor: 6.663   Quartile: 1   Citations: 30	
<b>DOI:</b> 10.1016/j.uclim.2022.101266	
Flood risk perception and communication: The role of hazard proximity	2022
Asher Ali Irfan Ahmad Rana Ather Ali Fawad Ahmed Najam Journal of Environmental Management , Volume 316, Article Number 115309	
Impact Factor: 6.789   Quartile: 1   Citations: 32	
<b>DOI:</b> 10.1016/j.jenvman.2022.115309	
Social protection in disaster risk reduction and climate change adaptation: A bibliometric and thematic review	2022
Dr. Irfan Ahmad Rana Sifullah Khaled Adnan Nawaz Ali Jamshed	
Journal of Integrative Environmental Sciences, Pages 1-19	
Impact Factor: 3.143   Quartile: 3   Citations: 32  DOI: 10.1080/1943815X.2022.2108458	
Assessing the perceived spatial extent of a flood using cognitive mapping: a case study of rural	2022
communities along Indus and Chenab Rivers, Pakistan	
Samavia Rasool Irfan Ahmad Rana Hafiz Syed Hamid Arshad	
Modeling Earth Systems and Environment, Pages 1-16	

<b>DOI</b> : 10.1007/s40808-022-01442-2	
A systematic analysis of worldwide disasters, epidemics and pandemics associated mortality of 210 countries for 15 years (2001–2015)	202
Junaid Ahmad Mokbul Morshed Ahmad Zhaohui Su Irfan Ahmad Rana Asif Rehman Haleema Sadia International Journal of Disaster Risk Reduction, Volume 76, Article Number 103001	
Impact Factor: 4.320   Quartile: 1   Citations: 8	
DOI: 10.1016/j.ijdrr.2022.103001	
The impact of risk perception on earthquake preparedness: An empirical study from Rawalakot, Pakistan	202
Usama Bin Naseem Kiani Fawad Ahmed Najam Irfan Ahmad Rana International Journal of Disaster Risk Reduction, Volume 76, Article Number 102989	
Impact Factor: 4.320   Quartile: 1   Citations: 19  DOI: 10.1016/j.ijdrr.2022.102989	
Relationship of Residential Location Choice with Commute Travels and Socioeconomics in the Small	202
Towns of South Asia: The Case of Hafizabad, Pakistan	
Houshmand Masoumi Atif Bilal Aslam Irfan Ahmad Rana Muhammad Ahmad Nida Naeem	
Sustainability, Volume 14(6), Article Number 3163	
Impact Factor: 3.251   Quartile: 2   Citations: 5	
<b>DOI:</b> 10.3390/su14063163	
The use of local climate zones in the urban environment: A systematic review of data sources,	202
methods, and themes  Ayman Aslam Irfan Ahmad Rana	
Urban Climate , Volume 42, Article Number 101120	
Impact Factor: 5.731   Quartile: 1   Citations: 90	
<b>DOI:</b> https://doi.org/10.1016/j.uclim.2022.101120	
Linking flood risk perceptions and psychological distancing to climate change: A case study of rural	202
communities along Indus and Chenab rivers, Pakistan	
Samavia Rasool Irfan Ahmad Rana Shakil Ahmad	
International Journal of Disaster Risk Reduction, Volume 70, Article Number 102787	
Impact Factor: 4.320   Quartile: 1   Citations: 20  DOI: 10.1016/j.ijdrr.2022.102787	
Local climate zones and its potential for building urban resilience: a case study of Lahore, Pakistan	202
Ayman Aslam Irfan Ahmad Rana Saad Saleem Bhatti	
International Journal of Disaster Resilience in the Built Environment, Pages 1-18	
Impact Factor: N/A   Citations: 9  DOI: 10.1108/IJDRBE-08-2021-0116	
Impact of the built environment on climate change risk perception and psychological distancing:	202
Empirical evidence from Islamabad, Pakistan	
Ayman Aslam Irfan Ahmad Rana	
Environmental Science and Policy, Volume 127, Pages 228-240	
Impact Factor: 5.581   Quartile: 1   Citations: 20	
<b>DOI:</b> 10.1016/j.envsci.2021.10.024	
The spatiotemporal dynamics of urbanisation and local climate: A case study of Islamabad, Pakistan	202
Ayman Aslam Irfan Ahmad Rana Saad Saleem Bhatti	
Environmental Impact Assessment Review , Volume 91, Article Number 106666	
Impact Factor: 4.549   Quartile: 2   Citations: 43  DOI: https://doi.org/10.1016/j.eiar.2021.106666	
An approach to understanding the intrinsic complexity of resilience against floods: Evidences from	202
three urban communities of Pakistan	202
Irfan Ahmad Rana Saad Saleem Bhatti Ali Jamshed Shakil Ahmad	
International Journal of Disaster Risk Reduction, Volume 63, Article Number 102442	
Impact Factor: 4.842   Quartile: 1	
<b>DOI:</b> 10.1016/j.ijdrr.2021.102442	

2021

Determinants of transportation sustainability in universities of Islamabad, Pakistan

Impact Factor: N/A | Citations: 3

Impact Factor: 4.120   Quartile: 1   Citations: 4  DOI: 10.1108/IJSHE-07-2020-0273	
Holistic Multidimensional Vulnerability Assessment: An empirical investigation on rural communities of the Hindu Kush Himalayan region, Northern Pakistan  Zainab Khalid Xingmin Meng Irfan Ahmad Rana Mohib ur Rehman Xiaojun Su International Journal of Disaster Risk Reduction, Volume 62, Article Number 102413  Impact Factor: 4.842   Quartile: 1   Citations: 28	2021
<b>DOI:</b> 10.1016/j.ijdrr.2021.102413	
Disaster management cycle and its application for flood risk reduction in urban areas of Pakistan  Irfan Ahmad Rana Muhammad Asim Atif Bilal Aslam Ali Jamshed  Urban Climate, Volume 38, Article Number 100893	2021
Impact Factor: 6.663   Quartile: 1   Citations: 76  DOI: 10.1016/j.uclim.2021.100893	
An index-based approach for understanding gender preferences in active commuting: A case study of Islamabad, Pakistan  Muhammad Hamza Baig Irfan Ahmad Rana Abdul Waheed  Case Studies on Transport Policy, Volume 9, Issue 2, Pages 600-607  Impact Factor: 0   Citations: 2  DOI: 10.1016/j.cstp.2021.02.014	2021
COVID-19 risk perception and coping mechanisms: Does gender make a difference?  Irfan Ahmad Rana Saad Saleem Bhatti Atif Bilal Aslam Ali Jamshed Junaid Ahmad Ashfaq Ahmad Shah  International Journal of Disaster Risk Reduction, Volume 55, Article Number 102096  Impact Factor: 4.842   Quartile: 1   Citations: 138  DOI: 10.1016/j.ijdrr.2021.102096	2021
Determinants of people's seismic risk perception: A case study of Malakand, Pakistan  Muhammad Irshad Qureshi Sibghat Ullah Khan Irfan Ahmad Rana Babar Ali Asad ur Rahman  International Journal of Disaster Risk Reduction, Volume 55, Article Number 102078  Impact Factor: 4.842   Quartile: 1   Citations: 22  DOI: 10.1016/j.ijdrr.2021.102078	2021
An Updated Earthquake Catalogue and Source Model for Seismic Hazard Analysis of Pakistan  Asad ur Rahman Atif Rasheed Fawad Ahmed Najam Saeed Zaman Irfan Ahmad Rana Faheem Aslam Sibghat Ullah Khan  Arabian Journal for Science and Engineering, Pages 1-23  Impact Factor: 2.807   Quartile: 2   Citations: 8  DOI: https://doi.org/10.1007/s13369-021-05439-4	2021
An updated probabilistic seismic hazard assessment (PSHA) for Pakistan  Asad ur Rahman Fawad Ahmed Najam Saeed Zaman Atif Rasheed Irfan Ahmad Rana  Bulletin of Earthquake Engineering, Pages 1-38  Impact Factor: 4.556   Quartile: 1   Citations: 17  DOI: https://doi.org/10.1007/s10518-021-01054-8	2021
Assessing school safety against natural and human-made hazards: A case study of Gilgit city, Pakistan  Awais All Khan Irfan Ahmad Rana Fawad Ahmed Najam  Journal of Geography and Social Sciences, Volume 2(2), Pages 133-147  Impact Factor: 0  DOI: N.A.	2020
Tourism and Disasters: A Systematic Review from 2010–2019  Nida Naeem Irfan Ahmad Rana  Journal of Extreme Events, Volume 7(1-2), Article Number 2030001  Impact Factor: 0  DOI: 10.1142/S234573762030001X	2020
Disaster and climate change resilience: A bibliometric analysis  Irfan Ahmad Rana  International Journal of Disaster Risk Reduction, Volume 50, Article Number 101839	2020

Muhammad Hamza Baig Abdul Waheed Irfan Ahmad Rana Kulsoom Abbas International Journal of Sustainability in Higher Education, Pages 1-17

Impact Factor:  $4.320 \mid$  Quartile:  $1 \mid$  Citations: 99

The effect of spatial proximity to cities on rural vulnerability against flooding: An indicator based 2020 approach Ali Jamshed Joern Birkmann Irfan Ahmad Rana Danial Feldmeyer Ecological Indicators, Volume 118, Article Number 106704 Impact Factor: 4.958 | Quartile: 2 | Citations: 41 DOI: 10.1016/j.ecolind.2020.106704 Gender-based emergency preparedness and awareness: empirical evidences from high-school 2020 students of Gilgit, Pakistan Awais Ali Khan Irfan Ahmad Rana Adnan Nawaz Abdul Waheed Environmental Hazards, Pages 1-16 Impact Factor: 1.827 | Quartile: 4 | Citations: 20 DOI: 10.1080/17477891.2020.1839375 The relevance of city size to the vulnerability of surrounding rural areas: An empirical study of flooding 2020 in Pakistan Ali Jamshed Joern Birkmann Irfan Ahmad Rana Joanna M. McMillan International Journal of Disaster Risk Reduction, Volume 48, Article Number 101601 Impact Factor: 4.320 | Quartile: 1 | Citations: 46 DOI: 10.1016/j.ijdrr.2020.101601 2020 How do rural-urban linkages change after an extreme flood event? Empirical evidence from rural communities in Pakistan Irfan Ahmad Rana Ali Jamshed Joern Birkmann Joanna McMillan Daniel Feldmeyer Holger Sauter Science of the Total Environment, Volume 750, Article Number 141462 Impact Factor: 7.963 | Quartile: 1 | Citations: 40 DOI: 10.1016/j.scitotenv.2020.141462 2020 Characterizing flood risk perception in urban communities of Pakistan Irfan Ahmad Rana Ali Jamshed Zahid Irshad Younas Saad Saleem Bhatti International Journal of Disaster Risk Reduction, Volume 46, Article Number 101624 Impact Factor: 4.320 | Quartile: 1 | Citations: 85 DOI: 10.1016/j.ijdrr.2020.101624 Effectiveness of flood early warning system from the perspective of experts and three affected 2020 communities in urban areas of Pakistan Irfan Ahmad Rana Saad Saleem Bhatti Ali Jamshed Environmental Hazards, Volume 19, Pages 1-21 Impact Factor: 1.827 | Quartile: 4 | Citations: 30 DOI: 10.1080/17477891.2020.1751031 A Conceptual Framework to Understand the Dynamics of Rural-Urban Linkages for Rural Flood 2020 Vulnerability Ali Jamshed Joern Birkmann Daniel Feldmeyer Irfan Ahmad Rana Sustainability, Volume 12, Issue 7, Article Number 2894 Impact Factor: 3.251 | Quartile: 2 | Citations: 54 DOI: 10.3390/su12072894 Gender-based approach for assessing risk perception in a multi-hazard environment: A study of high 2020 schools of Gilgit, Pakistan Adnan Nawaz Awais Ali Khan Irfan Ahmad Rana International Journal of Disaster Risk Reduction, Volume 44, Article Number 101427 Impact Factor: 4.320 | Quartile: 1 | Citations: 62 DOI: 10.1016/j.ijdrr.2019.101427 2019 Seismic vulnerability assessment of building stock of Malakand (Pakistan) using FEMA P-154 method Sibghat Ullah Khan Muhammad Irshad Qureshi Ahsen Maqsoom Sibghat Ullah Khan Muhammad Irshad Qureshi Irfan Ahmad Rana Ahsen Maqsoom SN Applied Sciences, Volume: 1, Issue: 12, Article Number: 1625 Impact Factor: 0 | Citations: 24 DOI: 10.1007/s42452-019-1681-z An empirical relationship between seismic risk perception and physical vulnerability: A case study of 2019 Malakand, Pakistan

Sibghat UllahKhan Muhammad Irshad Qureshi Irfan Ahmad Rana Ahsen Magsoom

International Journal of Disaster Risk Reduction, Volume 41, Article Number 101317  Impact Factor: 2.896   Quartile: 2   Citations: 30  DOI: 10.1016/j.ijdrr.2019.101317	
Building community resilience in post-disaster resettlement in Pakistan  Ali Jamshed Irfan Ahmad Rana Joanna M. McMillan, Joern Birkmann  International Journal of Disaster Resilience in the Built Environment, Volume 10, Issue 4, Pages 301-315, Special Issue SI  Impact Factor: 0   Citations: 29  DOI: 10.1108/IJDRBE-06-2019-0039	2019
Spatiotemporal dynamics of development inequalities in Lahore City Region, Pakistan  Irfan Ahmad Rana Jayant K. Routray Zahid Irshad Younas  Cities , Volume 96, Article Number 102418  Impact Factor: 4.802   Quartile: 1   Citations: 25  DOI: https://doi.org/10.1016/j.cities.2019.102418	2019
Determining Factors Influencing Residents' Satisfaction Regarding Urban Livability in Pakistan  Farrukh Baig Irfan Ahmad Rana Mir Aftab Hussain Talpur  International Journal of Community Well-Being, Volume 2, Issue 2, Pages 91-110  Impact Factor: 0   Citations: 12  DOI: 10.1007/s42413-019-00026-w	2019
Assessing relationship between vulnerability and capacity: An empirical study on rural flooding in Pakistan  Ali Jamshed Irfan Ahmad Rana Usman Maqsood Mirza Joern Birkmann  International Journal of Disaster Risk Reduction, Volume 36, Article Number 101109  Impact Factor: 2.896   Quartile: 2   Citations: 79  DOI: 10.1016/j.ijdrr.2019.101109	2019
Price risk management using forward contracts: the case of farmers in Pakistan  Shahab E. Saqib John K. M. Kuwornu Ubaid Ali Sanaullah Panezai Irfan Ahmed Rana  International Journal of Value Chain Management, Volume 9, Issue 3, Pages 241-256  Impact Factor: 0   Citations: 11  DOI: 10.1504/JJVCM.2018.093888	2018
Multidimensional Model for Vulnerability Assessment of Urban Flooding: An Empirical Study in  Pakistan  Irfan Ahmad Rana Jayant K. Routray  International Journal of Disaster Risk Science, Volume 9, Issue 3, Pages 359–375  Impact Factor: 2.162   Quartile: 2   Citations: 126  DOI: 10.1007/s13753-018-0179-4	2018
Community participation framework for post-disaster resettlement and its practical application in  Pakistan  Ali Jamshed Irfan Ahmad Rana Masood Ali Khan Nikhil Agarwal Ahsan Ali Mayank Ostwal  Disaster Prevention and Management, Volume: 27, Issue: 5, Pages 604-622  Impact Factor: 1.247   Quartile: 3   Citations: 32  DOI: 10.1108/DPM-05-2018-0161	2018
Integrated methodology for flood risk assessment and application in urban communities of Pakistan  Irfan Ahmad Rana Jayant K. Routray  Natural Hazards, Volume 91, Pages 239–266  Impact Factor: 2.319   Quartile: 2   Citations: 95  DOI: 10.1007/s11069-017-3124-8	2018
Lahore, Pakistan - Urbanization challenges and opportunities  Irfan Ahmad Rana Saad Saleem Bhatti  Cities , Volume 72, Part B, Pages 348-355  Impact Factor: 3.853   Quartile: 1   Citations: 115  DOI: 10.1016/j.cities.2017.09.014	2018

2017

The spatial and temporal dynamics of infrastructure development disparity? From assessment to

Irfan Ahmad Rana Saad Saleem Bhatti Shahab e Saqib

Cities , Volume 63, Pages 20-32

analyses

DOI: 10.1016/j.cities.2016.12.020 Assessing the socioeconomic and infrastructure development disparity - a case study of city districts 2017 of Punjab, Pakistan Irfan Ahmad Rana Saad Saleem Bhatti Hafiz Syed Hamid Arshad International Journal of Urban Sustainable Development, Volume 9, Issue 3, Pages 151-163 Impact Factor: 0 | Citations: 20 DOI: 10.1080/19463138.2017.1320286 Changes in Vulnerability and Response Capacities of Rural Communities After Extreme Events: Case 2017 of Major Floods of 2010 and 2014 in Pakistan Ali Jamshed Irfan Ahmad Rana Joern Birkmann Obaidullah Nadeem Journal of Extreme Events, Volume 04, Issue 03, Article No.1750013 Impact Factor: 0 DOI: 10.1142/S2345737617500130 Actual vis-a-vis perceived risk of flood prone urban communities in Pakistan 2016 Irfan Ahmad Rana Jayant K. Routray International Journal of Disaster Risk Reduction, Volume 19, Pages 366-378 Impact Factor: 1.603 | Quartile: 2 | Citations: 125 DOI: 10.1016/j.ijdrr.2016.08.028 2016 An empirical assessment of farmers' risk attitudes in flood-prone areas of Pakistan Shahab E. Sagib Mokbul Morshed Ahmad Sanaullah Panezai Irfan Ahmad Rana International Journal of Disaster Risk Reduction, Volume 18, Pages 107-114 Impact Factor: 1.603 | Quartile: 2 | Citations: 93 DOI: 10.1016/j.ijdrr.2016.06.007 2015 A multi-scale modeling approach for simulating urbanization in a metropolitan region Saad Saleem Bhatti Nitin Kumar Tripathi Vilas Nitivattananon Irfan Ahmad Rana Chitrini Mozumder Habitat International, Volume 50, Pages 354-365 Impact Factor: 2.029 | Quartile: 1 | Citations: 62 DOI: 10.1016/j.habitatint.2015.09.005 **Conference Proceedings** Adaptation Planning for Flood Risk Reduction in Urban Areas of Pakistan. 2023 Hassam Bin Waseem Abdul Waheed Irfan Ahmad Rana 1st International Conference on Climate-Induced Disasters and Mitigation, res.country(177,) Citations: N/A DOI: Nil Harnessing Nature-Based Solutions to Mitigate Urban Heatwaves 2023 Aimen Feroz Abdul Waheed Irfan Ahmad Rana 1st International Conference on Climate-Induced Disasters and Mitigation, res.country(177,) Citations: N/A DOI: Nil 2023 Assessment of human heat vulnerability of different Local Climate Zones in Lahore Coupling remote sensing and socioeconomic data

Nimra Iqbal Ayman Aslam Ali Jamshed Marvin Ravan Jörn Birkmann Irfan Ahmad Rana

2023 Joint Urban Remote Sensing Event, JURSE 2023, res.country(88,)

Citations: N/A

DOI: 10.1109/JURSE57346.2023.10144180

Impact Factor: 2.704 | Quartile: 1 | Citations: 28

## **Book Chapters**

Impact of Droughts Empirical Evidences from Thar Region, Pakistan 2020 Irfan Ahmad Rana Abdul Waheed Malik Asghar Naeem Anila Hayat In: Book on Drought Risk Management in South and South-East Asia, 1st Edition, Chapter 5, Pages 96-112 Citations: N/A DOI: https://doi.org/10.4135/9789353885649 Public and Private Sector Interventions in Post-disaster Resettlement: A Case Study of Model Villages 2020 in Pakistan Irfan Ahmad Rana Ali Jamshed Usman Maqsood Mirza In: Book on External Interventions for Disaster Risk Reduction, Chapter 13, Pages 229-252 Citations: 3 **DOI:** 10.1007/978-981-15-4948-9 13 The Impact of Extreme Floods on Rural Communities: Evidence from Pakistan 2020 Ali Jamshed Joern Birkmann Joanna M. McMillan Irfan Ahmad Rana Hannes Lauer In: Book on Climate Change, Hazards and Adaptation Options, Pages 585-613 Citations: 15 **DOI:** 10.1007/978-3-030-37425-9\_30 Socioeconomic Vulnerability Assessment: A Case Study of Flood Prone Urban Communities of 2019 **Pakistan** Irfan Ahmad Rana Jayant K. Routray In: An Interdisciplinary Approach for Disaster Resilience and Sustainability, Chapter 8, Pages 123-139 Citations: N/A **DOI:** 10.1007/978-981-32-9527-8\_8