



E-NEWSLETTER

Global Climate-Change Impact Studies Centre (GCISC), Issue-2 (Jan—Mar 2025)





TABLE OF CONTENTS

About GCISC	3
About Newsletter	3
Executive Director's Message	4
NDC 3.0 Consultations	5
Collaborations	12
Participation in Activities	18
International Recognition and Capacity Building	41
Memorandum of Understanding	42
International and National Partners	46
Contact Info	47



| About GCISC

Overwhelming evidence accumulated over the last three decades clearly shows that human activity has reached a level where it is significantly affecting the global environment. Furthermore, the global change due to anthropogenic perturbations is happening at a much shorter time scale compared to the natural events. It is feared that some of the resulting adverse impacts will have serious implications in areas such as climate, health, water, energy, food security etc. in many parts of the world. Developing countries with weak scientific and technological base will be most vulnerable to such adverse impacts.

It is in this perspective that the Global Climate-Change Impact Studies Centre (GCISC) was established in May 2002 on the initiative of Dr. Ishfaq Ahmad, then Special Advisor to the Chief Executive of Pakistan. The Centre started functioning with seed money provided by the Ministry of Science & Technology, and functioned as a Public Sector Development Project (PSDP) for 11 years.

In March 2013, GCISC was granted the status of a regular national entity by passage of “GCISC Act 2013” through the Parliament. It is now functioning as dedicated research institute, under the directions of a Board of Governors (BOG-GCISC) as per provision of the Act.

| About Newsletter

The GCISC newsletter is committed to fostering dialogue and disseminating knowledge on critical climate and sustainability issues. Our aim is to keep our readers informed about the latest research, innovative solutions, and impactful initiatives in the field of climate change and environmental science. Through expert insights, community stories, and actionable steps, we strive to empower individuals, organizations, and policymakers to drive change towards a sustainable future.



EXECUTIVE DIRECTOR'S MESSAGE

Climate change poses one of the most significant challenges of our time, impacting ecosystems, economies, and communities around the globe. Rising temperatures, erratic weather patterns, and increased frequency of natural disasters are just some of the dire consequences of our changing climate. According to the latest reports from the Intergovernmental Panel on Climate Change (IPCC), we are rapidly approaching critical thresholds that could trigger irreversible damage to our planet.

At GCISC, we are committed to advancing pioneering research and cultivating innovative solutions that address the urgent issues arising from climate variability and its profound impacts on our environment and societal structures. Our multidisciplinary consortium of experts is focused on delivering actionable insights while promoting capacity-building initiatives that empower stakeholders throughout Pakistan and beyond.

Our endeavors are of paramount importance as we strive to align our efforts with both national and international climate objectives. We firmly believe that collaboration is essential to fostering resilience in the face of these challenges, and we proactively engage with governmental agencies, academic institutions, and local communities to effectuate meaningful change.

I encourage you to delve into our extensive array of research findings, initiatives, and resources available on this platform. Together, we can forge a sustainable future and ensure that the voices of those adversely affected by climate change are amplified and addressed.

Warm regards,

Muhammad Arif Goheer

Executive Director

Global Climate-Change Impact Studies Centre (GCISC)



NDC 3.0 Consultations

GCISC organized NDC 3.0 Secretariat Meeting with UNICEF and UNDP officials – 27 March 2025

GCISC organized a Meeting with UNICEF and UNDP officials on the progress and update of NDC 3.0 under the Chairmanship of Executive Director, GCISC, at Conference Room, GCISC, Islamabad. Arif Goheer, serving as the National Focal Point for NDCs and Executive Director of GCISC, gave a comprehensive overview that sparked an

engaging discussion on the NDC 3.0 framework. Participants shared varied perspectives, fostering a spirit of collaboration and inclusivity. Goheer emphasized the dedication to ensuring a participatory process in the formulation of NDCs.



NDC 3.0 Secretariat Meeting with UNICEF and UNDP officials



One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by MoCC&EC, GCISC and Planning & Development Department, Government of Gilgit-Baltistan, Gilgit - 18 March 2025

The Planning & Development Department, Government of Gilgit-Baltistan, and the Ministry of Climate Change & Environmental Coordination (MoCC&EC) jointly organized a stakeholder consultation workshop on NDC 3.0. Arif Goheer, National Focal Point for NDCs and Executive Director, GCISC, delivered a detailed presentation,

initiating a dynamic discussion on the NDC 3.0 framework. Representatives from key departments and development partners offered diverse insights, strengthening a collaborative and inclusive approach. Goheer reaffirmed the commitment to a participatory NDC formulation process.



NDC 3.0 Consultation at Planning & Development Department, Sindh, Karachi



One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and Planning & Development Department, Sindh, at Karachi - 12 February 2025

The Executive Director, GCISC Chaired One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and P&D Department, Sindh, Karachi. The NDC 3.0 Provincial Consultation for Sindh was held on February 12, 2025, at the P&D Department to discuss Sindh's role in the Nationally Determined Contribution (NDC) 3.0 process in order to prepare all-inclusive and jointly consulted NDC 3.0. The consultation from Government of Sindh was led by the Chairman P&D Department Sindh and from Ministry of Climate Change &

Environmental Coordination (MoCC & EC), GOP by the Executive Director (ED), Global Climate Change Impact Studies Centre (GCISC). Regarding progress on NDC 2.0 and latest on NDC 3.0 process and the envisaged priorities, the session was led by Mr. Arif Goheer, ED, GCISC, with key discussions involving the Chairman P&D, government officials, and representatives from UNICEF and MOCC&EC. The meeting concluded with a consensus on stronger provincial participation and enhanced collaboration for NDC 3.0 preparation.



NDC 3.0 Consultation at Planning & Development Department, Sindh, Karachi



One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and Planning & Development Department, Balochistan at Quetta - 10 February 2025

The Executive Director, GCISC Chaired One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and P&D Department, Balochistan, Quetta. The consultation meeting on the formulation process of NDC 3.0 by incorporating needs of province of Balochistan was held at the P&D Department, Quetta, on February 10, 2025. The meeting aimed to discuss provincial engagement in NDC 3.0 process in order to prepare an all-inclusive and jointly consulted NDC 3.0, to gauge progress made under NDC 2.0, sectorial priorities, existing institutional arrangements, data collection mechanisms, and climate adaptation and mitigation strategies. Mr. Arif Goheer provided an overall overview of

prevailing global climate challenges, international cooperation under the Paris Climate Agreement, and the evolution of NDCs. He explained details of Pakistan's submission under NDC 1.0 and NDC 2.0 besides its emission reduction targets, adaptation goals, and sectoral ambitions. He urged the provincial government to establish working groups in alignment with federal working groups and ensure an inclusive approach in identifying needs and priorities. The meeting concluded with a strong consensus on the importance of provincial ownership in climate action and the urgent need for coordinated efforts in preparing NDC 3.0.



NDC 3.0 Consultation at Planning & Development Department, Balochistan, Quetta



One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and Planning & Development Department, Khyber Pakhtunkhwa at Peshawar - 03 February 2025

The Executive Director, GCISC Chaired One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and P&D Department, Khyber Pakhtunkhwa at Peshawar. Mr. Muhammad Arif Goheer

presented an overview of the NDC framework and emphasized Pakistan's commitments under the Paris Agreement and the rationale for updating the NDCs 3.0.

One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and P&D Department, AJ&K, Muzaffarabad, January 28, 2025

The Executive Director, GCISC Chaired One-Day Consultation Meeting on NDC 3.0 Preparation, being organized by GCISC and P&D Department, AJ&K at Muzaffarabad. Mr. Muhammad Arif Goheer presented an

overview of the NDC framework and emphasized Pakistan's commitments under the Paris Agreement and the rationale for updating the NDCs 3.0.



Consultative Workshop on Nationally Determined Contributions NDC 3.0 Preparation Process,

At P&DD, Muzaffarabad on 28th January, 2025





GCISC and PPIB organized Inception Meeting of Mitigation Working Group for Preparation of Nationally Determined Contributions (NDCs) 3.0 at PPIB Head Office, Islamabad - January 24, 2025

GCISC and PPIB organized Inception Meeting of Mitigation Working Group for Preparation of Nationally Determined Contributions (NDCs) 3.0 at PPIB Head Office, Islamabad. Participants from relevant provincial government departments, universities and federal

departments attended the meeting. Mr. Muhammad Arif Goheer presented an overview of the NDC framework and emphasized Pakistan's commitments under the Paris Agreement and the rationale for updating the NDCs 3.0.



Mitigation Working Group Meeting



NDC 3.0 Consultation Workshop jointly organized by GCISC and Planning and Development Department, Government of Punjab, Lahore - January 22, 2025

Muhammad Arif Goheer, Executive Director, GCISC Chaired the workshop and Consultation on Nationally Determined Contributions-3.0 (NDC 3.0) at AKS Auditorium, Planning & Development

Department, Lahore. Mr. Muhammad Arif Goheer presented an overview of the NDC framework and emphasized Pakistan's commitments under the Paris Agreement and the rationale for updating the NDCs 3.0.



NDC 3.0 Consultation at AKS Auditorium, Planning & Development Department, Lahore.



Collaborations

Online course was launched exclusively for women across Pakistan, Brazil, Nepal, Bangladesh, and Uzbekistan. Spearheaded by GCISC Pakistan, in collaboration with UNIFEI Brazil - 17 March 2025:

With a strong focus on capacity building for female researchers, the "Introduction to Atmospheric Science: A Look into the Southern and Northern Hemispheres" online course was launched exclusively for women across Pakistan, Brazil, Nepal, Bangladesh, and Uzbekistan on 17 March 2025. Spearheaded by GCISC Pakistan, in

collaboration with UNIFEI Brazil, this 60-hour international program equips participants with expertise in meteorology, extreme events, monsoon systems, and climate change. Offering hands-on training, digital resources, and global networking, it marks a significant step toward fostering gender-inclusive scientific research.





GCISC in collaboration with Department of Statistics and Mathematics, University of Sargodha (UoS) jointly organized a two-day interdisciplinary seminar on “Environment and Climate Change and Community Interactions” from February 18-19, 2025:


Global Climate-Change Impact Studies Centre (GCISC) in collaboration with Department of Statistics and Mathematics, University of Sargodha (UoS) jointly organized an interdisciplinary seminar on “Environment and Climate Change and Community Interactions” being held in the University of Sargodha (UoS) from February 18-19, 2025. This seminar aimed to enhance the knowledge of students of various department of the Sargodha university in the field of climate change, monsoon related climate extremes and air pollution in the context of Pakistan. Three scientists from GCISC participated as keynote speakers in the seminar and delivered presentations on the following topic:

1. Mr. Shahbaz Mehmood, ‘Climate Change Scenarios for Pakistan’
2. Mr. Muhammad Adnan, ‘Role of Statistics in Climate Change Research and Brief Overview of Climate Extreme’
3. Dr. Kaleem Anwar Mir, ‘Air Pollution and Environmental Impact’

GCISC stressed the need to initiate the research department on climate change at the university and assured full technical support of GCISC in establishing the institute of Environmental Sciences and Climate Change.



Prof. Dr. Qaisar Abbas, Vice Chancellor of Sargodha University highlighted the importance of climate change and its impact on different socio economic on Pakistan in his address. He acknowledges the GCISC’s contribution towards the climate change research. Later at the closing session Vice Chancellor also acknowledge the guest speaker’s effort in enhancing the capacity of the university students in the field of climate change and presented the souvenir to them.


**UNIVERSITY OF
SARGODHA**


**ORIC**
OFFICE OF RESEARCH, INNOVATION
AND COMMERCIALIZATION


Seminar


**ONE DAY INTERDISCIPLINARY COMMUNITY
INTERACTION ON CLIMATE CHANGE**


 18, 19 February 2025 at 09:00 AM  MFK Noon Business School

**Prof. Dr. Zahoor Ahmad**
Chairman
Department of Statistics






**Mr. Shehbaz Mehmood**
HOD, Climatology
GCISC, Islamabad

**Dr. M Ashraf**
Associate Professor
Department of Maths

**Mr. M Adnan**
Senior Scientific Officer
GCISC, Islamabad

**Dr. Kalim mir**
Scientific Officer
GCISC, Islamabad

Organized by: Department of Statistics &
Department of Mathematics

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Visit of Member WAPDA to GCISC, February 19, 2025

Mr. Azam Joya, Member WAPDA paid a visit to the Global Climate-Change Impact Studies Centre (GCISC) to explore avenues for future collaboration. During the meeting with the Mr. Arif Goheer, Executive Director of GCISC, comprehensive discussions took place regarding potential areas of partnership, with a particular focus on climate change and water resources research. Both parties expressed a strong commitment to working together on

initiatives aimed at addressing the challenges posed by climate change. Their shared vision involves pooling expertise and resources to enhance research, develop innovative solutions, and contribute to sustainable management of water resources in Pakistan. This collaborative effort marks an important step in tackling climate-related issues and fostering resilience within the country.



Visit of Member WAPDA to GCISC

GCISC & Centre of Excellence in Water Resources Engineering (CEWRE), University of Engineering and Technology (UET), Lahore, co-organized International Conference on Water Security & Climate Change 2025 at UET Lahore, 29-30 January 2025

GCISC & Centre of Excellence in Water Resources Engineering (CEWRE), University of Engineering and Technology (UET), Lahore, co-organized International Conference on Water Security & Climate Change 2025 at UET Lahore from 29-30

January 2025. GCISC scientist presented key note lecture on “High-Resolution Climate Projections Using CMIP6 Data for Planned Adaptations and Informed Policy Decisions in Pakistan”.



Highlights from GCISC and UET Lahore Conference



Meeting between Executive Director, GCISC and Vice Chancellor, Karakorum International University (KIU), Gilgit, January 6, 2025

GCISC and Karakorum International University agreed to work to address the challenges of climate change. The aim of this partnership is to promote climate research, build capacity and contribute to climate policy making. This was decided in a meeting between the representatives of both institutions. In which Mr. Muhammad Arif Goheer, Executive Director, GCISC with his team met with Vice Chancellor KIU Professor Dr. Attaullah Shah and senior faculty of the University. The Executive Director of GCISC praised Jamia Karakoram for its various initiatives in climate research

and awareness. presented a detailed overview of national and international partnerships in climate research and communication. At the end of the meeting, both institutions also agreed to sign a Memorandum of Understanding (MoU). It aims to promote collaborative research, policy dialogues and student and faculty capacity building initiatives. The two institutions also agreed to further enhance their activities in climate education and research. At the end of the meeting, the Executive Director handed over the shield to Vice Chancellor, KIU.



Muhammad Arif Goheer, Executive Director, GCISC presenting shield to Dr. Attaullah Shah, Vice Chancellor, Karakorum International University, Gilgit on his visit to GCISC



| Participation in Activities

GCISC Participation in an introductory webinar for the UNU TOT program - March 13, 2025

Ms. Nuzba Shaheen, Senior Scientific Officer, participated in an introductory webinar for the UNU ToT program. The session provided an overview of the training

structure, objectives, and key expectations for participants. It aimed to prepare attendees for effective engagement in the upcoming capacity-building activities.

GCISC's officer served as a Resource Person at the Civil Services Academy Lahore

Ms. Nuzba Shaheen, Senior Scientific Officer, served as a Resource Person at the Civil Services Academy Lahore, delivering a session on climate change impacts on agriculture in Punjab. She provided government officers (BPS 18-19) with

insights into climate risks, adaptation strategies, and policy responses. The session aimed to enhance their capacity for climate-resilient agricultural planning and decision-making.

Meeting convened between the GCISC and The Asia Foundation (TAF) to discuss potential collaboration in climate research

Mr. Muhammad Ijaz and Ms. Nuzba Shaheen convened a meeting with The Asia Foundation (TAF) at GCISC, regarding potential collaboration in climate research, governance, and capacity building. The meeting explored joint initiatives on the gendered effects of climate change, water

resource management, climate resilience training, and pilot projects focused on vulnerable communities. Additionally, the need for an MoU between GCISC and TAF was discussed to formalize cooperation and facilitate long-term engagement on climate resilience and policy support.

GCISC participation in a Training Workshop on Resource Mobilization for Climate-Resilient WASH, being organized by SDPI - March 11, 2025

Mr. Aftab Ahmad Khan, Scientific Officer participated in a Training Workshop on Resource Mobilization for Climate-Resilient WASH, March 11, 2025, being organized by SDPI. The workshop aimed to enhance stakeholders' capacity in Climate-Resilient WASH (CR-WASH) and advocate for its integration into budgets. It focused on resource mobilization, policy alignment,

and sustainable water management. Participants explored alternative funding sources and strategies for effective implementation. Collaboration with governments was emphasized to streamline data and develop national WASH accounts. The need for a holistic and coordinated approach to water and sanitation challenges was underscored.



Ms. Aisha Humera Ch, Secretary Ministry of Climate Change & Environmental Coordination (MoCC&EC), visited the Global Climate-Change Impact Studies Centre (GCISC) – 4 March 2025

Ms. Aisha Humera Ch, Secretary Ministry of Climate Change & Environmental Coordination (MoCC&EC), accompanied by Mr. Zulfiqar Younis, Additional Secretary of MoCC&EC, visited the Global Climate-Change Impact Studies Centre (GCISC). Mr. Muhammad Arif Goheer, Executive Director GCISC, provided a comprehensive briefing on the center's ongoing initiatives and the process of preparing national greenhouse

gas (GHG) inventories. The Secretary expressed great interest and appreciated GCISC's contributions to climate research and policy. She also underscored the urgent need to strengthen the center's technical capabilities and upgrade its server infrastructure to enhance the performance of existing digital platforms and hosting of National Carbon Registry.



Ms. Aisha Humera Ch, Secretary MoCC&EC, Mr. Zulfiqar Younis, Additional Secretary MoCC&EC, Mr. Muhammad Arif Goheer, Executive Director GCISC and GCISC team



Executive Director, GCISC chaired meeting for preparation of Annual Research Plan of Climatology Section, GCISC – 3 March 2025

The Executive Director of GCISC chaired a pivotal meeting dedicated to shaping the Annual Research Plan for the Climatology Section. During the session, Climatology Scientists presented their detailed proposals and outlined their research objectives, which aim to address critical climate-related challenges. The meeting provided a platform for collaborative discussions, encouraging innovative ideas

and ensuring that the research plan aligns with GCISC's overarching mission to advance climate science and policy development. This strategic engagement highlighted the institution's commitment to fostering excellence in climatological research and supporting Pakistan's efforts to fulfill its national and international climate commitments.



GCISC's Officer delivered a Lecture at Civil Services Academy (CSA), Lahore on Climate Change-Induced Flooding in Punjab, Pakistan – 28 February 2025

Ms. Qurat Ul Ain Ahmed, Senior Scientific Officer/ Head Water Resources and Glaciology Section, GCISC Delivered a lecture on climate change-induced flooding in Punjab, Pakistan during the MCMC 11 course at the Civil Services Academy (CSA), Lahore. The session covered the causes,

impacts, and mitigation strategies for climate-induced flooding. The lecture provided policymakers and civil servants with critical insights into the hydrological challenges of Punjab and strategies to enhance flood resilience in vulnerable areas.



GCISC Scientist presentation on “Harnessing AI for Climate-Resilient Water Resource Management in Pakistan” at 3rd WAPDA conference “Application of Artificial Intelligence for Water Resource Planning and Management” at WAPDA Auditorium, WAPDA House, Lahore, 27 February 2025

GCISC actively participated in the workshop and Ms. Qurat Ul Ain Ahmed, Senior Scientific Officer/ Head Water Resources and Glaciology Section, GCISC delivered presentation on “Harnessing AI for Climate-Resilient Water Resource Management in Pakistan” at 3rd WAPDA conference “Application of Artificial Intelligence for Water Resource Planning and Management”, being organized by WAPDA

at WAPDA Auditorium, WAPDA House, Lahore, 27 February 2025. The presentation covered AI-driven hydrological forecasting, flood risk assessment, and water distribution optimization. Discussions emphasized the role of AI in improving climate adaptation strategies and strengthening Pakistan’s water management policies.





Mr. Arif Goheer, Executive Director of the Global Climate-Change Impact Studies Centre (GCISC), represented Pakistan at the 62nd Session of the Intergovernmental Panel on Climate Change (IPCC), convened in Hangzhou, China, from February 24 to 28, 2025

Mr. Arif Goheer, Executive Director of the Global Climate-Change Impact Studies Centre (GCISC), represented Pakistan at the 62nd Session of the Intergovernmental Panel on Climate Change (IPCC), convened in Hangzhou, China, from February 24 to 28, 2025. This distinguished assembly of leading climate scientists, policymakers, and subject-matter experts engaged in rigorous deliberations on recent advancements in

climate science, policy imperatives, and the strategic direction of the IPCC's initiatives. The plenary session focused on finalizing the draft outlines of the Seventh Assessment Report (AR7), with over 400 delegates reviewing its structure, timelines, and financial frameworks. His participation underscores Pakistan's enduring commitment to global climate governance.



GCISC and CRCC/NRSP - Stakeholder Consultation-Dairy Productivity and Emission Reduction Programme, February 20, 2025

GCISC and CRCC/NRSP meeting to discuss collaboration with USAID and the Global Dairy Platform, under series of stakeholder consultations to further develop the Dairy Productivity and Emissions Reduction Programme for Pakistan. Given GCISC's role in climate research and policy analysis, GCISC provide his insights in ensuring that this programme aligns with Pakistan's broader climate strategies and international commitments. GCISC's expertise and insights in climate modelling, emission trends, and adaptation strategies will be instrumental in shaping targeted interventions for a more sustainable and productive dairy sector. The objective of Consultation on Dairy Productivity and

Emission Reduction Programme was to represent GCISC in discussions aimed at improving dairy sector sustainability. Their contributions focused on enhancing productivity while reducing greenhouse gas emissions through science-based approaches and innovative climate solutions. A key outcome of their engagement was advancing collaboration between GCISC and CRCC, leading to the development of a Memorandum of Understanding (MoU). This partnership seeks to foster research, policy recommendations, and practical interventions for a low-carbon and climate-resilient dairy industry.



GCISC and CRCC Team



Arif Goheer delivered a talk at an event organized by Potohar Organization for Development Advocacy (PODA) and WaterAid, focusing on the importance of gender-inclusive Nationally Determined Contributions (NDCs) - February 19, 2025

Arif Goheer delivered a talk at an event organized by Potohar Organization for Development Advocacy (PODA) and WaterAid, focusing on the importance of gender-inclusive Nationally Determined Contributions (NDCs). The presentation highlighted the critical need to integrate gender-responsive policies within climate action frameworks, ensuring that women's voices and contributions are recognized in

climate mitigation and adaptation strategies. The role of equitable resource allocation, capacity building, and policy reforms to strengthen gender mainstreaming in NDCs was emphasized. The discussion also explored best practices and challenges in incorporating gender perspectives into national and international climate commitments.



Consultation workshop – Advancing Gender-Responsive



GCISC meeting with CRCC team to discuss future way of collaboration – 18 February 2025

GCISC and CRCC team held a pre-meeting to explore feasible way of research and coordination with USAID and the Global Dairy Platform as part of a series of stakeholder consultations aimed at advancing the Dairy Productivity and Emissions Reduction Programme for

Pakistan. Leveraging its expertise in climate research and policy analysis, Mr. Muhammad Arif Goheer, Executive Director, GCISC given valuable insights to ensure the programme aligns with Pakistan's overarching climate strategies and international commitments.



GCISC Meeting with CRCC Team



Muhammad Arif Goheer delivered a keynote address on Potential of Carbon Market Policy Guidelines as Guest of Honor at event on "Carbon Market Policy: Pakistan's Commitment to Net Zero", being organized by ACCA – 13 February 2025

At the Pakistan Leadership Conversation (PLC 2025), hosted by ACCA under the theme "From Surviving to Thriving," the Executive Director of GCISC delivered a keynote address on "Carbon Market Policy:

Pakistan's Commitment to Net-Zero." He underscored the critical role of AI and carbon market policies in driving a sustainable and resilient future.



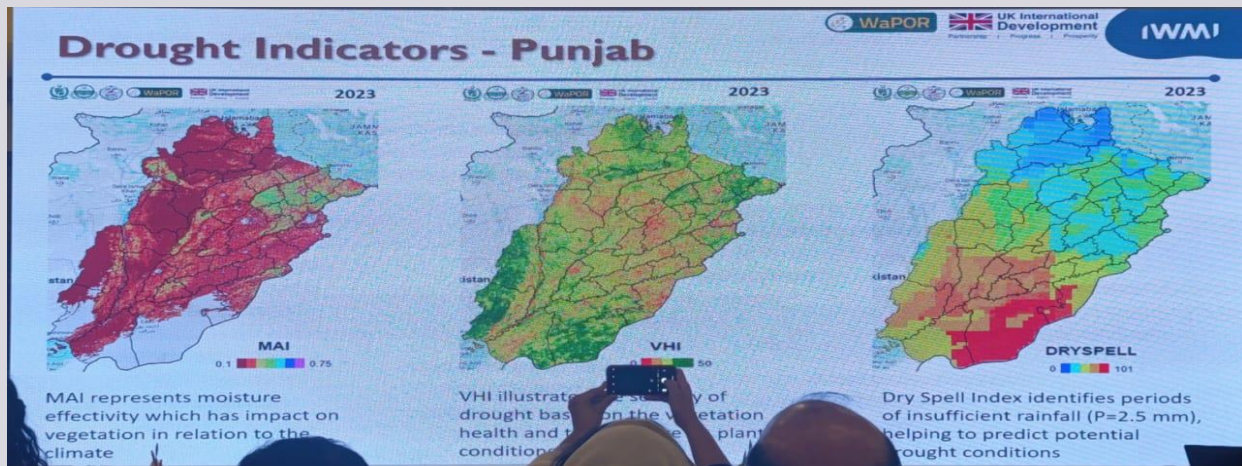
Muhammad Arif Goheer delivering a keynote address as Guest of Honor



GCISC's officer participated in the Launching Ceremony of Pakistan Drought Management System (PakDMS) – 10 February 2025

Ms. Qurat Ul Ain Ahmed, Senior Scientific Officer/ Head Water Resources and Glaciology Section, GCISC attended the official launch of the Pakistan Drought Management System (PakDMS), being organized by Pakistan Meteorological Department (PMD) and IWMI at Marriott,

Islamabad, a significant step in enhancing drought monitoring and response capabilities. The event featured discussions on the system's role in improving early warning mechanisms, data sharing, and policy integration for climate resilience in Pakistan.





GCISC's officers participated in DawnMedia's 2-Day Climate Conference - 'Breathe Pakistan' – 6-7 February 2025

GCISC's senior technical officers participated in DawnMedia's 'Breathe Pakistan' Climate Conference, a two-day event addressing Pakistan's environmental challenges, including air pollution, water scarcity, and climate resilience strategies. The conference brought together environmentalists, policymakers, and researchers to discuss sustainable solutions for a greener Pakistan. GCISC contributed insights on climate-induced hazards and adaptation measures.





Mr. Muhammad Arif Goheer, Executive Director, GCISC delivered presentation at Workshop on “Climate Resilient and Low Carbon Agriculture in Pakistan”, being organized by Asian Development Bank at Marriott Hotel, Islamabad. February 06, 2025:

Mr. Muhammad Arif Goheer, Executive Director, GCISC delivered presentation on “Role of Agriculture in Achieving Pakistan’s NDC Targets” at Workshop on “Climate

Resilient and Low Carbon Agriculture in Pakistan”, being organized by Asian Development Bank at Marriott Hotel, Islamabad.



Mr. Muhammad Arif Goheer, Executive Director, GCISC delivering presentation



1st NDC Donor Coordination online meeting at GCISC - January 31, 2025

The 1st Donor Coordination Meeting on NDC 3.0 Preparation of Pakistan commenced on January 31, 2025 with opening remarks from Ms. Khalida Bashir, Joint Secretary (Climate Finance) and Focal Person for NDC, Ministry of Climate Change and Environmental Coordination (MoCC&EC). She welcomed all participants, emphasizing the importance of Pakistan's commitment to climate action and the critical role of development partners in achieving the goals of NDC 3.0. Ms. Khalida Bashir highlighted the need for integrated and collaborative approaches to address the climate challenges effectively.

Development partners shared their ongoing activities and commitments to support Pakistan's climate objectives. Participants engaged in a constructive online discussion, offering insights and seeking clarifications on Pakistan's NDC 3.0 framework. Key areas highlighted included the need for stronger

alignment of donor-funded projects with NDC priorities, improved coordination mechanisms, and leveraging climate finance opportunities.

Mr. Muhammad Arif Goheer, NDC Focal Person and Executive Director of the Global Change Impact Studies Centre (GCISC), outlined the roadmap for the successful completion of NDC 3.0. He stressed the importance of continuous donor engagement, capacity-building efforts, and robust data systems to support the development and implementation phases.

The meeting concluded with a reaffirmation of the collective ambition to work collaboratively towards the successful development and implementation of NDC 3.0. The NDC Focal Person thanked all participants for their active engagement and valuable inputs, expressing optimism for a joint and coordinated effort in achieving Pakistan's climate objectives.



NDC Donor Coordination meeting at GCISC



GCISC's team participated and presented a paper during 3rd International Conference on Hydrology and Water Resources – 29-30 January 2025

GCISC team has presented a paper titled ***“High-Resolution Climate Projections Using CMIP6 Data for Planned Adaptations and Informed Policy Decisions in Pakistan”*** during the conference being co-organized by Centre of Excellence in Water Resources Engineering (CEWRE), University of Engineering and Technology (UET), Lahore and GCISC. The conference focused on water security and climate change, bringing together experts to discuss hydrological modeling, climate risk assessment, and water resource management strategies. The event highlighted state-of-the-art methodologies in adaptive water planning and the application of AI in hydrology. GCISC representative from water section also contributed in a panelist session on need and importance of time and location-specific climate projections analysis for informed planning for sustainable future water availability.





Executive Director delivered insightful Presentation at Workshop on Adaptive Social Protection, being organized by GIZ ASP in collaboration with Punjab Social Protection Authority (PSPA) at Marriott Hotel, Islamabad, January 27, 2025

The Executive Director Muhammad Arif Goheer, GCISC delivered an insightful presentation on "Key Issues in Climate Change and Disasters" in the Workshop on

Adaptive Social Protection being organized by GIZ ASP in collaboration with Punjab Social Protection Authority (PSPA) at Marriott Hotel, Islamabad.



Muhammad Arif Goheer at Social Protection Event GIZ



GCISC's officers participated in the Roundtable Consultation on Climatic Risks and Intersectionalities in HKH Region – 27 January 2025

The roundtable consultation took place at Ambassador Hall, Marriott Hotel, Islamabad, organized by the International Centre for Integrated Mountain Development (ICIMOD), UNDP, and the GLOF Team/MoCC. GCISC's senior technical officers actively participated in roundtable consultation focusing on climatic risks and

intersectional ties in the Hindu Kush Himalaya (HKH) region. The session brought together national and international experts who discussed vulnerabilities, cross-border cooperation, and adaptation strategies. GCISC presented its research findings on glacier melt projections and their implications for regional water security.



GCISC's senior officer participated in an Online ACWA Portal Consultative Workshop – 22 January 2025

Ms. Qurat Ul Ain Ahmed, Senior Scientific Officer/ Head Water Resources and Glaciology Section, GCISC attended the consultative workshop on the ACWA Portal, online being organized by Asian Development Bank (ADB). The session

focused on enhancing the usability and application of the ACWA Portal for water management and climate resilience. Participants discussed integrating real-time climate data with decision-support tools for improved water governance in Pakistan.



Meeting with Boston Consulting Group at GCISC, January 20, 2025

Muhammad Arif Goheer, the Executive Director of the Global Climate Change Impact Studies Centre (GCISC), held a meeting with representatives from the Boston Consulting Group (BCG) at the GCISC office. The discussion focused on initiatives aimed at training young volunteers to enhance their skills and knowledge in climate change-related areas. Additionally,

the meeting explored opportunities for future collaboration between GCISC and BCG, emphasizing joint efforts to address climate challenges and promote sustainable development. This partnership aims to leverage expertise from both organizations to create impactful programs and strategies.



Boston Consulting Group Meeting at GCISC



GCISC consulted with KPK Stakeholders on Disaster Risk Reduction and Forest Management – 20 January 2025

Mr. Aftab Ahmad Khan, Scientific Officer GCISC consulted with KPK stakeholders on Disaster Risk Reduction and Forest Management, on 20th January 2025 at Civil Secretariat Peshawar. The objective was to develop a multi-hazard early warning system using advanced climate modeling, AI, and supercomputing for precise weather forecasting in KPK. The discussions also focused on afforestation and biodiversity

conservation to enhance carbon sequestration and generate carbon credits. GCISC's role in climate risk assessments and adaptation strategies was emphasized. The initiative aims to strengthen disaster preparedness and long-term climate resilience. Stakeholders committed to science-driven solutions for sustainable development in the region.



Muhammad Arif Goheer, Executive Director, GCISC participated in Roundtable on ‘Addressing the Food Systems-Climate Change Nexus for a Resilient Future’, organized by WWF-Pakistan and the Global Alliance for Improved Nutrition (GAIN). January 15, 2025

NDCs Focal Point of Pakistan, Muhammad Arif Goheer presented Pakistan’s progress on the NDC 3.0 and shared that the integration of the food and agriculture sectors is central to the country’s planning. The roundtable aimed to foster dialogue and integrate the key actionable strategies at the intersection of food systems, nutrition and climate change, given the upcoming Nationally Determined

Contributions (NDCs) under the Paris Agreement that is being prepared.

The roundtable brought to debate the priority areas and goals which could help achieve better food production in the country. It was proposed to improve access to nutritious and sustainable foods through targeted subsidies and infrastructure investments for underserved markets, focusing on gender inclusivity.



Executive Director, GCISC at the Event



GCISC Meeting with Sustainable Development Policy Institute (SDPI) and the Pakistan Renewable Energy Coalition (PREC) at GCISC, January 14, 2025

SDPI and PREC meeting with Mr. Muhammad Arif Goheer and acknowledged the GCISC leading efforts in developing an inclusive NDC, especially in making civil society a part of this process. These efforts can eventually lead to climate action at the community level.

Following GCISC, SDPI and PREC discussions at the workshop on Developing Inclusive

Climate Commitments: NDCs 3.0 for Pakistan, held on December 18, 2024, at the Marriott Hotel, Islamabad, SDPI and PREC shared their kind submissions from the workshop in form of a position paper that PREC has developed. The position paper highlights the shared stance of member organizations on “NDC 3.0 – Translating Climate Action Needs into Ambitions”.



GCISC Meeting with SDPI & PRECES at GCISC



GCISC's officer participated in the Training Workshop on Handling Climate Data – 7-8 January 2025

This training workshop provided an in-depth understanding of climate data handling for researchers and professionals in higher education. The session aimed to enhance participants' ability to manage, analyze, and interpret climate data sets effectively. Attendees learned to explore various climate data sources, access and download datasets, and interpret climate model outputs. The workshop also introduced participants to key climate data platforms, visualization tools, and scripting techniques for data analysis. Hands-on exercises allowed participants to work with complex climate data formats and apply analytical tools for climate research, teaching, and reporting. Additionally, an overview of climate science, Pakistan's climate, and fundamental climate modeling concepts was provided to strengthen the participants' technical foundation.





Workshop Jointly organized by GCISC and GIZ: Launch of the Faculty Development Program for Climate Change Courses, January 7, 2025

GCISC in collaboration with GIZ Launched Faculty Development Program for Climate Change Courses. The initiative, spearheaded by the GCISC was inaugurated here at a workshop at Ramada. Muhammad Arif Goheer, Executive Director of GCISC, emphasized Pakistan's vulnerability to climate change. "The increasing frequency and intensity of floods, droughts, rising temperatures, and glacier melt pose grave threats to agriculture, water resources, and livelihoods," Goheer noted. He stressed the importance of equipping future leaders with the knowledge and skills to address these challenges. The workshop unveiled six new courses developed in collaboration with the University of Kassel, the Potsdam

Institute for Climate Impact Research (PIK), and GIZ Pakistan, with funding from the German Federal Ministry for Economic Cooperation and Development (BMZ).

In opening remarks at the event, the Executive Director, GCISC said that "I am especially delighted that the launch of the course "Navigating Climate Data" is taking place today. This course, with its myriad benefits, addresses the critical need to empower educators with the ability to understand, analyze, and apply climate data. It equips them with tools to bridge the gap between climate science and actionable insights, fostering a deeper understanding of our rapidly changing world".



Muhammad Arif Goheer, Executive Director, GCISC at Curriculum Courses Launch Event



AIOU Students visited GCISC to get insights on GHG, January 07, 2025

A group of PhD students from Allama Iqbal Open University (AIOU), currently enrolled in the Greenhouse Gas (GHG) Inventory Course, visited the Global Climate Change Impact Studies Centre (GCISC). During their visit, the students had the opportunity to engage with the GCISC team, who generously shared their expertise and insights. Sectoral experts involved in the preparation of Pakistan's GHG inventory provided in-depth knowledge, offering the

students a comprehensive understanding of the methodologies and processes involved in compiling the inventory. This interaction aimed to enhance the students' practical knowledge and foster their capacity to contribute to climate change mitigation efforts in the future. The faculty and students express their gratitude to the Executive Director of GCISC for dedicating their valuable time and efforts.



GCISC and AIOU Team Meeting

The Water Section unveiled a comprehensive Long-Term Vision and Research Plan for 2025 during a meeting presided over by the Executive Director of GCISC – 1 January 2025

The Water Resources and Glaciology Section presented a detailed long-term vision and research plan in full staff meeting of GCISC, outlining key objectives, methodologies, and anticipated outcomes for future research at GCISC. This session

set the foundation for strategic planning and collaborative research initiatives, engaging key researchers and policymakers. Discussions focused on strengthening data-driven climate research and enhancing Pakistan's adaptation strategies.



International Recognition and Capacity Building

- Two distinguished scientists from GCISC have been accorded the prestigious honor of being selected as Lead Authors for the IPCC AR7 Report on Short-Lived Climate Forcers (SLCFs). They actively contributed to the deliberations of the First Lead Author Meeting (LAM1), convened from March 24 to 26, 2025 held in Bilabo, Spain. The SLCF report aspires to furnish comprehensive guidance on anthropogenic emissions of Short-Lived Climate Forcers, explicitly excluding secondary human-induced substances from its scope.
- Mr. Arif Goheer, Executive Director of the Global Climate-Change Impact Studies Centre (GCISC), represented Pakistan at the 62nd Session of the Intergovernmental Panel on Climate Change (IPCC), convened in Hangzhou, China, from February 24 to 28, 2025.
- Mr. Muhammad Ijaz is selected as Technical Expert Reviewer by UNFCCC for in-country review of Italy's first biennial transparency report (BTR).
- Ms. Nuzba Shaheen is selected for The prestigious Australia Awards Short Course on water, environment, and climate change challenges. The program focuses on sustainable urban development and addressing climate change impacts. Core learning activities will be conducted at the University of Technology Sydney from April 7-17, 2025, followed by applied learning activities online in late May 2025.
- Ms. Nuzba Shaheen is shortlisted for the Training of Trainers (ToT) program by the United Nations University (UNU) among only five participants selected from across Pakistan. The program focuses on Climate Risk Modeling (CRA) and Adaptation Risk Management (ARM) to strengthen national capacities for climate adaptation strategies.



Memorandum of Understanding

Global Climate-Change Impact Studies Centre (GCISC) and the Climate Resourcing Coordination Centre (CRCC) have signed an MoU – 5 March 2025

The Global Climate-Change Impact Studies Centre (GCISC) and the Climate Resourcing Coordination Centre (CRCC) have signed an MoU to enhance collaboration on climate science, GHG accounting, and climate finance. The partnership will provide research and technical insights, develop institution-wide GHG inventories, and ensure compliance with

international standards. It also aims to engage stakeholders through dialogues, trainings, and workshops while identifying funding sources and supporting proposal development for climate financing. This collaboration will strengthen Pakistan's efforts in emissions reduction, climate adaptation, and sustainable development.



Mr. Arif Goheer, Executive Director, GCISC and Ms. Kashmala Kakakhel, Strategic Director, CRCC signed MoU



GCISC and Karakoram International University (KIU) signed an MOU at GCISC, Islamabad, January 31, 2025

GCISC and Karakoram International University (KIU) signed an MOU to collaborate on research addressing glacier melting and develop strategies to mitigate its effects, ensuring the protection of glaciers and affected communities. It aims

to promote collaborative research, policy dialogues and student and faculty capacity building initiatives. The two institutions also agreed to further enhance their activities in climate education and research.



Executive Director, GCISC and VC, Karakoram International University (KIU) Signed an MOU



GCISC and Islamic Relief Pakistan signed a MOU, January 07, 2025

The Global Climate-Change Impact Studies Centre (GCISC) and Islamic Relief Pakistan have entered into a Memorandum of Understanding (MoU) to address the pressing challenges posed by climate change. This partnership aims to foster collaboration on various projects that focus on climate resilience, adaptation, and mitigation strategies. By combining GCISC's

expertise in climate research and Islamic Relief Pakistan's humanitarian efforts, the two organizations seek to develop innovative solutions, raise awareness, and implement impactful initiatives to combat climate change and its effects on vulnerable communities. This MoU represents a significant step towards building a sustainable future for Pakistan.



MoU Signing ceremony between GCISC and IRP

Global Climate-Change Impact Studies Centre (GCISC) and the University of Sargodha (UOS) have signed an MoU – 10 March 2025

The Global Climate-Change Impact Studies Centre (GCISC) and the University of Sargodha (UOS) have formalized a strategic partnership founded on their shared commitment to fostering educational, social, and economic advancement in Pakistan. This collaboration underscores the mutual intention of both institutions to

collectively plan, develop, execute, and offer consultancy on impactful projects that contribute to the betterment of society on a broader scale.

Recognizing the alignment of their objectives, particularly in promoting climate-resilient development, GCISC and UOS aim to leverage their complementary



strengths and resources. This synergy has the potential to amplify their combined impact in addressing key challenges and advancing sustainable development goals.

In light of these overarching goals and the shared vision for national progress, both institutions have committed to collaborating on research and related activities. This partnership is designed to

Their unified efforts will emphasize fostering innovative solutions, knowledge dissemination, and capacity building in areas of shared interest.

support and drive advancements in areas of mutual interest, thereby contributing to the creation of a more informed, resilient, and sustainable future for Pakistani society.



**Mr. Muhammad Arif Goheer, Executive Director GCISC & Dr Irfan Ashraf, Chairman,
Department of Forestry, University of Sargodha**



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GLOBAL CLIMATE-CHANGE
IMPACT STUDIES CENTRE





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