CURRICULUM VITAE

1. Proposed role in the project:

2. Family name: Saeed

3. First names: Fahad

4. Date of birth: 22.03.1980

5. Nationality: German

6. Civil status: Married

7. Education:

Institution	Degree(s) or Diploma(s) obtained:
(Date from - Date to)	
MAX-PLANCK INSTITUTE FOR METEOROLOGY (MPI-M) UNIVERSITY OF HAMBURG, HAMBURG, GERMANY (04/2007-07/2011)	Ph.D. in Earth Sciences Thesis Title: Impact of Irrigation on South Asian Summer Monsoon Climate
QUAID-I-AZAM UNIVERSITY, ISLAMABAD, PAKISTAN (02/2002 – 05/2004)	Master of Philosophy (M.Phil) in Computational Physics Thesis Title: Simulation of Ising Model using single flip and cluster algorithm short description
QUAID-I-AZAM UNIVERSITY, ISLAMABAD, PAKISTAN (07/1999 – 06/2001	M.Sc. in Physics

8. Language skills: Urdu (Mother tongue), English (excellent), German (basic), Punjabi (excellent)

9. Membership of professional bodies:

- European Geophysical Union (EGU)
- Member of scientific support team at UNFCC for LDCs
- Associate Editor: Earth System and Environment (Springer)
- Member Editorial Board: Journal of Development Policy, Research and Practice (SDPI)

10. Other skills: (e.g. Computer literacy, etc.)

Proficient User of Linux, Mac, Windows Operating Systems Command over:

- Simulation/modelling/programming
- Large Data Management and Analysis
- Bias Correction
- Uncertainty Analysis
- Global and Regional Climate Model
- Distributed Hydrology Soil and Vegetation Model
- University of British Columbia Watershed Model
- Statistical Downscaling Model
- Climate Data Operators (CDOs)
- Shell Programming
- Fortran Programming

11. Present position:

Regional Lead: South Asia and Middle East

12. Years within the firm:

05 years +

13. Key qualifications: (Relevant to the project)

Fahad has over 17 years of vast professional experience in different areas related to climate change research on the topics of climatology, Hydrology/Glaciology, climate policy and communications. He has worked for well reputed international organizations like MPI, HZG, CSC, SDPI, CA etc.

Highlights:

- Played a pivotal role in Half a degree Additional warming, Prognosis and Projected Impacts <u>HAPPI-DE</u> Project, publications based on which were cited in <u>IPCC's Special</u> <u>Report on Global Warming of 1.5 °C (SR15)</u>
- Contributor in <u>GCFs Country Programme</u> and Project Lead for Lebanon Pilot Project (underway)
- Science advisor to Least Developed Countries (LDCs) during <u>Special Report on Global</u>
 <u>Warming of 1.5 °C (SR15)</u> (Incheon, South Korea) and <u>IPCC Special Report on The Ocean</u>
 and <u>Cryosphere in a Changing Environment (SROCC)</u> (Monaco) approval planaries.
- LDCs Science Advisor to various countries' representatives during COP24 Katowice, COP25 Madrid, as well as Bonn Sessions.
- During Bonn session 2019, was part of the team that held <u>a press conference</u> to present <u>UNEP-Report</u> on <u>'Decarbonising South and SouthEast Asia</u>', and was also a co-author of the report.
- Mass Awareness Articles/Blogs and Media Appearances on issues regarding Climate Change (The Conversation, The Third Pole, BBC World News, DW, Arab Radio, Max-Plank's Magazine etc)
- Provided scientific analysis and inputs for national climate change policies and plans of different countries
- Stakeholder engagement at various levels for many different countries in diverse regions
- Uptake of Scientific Research into Policy
- Cross-project on-demand data and programming support
- Contributed in and published various scientific Reports, Projects, Policy Papers etc
- Peer Reviewed International Publications in the field of climatology, hydrology, agriculture, irrigation, value chains, migration, political economy of climate extremes etc

Further he has:

- vast experience of working in various international and Collaborative <u>projects</u> dealing with components of Climate Change Research including Impacts, Vulnerability, Adaptation and Mitigation studies as well as Policy and Negotiations.
- very high experience in science-policy interfaces, policy and action research, and science communication

Fahad Saeed - CLIMATE ANALYTICS

- fluency in English, Urdu/Hindi and knowledge of German has leveraged on its communications skills to engage with governments officials, international partners, local stakeholders and media personnel
- diverse regional work experience in South Asia, African region, Arbian Peninsula, Europe etc, that imparted in him an ability to comfortably work in interdisciplinary and multicultural and multilingual environment.
- been associated with Climate Analytics that is one of the best international thinks tanks for Climate Change science/policy research, has worked in one of the top Think-Tanks of Pakistan i.e. Sustainable Development Policy Institute, Islamabad as Head of Environment and Climate Change Unit, as a Climate Change Adviser in PRISE Project, as Head of Water Resources Unit in the research wing of Pakistan's Climate Change Ministry, Global Change Impact Studies Center, Islamabad and also holds Adjunct Professorship at Center of Excellence for Climate Change Research CECCR-KAU Jeddah, Saudi Arabia.
- been involved with editorial responsibilities as Associate Editor of Earth System and Environment (Springer) and as Member Editorial Board: Journal of Development Policy, Research and Practice (SDPI) plus as Reviewer of international journals (Climate Dynamics, Journal of Geophysical Research, Geophysical Research Letters, MDPI Atmosphere, etc)
- familiarity with desk research on Natural Resource Management like solar, coal, hydro etc. and have published few articles on the importance of Renewable Energy Sources (article published in The Conversation), on decarbonizing South and South-East Asia (I was among the authors of this <u>UNEP</u> report), on <u>Geo-Engineering</u>, small <u>hydro-powers</u> etc.
- numerous international publications, scientific reports and policy briefs to his credit, in very well reputed journals and sources of knowledge for scientific research community and policy makers
- in addition, wrote many articles/blogs and made media appearances in international media outlets (like BBC World Service, Deutsche Welle (DW), The Converstaion, The Third Pole, Arab Radio, etc) to create public awareness about current issues concerning climate change and its impacts.
- strong organizational and managerial skills gained through managing teams of people at SDPI and GCISC, coordination and leadership experience gained as Head of Environment and Climate Change Unit at SDPI and Head of Water Resources Section at GCISC, Professional Skills evaluation while being part of staff hiring at SDPI and GCISC, and as Chairman of Staff Welfare Committee at SDPI to administer staff code of ethics, rules and regulations by settling disputes, representing staff while coordinating with management and creating harmony among the team members.

15. Professional experience

Date from - Date to	Location	Company& reference person¹ (name & contact details)	Position	Description

03/2021 - Present	ISLAMABAD, PAKISTAN	CLIMATE ANALYTICS, BERLIN, GERMANY	Regional Lead: South Asia and Middle East	COP26 – Glasgow, Scotland, 2021 During COP26, provided science support to LDC group. More specifically, following themes including Research and Systematic Observations (RSO), Periodic Review, and IPCC
				Project: Paris Agreement Overshooting Reversibility, Climate Impacts and Adaptation Needs (PROVIDE) under Horizon 2020 Year: 2021-Present Location: Global Client: EU Main project Activities: The PROVIDE project aims to deliver information on overshoot scenarios and respective impacts in the context of adaptation through an innovative web tool. You will be able to assess the risks of overshooting systemic thresholds (e.g. glacier melt) from the local to the global level. Moving beyond a limited set of climate scenarios, the PROVIDE approach allows you to make thresholds the starting point for the analysis and adaptation planning. We intend to offer two entry points, one general one and one expert mode to cater to the different needs of users. Regional focus: Four iconic regions are identified, one of which is the Indus River Basin which is characterized by high socio-economic vulnerability as well as exposure to key impacts such as extreme weather events (e.g. heat, flood and drought), economic damages and crop failure. In addition, Pakistan's capital Islamabad is projected to grow considerably over the next decades and is vulnerable to risks such as water shortages, urban flooding and heat stress. PROVIDE will assess regional and local impacts of overshoot pathways and required adaptation responses in the four iconic regions, including a focus on selected urban environments such as Islamabad. Activities performed: LEAR for EU and focal person for Upper Indus Basin part, Stakeholders' Engagement, Execution of UBC Watershed Model, provide input data to set up and develop a climate services dashboard (innovative web tool)

11/2016 - 03/2021	BERLIN, GERMANY	CLIMATE ANALYTICS, BERLIN, GERMANY	Regional Climate Scientist / Scientific Model and Data Manager / Programm er	involved in the negotiations process of UNFCCC while supporting various Least Developed Countries' (LDCs) representatives, by translating scientific findings for their country, in order to effectively present their country's case. This process demands the skill to look for the global picture, without ignoring the tiniest of details. That, in turn, inculcated the ability to bridge between the LDCs teams and other negotiators, in order to help clearly channelise the needs/problems of LDCs and effectively communicate those to the rest of those influencing the policy. COP24 – KATOWICE, POLAND 2018 Member of Least Developed Countries (LDCs) support team for UNFCCC negotiations Contributor in GCFs Country Programme and Project Lead for Lebanon Pilot Project (underway) Stakeholder engagement at various levels for many
				global picture, without ignoring the tiniest of details. That, in turn, inculcated the ability to bridge between the LDCs teams and other negotiators, in order to help clearly channelise the needs/problems of LDCs and effectively communicate those to the rest of those influencing the policy. COP24 – KATOWICE, POLAND 2018 Member of Least Developed Countries (LDCs) support team for UNFCCC negotiations Contributor in GCFs Country Programme and Project Lead for Lebanon Pilot Project (underway)

Main project Activities: Fast track support to countries to enhance the quality, increase the ambition, and implement nationally determined contributions. More specifically, the project aims to provide technical support to the Government of Nepal and Grenada in responding to the needs of scientific and technical services which contributed to the development/revisions of their NDCs. These processes will be important as the countries moves forward with implementation of its NDC, in order to be able to track and measure progress towards its emissions reduction and other climate goals. Positions held: Regional Climate Scientist Activities performed: Part of the team that developed Climate Risk Profile for Nepal and Grenada. Development of Climate Dash-board for Nepal.

Project: GCF Country Programme

<u>Year:</u> 2019-Present <u>Client:</u> GCF <u>Location:</u> Chile, Mexico, Nicaragua, Uzbekistan, The Solomon Islands, Kiribati, Ghana, Lebanon and Malaysia

Main project features: This novel project aims to provide technical advisory services to partner countries to enhance the scientific quality of their Country Programmes for the Green Climate Fund in order to improve access to funding. The services include scientific analysis, development of tools and guidelines as well as institutional capacity building. It also includes Technical Advisory Services on the Piloting of Activities for the Preparation of Country Programmes and Related Processes, funded by GCF, in collaboration with IIASA and CCA.

Positions held: Regional Climate Scientist
Activities performed: Country Lead for Lebanon,
Provided 'Climate Change Risks' services to
Lebanon, Ghana, Solomon Islands, Kiribati.
Provided data for Macroeconomic and
Vulnerability assessment for Mexico, Malaysia,
Lebanon, Ghana, Kiribati.

Project: IMPACT - Science-based implementation of 1.5°C compatible climate action for LDC and SIDS

<u>Year:</u> 2016 - Present <u>Location:</u> Nepal <u>Client:</u> BMU

Main project features: The project aims to strengthen the connections between the scientific assessments of climate impacts, vulnerability and adaptation to help enable access to finance and help SIDS and LDCs implement concrete projects and to build sustainable capacity in 3 partner regions (the Caribbean, the Pacific and West Africa).

Positions held: Scientific Model and Data Manager

Activities performed: Provided science support to Least Developed Countries (LDCs) focal points during IPCC and UNFCCC negotiations. Science based studies in response to country requests from multiple countries from West Africa, Caribbean and Pacific regions.

Project: Decarbonising South and South East Asia

Year: 2018-2019. Client: UNEP
Location: India, Pakistan, Bangladesh, Thailand,
Vietnam, Indonesia and the Philippines
Main project features: Assessment of adoption of
sustainable pathways for the countries of south
and south east Asia to meet increasing energy
demands whilst meeting their sustainable
development goals (SDGs).

<u>Positions held:</u> Scientific Modeler and Data Manager

<u>Activities performed:</u> A large multi-model ensemble of Global Climate Model is used to project future impact of climate change on countries of south and south-east Asia

<u>Project: PAS-PNA - Science-based National</u> <u>Adaptation Planning in Sub-Saharan Africa</u>

Year: 2016-2019 Location: Sub-Saharan Africa

Client: BMU

<u>Main project features:</u> PAS-PNA is a support project for francophone Sub-Sahara African LDCs

in their National Adaptation Plan process (NAP). Its main is to strengthen national science-policy interfaces and increase the capacity and efficiency of science-based NAP formulation in Benin, Senegal, Burkina Faso and another 12 Sub-Saharan African LDCs.

<u>Positions held:</u> Scientific Model and Data Manager <u>Activities performed:</u> Provided science support to various different countries of West Africa to carry out vulnerability and impact studies using the data of climate models.

Contributed in the development of RegioClim tool for Africa

Project: Half a degree Additional warming,
Prognosis and Projected Impacts (HAPPI-DE)—
Europe and Africa

Year: 2017-2018 Location: Global Client: BMBF Main project features: The HAPPI project calls on climate modelling groups to undertake a simple series of experiments specifically designed to assess the climate impacts and quantify the relative risks associated with 1.5°C and 2°C of warming, drawing directly on the "Climate of the 20th Century" experiments that already focus on robust assessment of extreme weather and the relative risks of low-probability extreme weather events.

<u>Positions held:</u> Scientific Modeler and Data Manager

Activities performed: Quality control, Data management and publication of HAPPI climate simulation data; Bias correction of the output of the global climate models; coordination of HAPPI-ISIMIP climate impact simulations, preparation of HAPPI climate data input, management and support; and HAPPI-ISIMIP simulations on climate impacts.

01/2014 - Present		CENTRE OF EXCELLENCE FOR CLIMATE CHANGE RESEARCH (CECCR) KIND ABDUL AZIZ UNIVERSITY, SAUDI ARABIA	Adjunct Professor	 Collaborative Research in International Projects Mentoring Doctoral Candidates and Research Fellows Project Proposal Writing
Previous full-	-time employme	ent		
09/2014 – 11/2016	ISLAMABAD, PAKISTAN	SUSTAINABLE DEVELOPMENT POLICY INSTITUTE (SDPI) ISLAMABAD, PAKISTAN	Research Fellow / Head of Environme nt and Climate Change Unit	 Head of the Environment and Climate Change Unit, performing Policy Research in Climatology, Hydrology, Agriculture etc Climate Change Advisor and Acting Co-PI for Pathways to Resilience in Semi-Arid Economies (PRISE) project (CARRIA) sponsored by IDRC and DFID, working closely with ODI (successfully completed) PI of 'OSF Heat Stress Project' of CARRIA (successfully completed) Organizer, Sustainable Development Conference (SDC) in 2014, 2015, 2016 and other national/international scientific activities organised at SDPI Stakeholder engagement at various levels in local government / non-government institutions Project Proposal Writing Interaction with Policy makers /end-users /stakeholders On field research/surveys Chair, Staff Welfare Committee (SDPI) Electronic/Print/Social Media appearances Newspaper Article writing for public awareness on issues regarding Climate Change Policy Briefs/Recommendations for government about diverse issues related to Climate Change, weather, climate, value chains, rural to urban migration etc Collaboration and Partnership with various international government/non-government institutions

D9/2014 – 11/2016 ISLAMABAD, PAKISTAN PAKISTAN PATHWAYS TO RESILIENCE IN SEMI-ARID ECONOMICS (PRISE Project) by DFID/IDRC (while working at SDPI-Pakistan) PAKISTAN Climate Change Advisor Climate Change Advisor Agriculture Mentoring research activities of the group On field research/surveys for project on Cotton Value Chain, Heat Induced Rural to Urban Migra Climatic Hazards (floods) etc. Interaction with Policy makers /end-users /stake-holders Publication of working-papers and public awaren articles Attended several international meetings Project: Pathways to Resilience in Semi-Arid (PRISE) Under Collaborative Adaptation Researd Initiative in Africa and Asia (CARIAA) Year: 2014-2016 Location: Nepal Client: DFID and IDRC (with ODI)	- ness
(PRISE) Under Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA) Year: 2014-2016 Location: Nepal Client: DFID and IDRC (with ODI)	<u>ch</u>
(PRISE) Under Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA) Year: 2014-2016 Location: Nepal Client: DFID and IDRC (with ODI)	<u>ch</u>
Initiative in Africa and Asia (CARIAA) Year: 2014-2016 Location: Nepal Client: DFID and IDRC (with ODI)	
Client: DFID and IDRC (with ODI)	
Main project features: CARIAA supported	
collaborative research by four consortia, each	
addressing a particular climate change hot spot	
Each consortium selected study areas based on	
geographic and social similarities in the way the	-
experienced climate change despite being spread across different countries and continents. This	au
model provided opportunities for institutions w	<i>i</i> ith
varying expertise and geographic scopes to com	
together to share knowledge and experience	
across disciplines, sectors, and geographic area	s.
PRISE, under CARIAA, aimed to strengthen the	
commitment of decision-makers in local and	
national governments, businesses and trade	
bodies to rapid, inclusive and resilient	
development in semi-arid regions. The project	
generated new knowledge about how economi	
development in semi-arid regions can be made	
more equitable and resilient to climate change,	
order to deepen decision-makers' understandir	_
of the threats and opportunities that semi-arid	
economies face in relation to climate change.	
PRISE research targeted semi-arid areas in six	W2
countries: Burkina Faso, Senegal, Tanzania, Ken Pakistan, Kyrgyzstan and Tajikistan.	ıya,
Positions held: Climate Change Advisor	
Activities performed: Project Design and	
implementation; stake holder engagement and	
mainstream/print media outreach; collection,	
control and management of primary data throu	ıgh

				field interviews; and scientific publication based on the results in the peer reviewed journals.
08/2011 – 12/2013	HAMBURG, GERMANY	CLIMATE SERVICE CENTRE (GERICS), HAMBURG, GERMANY	Science Officer	 Climate Modelling Dealing with large scale Climate Data, Analysis and Interpretation Project Proposal Writing Stakeholder engagement at various levels in government / non-government institutions of different countries Interaction with Policy makers /end-users /stakeholders Climate Change Scenarios for the River Congo Basin: A GTZ sponsored project for providing relevant national and regional decision makers with climate change scenarios for the River Congo Basin. (successfully completed) Output in the form of international Scientific Reports and Peer reviewed Publications Uptake of Scientific Research into Policy

				Post-Doctoral Research
04/2011– 07/2011	HAMBURG, GERMANY	MAX-PLANCK INSTITUTE FOR METEOROLOGY (MPI-M) HAMBURG, GERMANY	Post-Doc Fellow	Post-Doctoral Research Collaborative work in International Research Projects Project: HighNoon: adaptation to changing water resources availability in northern India with Himalayan glacier retreat and changing monsoon pattern Year: 2009-2012. Location: South Asia Client: EU Main project features: This project, funded under the EU's Seventh Framework Programme, was a collaboration between European, Indian and Incomes processes organisations and Universities.
				Japanese research organisations and universities. The team's primary focus was to assess the impact
				of glacier retreat and possible changes of the Indian summer monsoon on the spatial and
				temporal distribution of water resources in northern India. HIGHNOON applied a
				transdisciplinary research approach to climate change adaptation. The team integrated
				stakeholder knowledge on climate change and climate variability with scientific knowledge produced from improved regional climate
				modelling and socioeconomic scenario development.
				Innovative modelling of glaciers at a large scale within RCMs confirmed the expected continuation
				of glacier shrinkage in most parts of the Himalayan
				mountain ranges, the so-called Water Tower of Asia. Another finding was that higher
				temperatures and fewer rain days will likely exacerbate drought conditions by 2050.
				HIGHNOON has communicated its results to both EU and Indian policymakers, and published a
				comprehensive project policy brief. Results, available on the project website are also being
				communicated to the scientific community in peer-
				reviewed papers and at conferences. Positions held: Research Fellow
				Activities performed: Execution of Regional Climate Model REMO over India and scientific
				assessment of the data.

12/2009 - 03/2011	HAMBURG, GERMANY	MAX-PLANCK INSTITUTE FOR METEOROLOGY (MPI-M) HAMBURG, GERMANY	Research Associate (Terrestrial Hydrology)	Research in EU's WATCH Project and EU's HighNoon Project Doctoral Candidate Project: Water and Global Change (WATCH) Year: 2007-2011 Location: Global Client: EU Commission Main project features: WATCH is an Integrated Project to evaluate the global water cycle's response to current and future drivers of climate change. The project brings together European hydrological, water resources and climate communities to analyse, quantify and predict the components of the current and future global water cycles and related water resources states, evaluate their uncertainties and clarify the overall vulnerability of global water resources related to the main societal and economic sectors. The WATCH project analyses and describes the current global water cycle, especially causal chains leading to observable changes in extremes (droughts and floods), and evaluates how the global water cycle and its extremes respond to future drivers of global change (including greenhouse gas release and land cover change). WATCH, thus, aims at providing policy makers with a consistent and clear assessment of flows, floods and droughts for present and future scenarios. Positions held: Research Associate Activities performed: Regional Climate Simulations using REMO model; integration of irrigation module in a climate model; and scientific reports and publication in peer reviewed journals
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07/2006 - 02/2007	ISLAMABAD, PAKISTAN	GLOBAL CHANGE IMPACT STUDIES CENTRE (GCISC) ISLAMABAD, PAKISTAN	Senior Research Fellow/Acti ng Section Head (Water Resources)	Acting Section Head (Water Resources) (Nov. 2006 – Jan. 2007) Impact Modelling studies using Watershed Model Mentoring research activities of the group Collaborative work in International Research Projects Interaction with Policy makers/stake- holders Project: Enhancement of National Capacities in the Application of Simulation Models for Assessment of Climate Change and its Impacts on Water Resources and Food and Agricultural Production Year: 2003-2005. Location: Pakistan, South Asia Client: Asia Pacific Network (APN) for Global Change Research (under CAPaBLE programme) Main project features: The project was aimed at overcoming a major weakness of three South Asia countries; Bangladesh, Nepal and Pakistan, in climate change research viz. the lack of sufficient expertise and experience in the development and use of mathematical models for assessment of the impacts of global climate change. It helped to enhance Climate Change (CC)-related research capacity of the beneficiary countries (Bangladesh, Nepal and Pakistan) in areas of Regional Climate Modelling (RCM), Watershed Simulation Modelling (WSM) and Crop Simulation Modelling (CSM) and then made use of that enhanced capacity in order to (i) formulate country specific plausible CC scenarios, (ii) assess the corresponding impacts on water resources and agricultural production, and (iii) identify appropriate adaptation measures to cope with the adverse impacts. Positions held: Research Fellow Activities performed: Training and testing of UBC (University of British Columbia, Canada) Watershed Model Simulations, Regional Climate Models (RCMs) like RegCM3 and WRF, Dissemination of the research results to national planners and policy makers. Mentoring research activities of the group
04/2004 –	ISLAMABAD,	CHANGE IMPACT STUDIES CENTRE (GCISC) ISLAMABAD, PAKISTAN	Research	 Collaborative work in International Research
06/2006	PAKISTAN		Fellow	Projects Interaction with Policy makers/stake- holders

16. Other relevant information (e.g., Publications)

International Peer Reviewed Publications

- Almazroui, M., F. Saeed, Saeed, S. et al. (2021) <u>Projected Changes in Climate Extremes Using CMIP6 Simulations Over SREX Regions.</u> Earth Syst Environ 5, 481–497. doi: https://doi.org/10.1007/s41748-021-00250-5
- Almazroui, M., Ashfaq, F. Saeed et al (2021). <u>Assessment of CMIP6 Performance and Projected Temperature and Precipitation Changes Over South America.</u> Earth Syst Environ 5, 155–183 doi: https://doi.org/10.1007/s41748-021-00233-6
- Athar, H., Nabeel, A., F. Saeed, et al. (2021). Projected changes in the climate of Pakistan using IPCC AR5-based climate models. Theor Appl Climatol 145, 567–584. doi: https://doi.org/10.1007/s00704-021-03651-8
- J. R. Schleypen, M. N. Mistry, F. Saeed et al (2021) <u>Sharing the burden: quantifying climate change spillovers in the European Union under the Paris Agreement</u>, Spatial Economic Analysis doi: https://doi.org/10.1080/17421772.2021.1904150
- F. Saeed, C. F. Schleussner et al (2021) <u>Deadly Heat Stress to Become Common -place Across South Asia Already at 1.5°C of Global Warming, Geophysical Research Letters</u> 48 (7), e2020GL091191
 doi: https://doi.org/10.1029/2020GL091191
- F. Saeed, C. F. Schleussner, et al (2021) From Paris to Makkah: heat stress risks for Muslim pilgrims at 1.5 °C and 2 °C, Environ. Res. Lett. 16, 024037 doi: https://doi.org/10.1088/1748-9326/abd067
- M. Almazroui, M. N. Islam, F. Saeed et al. (2021) <u>Projected Changes in Temperature and Precipitation Over the United States, Central America, and the Caribbean in CMIP6 GCMs</u>. Earth Syst Environ 5, 1–24 doi: https://doi.org/10.1007/s41748-021-00199-5
- M. Almazroui, M. N. Islam, S. Saeed, F. Saeed et al. (2020) <u>Future Changes in Climate over the Arabian Peninsula based on CMIP6 Multimodel Simulations</u>. Earth Syst Environ 4, 611–630. doi: https://doi.org/10.1007/s41748-020-00183-5
- M. Almazroui, F. Saeed, S. Saeed et al. (2020) Projected Change in Temperature and Precipitation
 Over Africa from CMIP6. Earth Syst Environ 4, 455–475.
 doi: https://doi.org/10.1007/s41748-020-00161-x
- M. Almazroui, S. Saeed, F. Saeed et al. (2020) Projections of Precipitation and Temperature over the South Asian Countries in CMIP6. Earth Syst Environ 4, 297–320 doi: https://doi.org/10.1007/s41748-020-00157-7
- H. Shiogama, T. Hasegawa, S. Fujimori, D. Murakami, K. Takahashi, K. Tanaka, S. Emori, I. Kubota, M. Abe, Y. Imada, M. Watanabe, D. Mitchell, N. Schaller, J. Sillmann, E. Fischer, J. F. Scinocca, I. Bethke, L. Lierhammer, J. Takakura, T. Trautmann, P. Döll, S. Ostberg, H. M. Schmied, F. Saeed, C. Schleussner (2019) <u>Limiting global warming to 1.5 °C will lower increases in inequalities of four hazard indicators of climate change</u>, Env. Res. Lett. doi: https://doi.org/10.1088/1748-9326/ab5256
- S. Hasson, F. Saeed, J. Böhner, C.F. Schleussner (2019) Water availability in Pakistan from Hindukush-Karakoram-Himalayan watersheds at 1.5°C and 2°C Paris Agreement Targets, Advances in Water Resources doi: https://doi.org/10.1016/j.advwatres.2019.06.010
- K. Shahzad, M. Almazroui, I. Kang, M. Hanif, F. Kucharski, M. A. Abid, F. Saeed (2019), <u>Long-term ENSO</u> relationship to precipitation and storm frequency over western Himalaya Karakoram-Hindukush region during the winter season, Climate Dynamics doi: https://doi.org/10.1007/s00382-019-04859-1
- C. Schleussner, D. Deryng, S. D'haen, W. Hare, T. Lissner, M. Ly, A. Nauels, M. Noblet, P. Pfleiderer, P. Pringle, M. Rokitzki, F. Saeed, M. Schaeffer, O. Serdeczny, A. Thomas (2018) 1.5°C Hotspots Climate hazards, vulnerabilities and impacts. Ann. Rev. Env. Res. doi: https://doi.org/10.1146/annurev-environ-102017-025835
- F. Saeed, I. Bethke, S. Lange, L. Lierhammer, H. Shiogama, D. A. Stone, T. Trautmann, C. Schleussner (2018) <u>Bias correction of multi-ensemble simulations from the HAPPI model intercomparison project</u>, Geosci. Model Dev. Discuss. doi: https://doi.org/10.5194/qmd-2018-107
- F. Saeed, I. Bethke, E. Fischer, S. Legutke, H. Shiogama, D. Stone. C. Schleussner (2018) Robust changes in tropical rainy season length at 1.5C and 2C. Environ. Res. Lett. doi: https://doi.org/10.1088/1748-9326/aab797
- M. A. Umar, F. Saeed, K. M. Salik, A. Q. Suleri (2018) <u>Exposure, impact and response to heat stress: a comparison between rural and peri-urban poor population</u>. Earth Sys Environ. doi: https://doi.org/10.1007/s41748-018-0070-x
- C. F. Schleussner, D. Deryng, C. Mller, J. Elliott, F. Saeed, C. Folberth, W. Liu, X. Wang, T. Pugh, W. Thiery, S. Seneviratne, J. Rogelj (2018) <u>Crop productivity changes in 1.5C and 2C worlds under climate sensitivity uncertainty.</u> Environ. Res. Lett. doi: https://doi.org/10.1088/1748-9326/aab63b

- J. Ali, K. H. Syed, H. F. Gabriel, F. Saeed, B. A. Syed, A. A. Bukhari (2018) <u>Centennial Heat Wave Projections Over Pakistan Using Ensemble NEX GDDP Data Set</u>, Earth Sys. Environ. doi: https://doi.org/10.1007/s41748-018-0064-8
- P. Doell, T. Trautmann, D. Gerten, M. Schmied, H.O. Sebastian, F. Saeed, C. Schleussner (2018)
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Other Publications / Reports:

Policy

• UNESCAP REPORT: (FEBRUARY, 2021)

COAL PHASE OUT AND ENERGY TRANSITION PATHWAYS FOR ASIA AND THE PACIFIC

Ursula Fuentes, Anna Chapman, Gaurav Ganti, **Fahad Saeed**, Jessie Ruth Schleypen, Bill HareReview: Matt Gidden, Deborah Ramalope

This report was developed by the Energy Division of Economic and Social Commission for Asia and the Pacific (ESCAP) in partnership with Climate Analytics

• <u>UNEP Report</u>: (June 2019) Presented in a <u>press conference</u> during the Bonn session. South and South East Asia <u>can power ahead with renewables</u>,

Ursula Fuentes Hutfilter, Anne Zimmer, **Fahad Saeed**, Bill Hare , Tina Aboumahboub, Ilsa Kelischek, Carl-Friedrich Schleussner, Paola Yanguas Parra, Andrzej Ancygier, Robert Brecha, Jessie Granadillos, Gaurav Ganti, Raghuveer Vyas, Michiel Schaeffer

PREPARED UNDER THE PROJECT "PILOT ASIA-PACIFIC CLIMATE TECHNOLOGY NETWORK AND FINANCE CENTRE", AN INITIATIVE OF UN ENVIRONMENT AND THE ASIAN DEVELOPMENT BANK (ADB), FUNDED BY THE GLOBAL ENVIRONMENT FACILITY (GEF).

- WHY GEOENGINEERING IS NOT A SOLUTION TO THE CLIMATE PROBLEM, (DECEMBER, 2018)
 Fahad Saeed, Carl-Friedrich Schleussner, William Hare
 CLIMATE ANALYTICS BRIEFING REPORT
- Muhammad Awais Umar, Fahad Saeed (2018) The role of heat stress in migration decisions: A case study of Faisalabad, Overseas Development Institute (ODI), PRISE Working Paper
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<u>Agriculture</u>

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Projects (selected):

- Technical Advisory Services on the Piloting of Activities for the Preparation of Country Programmes and Related Processes (<u>GCF Country Programme</u>), funded by Green Climate Fund, in collaboration with International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria and Center for Clean Air Policy (CCAP), Washington DC, USA
- Half a degree Additional warming, Prognosis and Projected Impacts' (HAPPI-DE): BMBF funded
 project to assess the difference in climate impacts between 1.5°C and 2°C using targeted multiensemble simulations. The simulations are designed to allow for robust assessment of changing
 risks in extreme weather events.
- Collaborative Adaptation Research Initiative in Africa and Asia (<u>CARIAA</u>): IDRC and DFID sponsored program to build the resilience of vulnerable populations and their livelihoods.
- Pathways to Resilience in Semi-Arid Economies (PRISE) project (CARRIA) sponsored by IDRC and DFID, working closely with ODI
- Coordinated Regional Climate Downscaling Experiment (CORDEX): WCRP-sponsored program to
 organize an international coordinated framework to produce an improved generation of regional
 climate change projections world-wide for input into impact and adaptation studies within the IPCC
 AR5 timeline and beyond.
- Water and Global Change (WATCH): European Union (EU) project for providing policy makers with a consistent and clear assessment of flows, floods and droughts for present and future scenarios.
- HighNoon: European Union (EU) project for adaptation to changing water resources availability in northern India with Himalayan glacier retreat and changing monsoon pattern.
- Climate Change Scenarios for the River Congo Basin: A GTZ sponsored project for providing relevant national and regional decision makers with climate change scenarios for the River Congo Basin.
- Enhancement of National Capacities in the Application of Simulation Models for Assessment of Climate Change and its Impacts on Water Resources and Food and Agricultural Production: An Asia Pacific Network (APN) funded project.

Blogs, Articles & Media

- South Asia faces a deadly heatwave. Here's what to do about it
 - THOMSON REUTERS, 28 APRIL, 2022
- IS PAKISTAN PREPARING FOR A DECARBONISED WORLD?
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 - The Conversation, 03 March, 2017.
- PAKISTAN'S PASSES CLIMATE CHANGE ACT, EXPERTS REMAIN SCEPTICAL,
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- A year of climate extremes: a case for Loss Damage at COP23.
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- Sound Byte: Expect more extreme weather this year, Daily Dawn, 12 February, 2016.
- Heatwave likely to hit urban areas this year. Daily Dawn. 14 March. 2016.
- Climate Change and Migration to Cities. PRISE Blog Post, 05 June, 2015.
- A challenge for cities of the future. Daily Times, 26 May, 2015.
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- Tackling global warming: Climate Change driving migration to urban areas. The Express Tribune, 14 December, 2014.
- The Perpetual Pump. Max-Planck Research Magazine, April, 2013.
- The Fate of the Big rain. Max-Planck Research Magazine, January, 2011.

Other International and Regional Engagements (Selected)

Engagement/Actions	Dates & Places
Sustainable Development and Climate Change in Developing and Least Developed Countries, The 5 th International Conference on Climate Change (ICCC) 2021 Role: Key-Note Speaker	February 18-19, 2021 Colombo, Sri- Lanka (online)
IPCC 1.5C Special Report, "Building capacity for LDCs to participate effectively in intergovernmental climate change processes	July 2-4 July, 2018,

Engagement/Actions	Dates & Places
Role: Invited Seminar / Speaker	UN-House, Bangkok,Thailand
International R&D Collaboration Conference, Ministry of Education Role: Nominated Workshop Coordinator/Facilitator	April 23-24, 2018 Riyadh, Saudi Arabia
Bias Correction of Global Climate Models' data within the framework of HAPPI project, European Geophysical Union (EGU) General Assembly Role: Speaker / Participant	April 8–13, 2018, Vienna, Austria
Changes in extreme weather indicators over Pakistan at 1.5°C and 2.0°C warming, International Science-Policy Conference on Climate Change in Pakistan Role: Invited Speaker	December 18-20, 2017 Islamabad, Pakistan
Bias Correction for climate impact modeling within the framework of the HAPPI Initiative, European Geophysical Union (EGU) General Assembly Role: Poster Presenter	April 23–28, 2017 Vienna, Austria
Climate Induced Migration in Pakistan: Preliminary Results, SDPI's Nineteenth Sustainable Development Conference Role: Speaker / Session Coordinator / Organizer	December 06-08, 2016 Islamabad, Pakistan
Impact of climate change on rural to urban migration in Pakistan, SDPI's Eighteenth Sustainable Development Conference Role: Speaker /Session Coordinator/Organizer	December 08-10, 2015 Islamabad, Pakistan.
Impact of climate change on cotton sector in Pakistan, SDPI's Eighteenth Sustainable Development Conference Role: Speaker / Organizer	December 08-10, 2015 Islamabad, Pakistan.
Providing RCM Outputs for Use in Impact Models: Examples from European Applications, Economic and Social Commission for West Asia (ESCWA), Regional Workshop on RCM Application and Analysis Role: Invited Speaker	July 2-4, 2012, UN-House- Beirut, Lebanon
Influence of mid-latitude circulation on upper Indus basin precipitation: the explicit role of irrigation., Summer School on Water resources and the Water Cycle in a Changing World Role: Poster Presenter / Participant	July 4-8 July, 2011, St. Catherines College, Oxford, UK.
Validation of the regional climate model REMO over several CORDEX regions throughout the globe. European Geophysical Union (EGU) General Assembly Role: Presentation / Participant	May 2-7, 2010 Vienna, Austria.
Impact of irrigation on south Asian summer monsoon 2nd Lund Regional-scale Climate Modelling Workshop: 21st Century Challenges in Regional-scale Climate Modelling. Role: Poster Presenter / Participant	4-8 May 2009, Lund,Sweden
Implementation of a Dynamical Glacier Scheme in a regional climate model over the Western Himalaya - Karakoram region, European Geophysical Union (EGU) General Assembly Role: Poster Presenter / Participant	April 19-24, 2009 Vienna, Austria.
Assessing the characteristics of the regional climate that are essential for studies of hydrological changes over Upper Indus basin., Proceedings of 20th ICID Congress 2008, Lahore, Pakistan. Role: Speaker / Participant	2008, Lahore, Pakistan
Assessing the Character- istics of the Regional Climate that are essential for studies of hydrological changes over Pakistan, European Geophysical Union (EGU) General Assembly Role: Poster Presenter / Participant	April 13-18, 2008 Vienna, Austria.
Impact Assessment of Land Cover Changes in Upper Indus Basin Using A Distributed Hydrological Model: A Case Study of Siran Watershed International Workshop on Land Surface Models and Their Applications, Role: Poster Presenter / Participant	November 15-18, 2005 Zhuhai, China.
Impacts of Climate Change Using Downscaling and Watershed Models: A Case Study of Siran Watershed Proceedings of APN-CAPaBLE Regional Workshop on Climate Scenarios for South Asia, Role: Paper Presenter / Participant	August 15-19, 2005 Khatmandu, Nepal.

Engagement/Actions	Dates & Places
Evaluating Spatial Resolution For Distributed Hydrologic Moldeling in the Indus River	March 7-18, 2005
Basin Proceedings of South Asia Regional Training Workshop on Watershed Modeling	Islamabad,
Role: Paper Presenter / Participant	Pakistan.