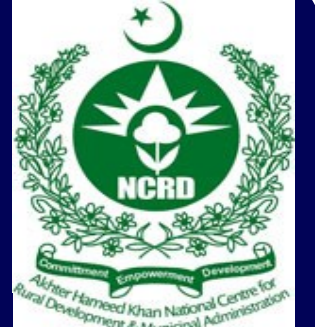




Establishment Division

GOVERNMENT OF PAKISTAN  
ESTABLISHMENT DIVISION  
AKHTAR HAMEED KHAN NATIONAL CENTRE FOR RURAL  
DEVELOPMENT (AHKNCRD)  
ISLAMABAD



Commitment Empowerment Development  
Akhtar Hameed Khan National Centre for  
Rural Development & Municipal Administration

# NEWSLETTER

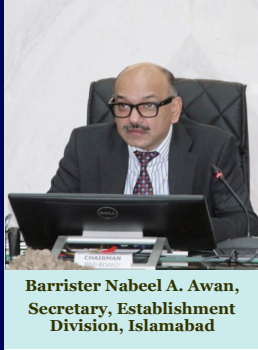
Vol: IX Issue: I Jan-Mar 2026

## VISION

“Socio-economic empowerment of rural and the under-privileged communities for sustainable development”

## MISSION

“Knowledge-based capacity building of the Public & development sectors engaged in rural development”



Barrister Nabeel A. Awan,  
Secretary, Establishment  
Division, Islamabad



View of the Main Building of NCRD



Mr. Israr Mohammad Khan,  
Director General,  
NCRD, Islamabad

## Expert Viewpoint

**Mr. Muhammad Arif Rasheed Goheer | Executive Director | Global Climate Change Impact Studies Centre (GCISC) | Ministry of Climate Change and Environmental Coordination (MoCC & EC) | Islamabad**

### Inside This:

Stories	Pg. No.
Expert Viewpoint : In conversation with Mr. Arif Rasheed Goheer	1,6 & 7
Training Programmes conducted during Jan-Mar, 2026	2-4
Spring blooms at NCRD	5
The Legacy of Dr. Akhtar Hameed Khan in Participatory Development	8



Ms. Maira Razzaq (Assistant Director, NCRD) interviewing Mr. Arif Rasheed Goheer

### Introduction:

Mr. Muhammad Arif Goheer is a highly accomplished scientist and researcher in the field of Agronomy/Agro-Climatology. With prestigious fellowships and affiliations with different international climate change organizations and government entities, he has gained expertise in GHG and Climate Change related science. Currently serving as Executive Director of the Global Climate-Change Impact Studies Centre (GCISC), Ministry of Climate Change & Environmental Coordination, Islamabad. Mr. Muhammad Arif Goheer has held key positions within the organiza-

tion, including Head Agriculture & Coordination and Director (Admin & Finance). His dedication to mentoring the next generation is evident through supervising numerous PhD and M.Phil students from international and national universities.

Mr. Goheer is a coordinator and lead contributor in the compilation of Greenhouse Gas Inventories (GHG-I), preparation of National Communications (NCS)/ Biennial update Reports (BUR) and Nationally Determined Contributions (NDCs). He has also contributed to various IPCC, UNFCCC,

UNEP, FAO, WMO and ICIMOD reports in the capacity of lead author and reviewer. Presently he is a member of UNFCCC Consultative Group of Experts (CGE) in UNFCCC, Member Emission Factor Database (EFDB) in IPCC and Scientific Planning Group (SPG) of Asia Pacific Network for Global Change Research (APN), Japan. His groundbreaking state of the art innovate ideas are in assessing the impacts of climate variability and change on agricultural systems using crop simulation and water management modeling approaches, devising strategies (contd. on page 5)

## Training Course on “Business Management for Small and Medium Enterprises”

In recognition of the vital role played by Small and Medium Enterprises (SMEs) in economic development, employment generation, and local entrepreneurship, NCRD organized a five-day training programme on Business Management for Small and Medium Enterprises during January 05-09, 2026. The programme was aimed at strengthening the managerial capacities of SME owners, managers, and aspiring entrepreneurs who often operate under challenging market conditions and limited resources.

The training programme was designed as a practical, need-based initiative to help participants better understand modern business practices and apply them effectively in their day-to-day operations. Emphasis was placed on real-life business situations, problem-solving, and sustainable growth of enterprises.

The programme covered key areas of business management essential for the efficient functioning of SMEs. The major topics included: SMEs Business Foundations & Strategies; Government

Policies and Initiatives for SME's in Pakistan; Role of SMEs in Generating Employment Opportunities; Navigating the Essentials of Business in Pakistan; From Company Registration to Compliance with FBR & SECP; From Idea to Revenue: A complete road map to Building a successful Busi-

A total of 31 participants from various regions of the country participated in the training course. The programme witnessed active participation from owners and managers of Small and Medium Enterprises, entrepreneurs, and officials associated with enterprise development. The participants represented diverse sectors such as manufacturing, services, trade, and small-scale industries.

A total of eight Resource Persons were invited to deliver the sessions who belonged to the following institutes and departments: Mr. Tariq Mahmood, Director General, PEMRA, Islamabad; Mr. Waleed Nasir, Research and Planning Officer, Ministry of Planning, Development and Special Initiatives, Islamabad; Mr. Atiq-ur-Rehman, Business Consultant, National Institute of Banking & Finance, State Bank of Pakistan, Islamabad; Mr. Muhammad Hassamuddin, CEO GeoAirCon, Islamabad; Ms. Nausheen Yasir, Personal Development Trainer, Islamabad; Mr. Mushahid Hussain, Co-Founder, Centangle Interactive, Islamabad; Dr. M. Azeem Khan, Chief Advisor, Lackson Group of Companies, Islamabad; and Ms. Samia Rashid, CEO & Founder, E-PROHUB.



A glimpse from one of the training sessions in progress

ness, Building Resilient Teams, Essential Soft Skills for SMEs Success; Digital Marketing in SMEs, Real World case studies & Projects; SMEs Opportunities in the Agriculture Sector; Innovation, Growth & Performance Management of SMEs and Emerging Trends in E-Commerce.

ness, Building Resilient Teams, Essential Soft Skills for SMEs Success; Digital Marketing in SMEs, Real World case studies & Projects; SMEs Opportunities in the Agriculture Sector; Innovation, Growth & Performance Management of SMEs and Emerging Trends in E-Commerce.

## Training Course on “Livestock Management for Income Generation”

Akhtar Hameed Khan National Centre for Rural Development (AHKNCRD) organized a five-day training course on “Livestock Management for Income generation” from 12-16 January, 2026.

The intellectual and participatory sessions were based on delivery of lectures coupled with participatory discussions as well as a questions-and-answers session at the end of each session.

A total of 30 participants joined the training course from various departments of the country.

Different themes and subjects pertaining to livestock management were covered during the programme. They included: System of Livestock Sector in Pakistan; Potential of Poverty Alleviation through Livestock Sector in Pakistan; Role of Livestock Sector in Poverty Alleviation & Income Generation in Pakistan; Government Policies and Initiatives for Livestock & Dairy Development; Issues in Livestock Reproduction in Pakistan; Modern Reproductive Techniques for better Productivity; Disease Prevention, Common Animal Health Problems & their Management; Vaccination, Immunization and Deworming for Livestock; Breeding & Genetics; Farm Planning & Business Man-

agement; Animal Nutrition, Feeding, Fodder & Resource Management; Fodder Preservation and Feedlot fattening at Household Level; Dairy Processing & Relevant Technologies; Market Linkages, Value Chains and Sustainability & Strategic

research being carried out at the Institute, were highlighted especially with regards to livestock industry and poverty alleviation.

During the concluding ceremony of the training course, Director (Training), Dr. Abdul Rehman Khan Niazi, emphasized the pivotal role of livestock in rural economies and urged participants to apply the skills gained to boost their incomes. He highlighted modern practices in animal husbandry, disease management, and value-added products as game-changers for sustainability.



Group photo of participants with Director (Training) NCRD and Course Coordinator

Enterprise Management. Moreover, a study visit to Animal Sciences Institute (ASI), National Agriculture Research Centre (NARC), Islamabad, was also conducted to have a hands-on experience of various research technologies developed and their implementation in the fields of nutrition and feeding, dairy technologies, animal reproduction & genetics and research on large animals and small ruminants. During the briefing and technical discussions, best practices in light of latest

management and healthcare techniques that'll cut my losses," one participant noted. Other participants gave similar remarks and appreciated the hands-on training and real-world scenarios that made complex concepts easy to grasp.

Many attendees expressed confidence in starting or scaling up their livestock businesses, crediting the course for equipping them with actionable skills.

Please visit us on [www.ncrd.gov.pk](http://www.ncrd.gov.pk)

You can apply online to participate in any of the programs.

## Training Course on “Solid Waste Management– Issues and Options”

NCRD successfully organized a five-day training course on "Solid Waste Management-Issues and Options" from January 19-23, 2026. A total of 27 participants participated in the training course.

The training aimed to provide participants with comprehensive insights into various aspects of solid waste management, policies, and sustainable practices. Renowned experts in their fields were invited to share their knowledge and expertise with the participants. For the sake of field exposure, the participants were taken to Rawalpindi Waste Management Company (RWMC).

The programme aimed to analyze the key challenges and complexities surrounding solid waste management; to explore diverse options for tackling these challenges through innovative technological solutions and improved governance systems and; to equip the participants with critical thinking skills to evaluate different waste management options.

The course covered key aspects of solid waste management, including concepts and issues

related to clean and green environments, classification and characterization of solid waste, and handling hazardous substances and plastic pollution in Pakistan. It also explored solid waste collection, transportation, and transfer, as well as

and waste-preneurship opportunities.

The expert speakers emphasized adopting integrated waste management approaches, leveraging technology for efficient disposal, and promoting community involvement.

Capital Development Authority's successful initiatives in Islamabad were also discussed by one of the resource persons from CDA. Green practices such as recycling and reducing plastic use were also highlighted during the programme. Representative from Integrated Resource Recovery Centre (IRRC), Islamabad was invited to discuss IRRC's model for waste management and converting it into energy. Additionally, a session focused on health implications of poor waste management. Moreover, the participants were also apprised of hazardous and hospital waste manage-

ment. The training sessions also pushed for awareness and policy reforms within the country. Overall the training programme emphasized sustained efforts and stakeholder collaboration for impactful results with regards to solid waste management across the country.



Group photo of participants with the Course Coordinator during the field visit

recovery and recycling with a case study. Additionally, the course delved into disposal techniques, landfill design, operation, and closure, and hazardous and hospital waste management. Other topics included the role of media in solid waste management, comparing one-dimensional and multi-dimensional management approaches,

## Training Workshop on “Digital Marketing and Entrepreneurship”

NCRD conducted a three-day training workshop on "Digital Marketing & Entrepreneurship" from January 26-28, 2026. The training was joined by a total of 35 participants from across the country.

The programme aimed to equip participants with the skills to launch and effectively market their businesses online. Other main objectives were to foster a comprehensive understanding of core digital marketing channels and strategies, and to empower participants in identifying opportunities and building a successful business.

The workshop covered a number of topics, including Entrepreneurship and Opportunity Development; Digital Marketing for Entrepreneurs; Building a Digital Marketing Strategy; and Sales Funnels and Customer Journey. Participants also gained insights into Entrepreneurial Skills and Strategies, Tools and Technologies for Digital Marketers and Entrepreneurs, AI and Content Creation, and Basic Financial Literacy for Entrepreneurs and Financial Control.

The industry experts from various organizations who were invited as resource persons, included: Mr. Tariq Mahmood, Director General, Regulatory Affairs, PEMRA, Ms. Samia Rashid, CEO &

Founder, E-PROHUB/Skill Trainer, and Mr. Mushahid Hussain, Co-Founder & Chief Sales & Technical Project Management, Centangle Interactive, among others. Their valuable insights and expertise helped participants gain a deeper under-

standing of digital marketing and entrepreneurship. They highlighted that the course enhanced their understanding of digital marketing strategies and entrepreneurship skills, and equipped them with the tools and techniques needed to launch and grow their own businesses. Many participants praised the expertise and engaging presentation styles of the resource persons, and appreciated the opportunities for networking and sharing experiences with peers. The training workshop on digital marketing was a resounding success, with participants hailing it as a valuable learning experience that significantly enhanced their online marketing skills and strategies. The comprehensive curriculum, expert insights, and hands-on sessions on SEO, social media, content creation, and data analytics empowered participants to drive engagement, leverage digital channels effectively, and optimize campaigns for maximum ROI, ultimately contributing meaningfully to their professional development in the digital landscape.

The feedback suggests that the workshop was a valuable learning experience that will have a lasting impact on the participants' professional and entrepreneurial journeys.



Group photo of participants with Resource Person and Course Coordinator

standing of digital marketing and entrepreneurship.

The concluding session was chaired by Dr. Abdul Rehman Khan Niazi, Director (Training), NCRD. After inviting valuable feedback from the participants, certificates were distributed and group photo taken outside the training hall.

During the valedictory ceremony of the training workshop, participants shared highly positive feedback and expressed appreciation for the rele-

Please visit us on [www.ncrd.gov.pk](http://www.ncrd.gov.pk)

You can apply online to participate in any of the programs.

## Training Workshop on “Communication and Presentation Skills for Professionals”

AHKNCRD organized a three day training workshop on “Communication and Presentation Skills for Professionals” from March 30 to April 01, 2026. The training was joined by a total of 40 participants including 11 females and 29 males from across the country.

The contents included in the training course covered a broad range of topics essential to understanding effective communication and presentation skills at workplace.

The Major topics that were covered in this workshop included: Fundamentals of Communication; Visual Aids and presentation Tools; Crafting Compelling Presentations; Mastering Interviews; Virtual Communications Skills; Mastering Body Language; Improving Vocal Delivery ; Communication for Effective Performance; Overcoming Communication Barriers at Workplace; and Off-the-Cuff Speaking.

The training workshop equipped participants with practical tools to enhance their professional

communication. Key learning outcomes included crafting clear, concise messages, structuring engaging presentations, and using body language effectively. Participants gained confidence in public speaking, handling Q&A sessions, and

Khan Niazi, Director (Training), NCRD, also invited verbal feedback to hear participants’ reflections firsthand. Generally, the feedback was favourable, with participants expressing their appreciation for the thoughtful design of the course, the diverse expertise of the resource

persons, and the engaging mix of technical presentations and interactive discussions. Participants praised the programme for its practical insights and impactful learning. They shared that they gained effective techniques to engage audiences, craft compelling messages, and deliver confident presentations. Many highlighted the importance of these skills in their professional growth, citing improved communication as a key to better collaboration, leadership, and career advancement. One participant noted, "I learned how to structure my thoughts and present with clarity, it's already making a difference in my team's dynamics." Overall, the workshop's focus on real-world scenarios and interactive sessions helped professionals identify areas for improvement and polish their skills for greater impact.



Group photo of participants with Director (Training) and Resource Person

adapting tone for diverse audiences. The workshop's interactive sessions and expert feedback helped attendees identify strengths and areas for improvement, empowering them to communicate with greater impact

During the closing ceremony, Dr. Abdul Rehman

## Training Course on “Disaster Risk Management– Issues and Strategies”

Disaster risk management is crucial for Pakistan, given its vulnerability to natural calamities like earthquakes, floods, and landslides. Effective DRM strategies help minimize loss of life, protect infrastructure, and ensure swift recovery. By identifying risks, building resilience, and promoting preparedness, communities can better withstand disasters and reduce economic impacts.

Keeping in view the importance of subject matter, NCRD organized a five day training course on “Disaster Risk Management – Issues and Strategies” from March 30–April 02, 2026. The training course was joined by a total of 45 participants from various departments across the country.

The objectives of the programme included the following: to aware the participants of the diverse challenges in disaster management, both on a global and local scale; to foster a comprehensive understanding of strategies that effectively mitigate the impact of disasters; and to empower participants with practical insights, enabling them to proactively engage in implementing disaster management solutions.

To deliver the technical sessions, AHKNCRD invit-

ed a diverse group of experienced resource persons from various organizations and departments. The resource persons included Ms. Shazia Akhtar, Manager, NIDM, NDMA, Islamabad; Ms. Sana Noor, Deputy Manager (Training), NIDM, NDMA, Islamabad; Mr. Waseem Ahmed, Sr. Capacity

Commission, Islamabad; and Prof. Dr. Ejaz Ahmad Khan, Associate Professor, Health Services Academy, Islamabad.

The course covered a comprehensive range of topics centered on disaster risk management and its importance. The topics included Disaster Risk Management: Concept and Terms, Disaster Risk Management Cycle and its Components, Anticipatory Action in DM Planning and Response, Camp Coordination and Camp Management (CCCM), Risk Assessment and Mapping Using Hazard Analysis & Vulnerability Assessment, Disaster Resilience: A Proactive Concept, Maximizing Resilience by Minimizing Disaster Risk, Rescue During Disasters- Dos and Don'ts during Emergencies & Disasters, Climate Change –Disaster Nexus in Pakistan, Flood Management in Pakistan, and Health Care Management during Disaster.

The participants assessed the training programme at the conclusion of the course by completing the overall training evaluation proforma. Overall, the responses from the attendees were positive.



Group photo of participants with Director (Training) and Course Coordinator

Building Specialist, NIDM, Islamabad; Mr. Muhammad Ismail Khan, Assistant Manager Risk Assessment, NDMA, Islamabad; Dr. Muhammad Irfan Khan, Professor, Department of Environmental Sciences, International Islamic University, Islamabad; Ms. Azra Shahid, Rescue & Safety Officer Rescue 1122, Rawalpindi; Mr. Zafar Iqbal, Superintending Engineer Floods Federal Flood

Please visit us on [www.ncrd.gov.pk](http://www.ncrd.gov.pk)

You can apply online to participate in any of the programs.



# Spring blooms at NCRD

The gardens of the NCRD office have come alive this season with a vibrant display of spring blooms, reflecting both careful planning and dedicated upkeep. A rich variety of flowers including rose, dahlia, marigold, vinca, pansy, petunia, antirrhinum, ranunculu, gazania, primula, dianthus, salvia, and daffodils-create a colorful and refreshing landscape that enhances the overall environment of the institute. The neatly maintained lawns, thoughtfully arranged flower beds, and flourishing greenery not only add aesthetic value but also provide a peaceful and inspiring setting for staff, trainees, and visitors. This seasonal transformation stands as a testament to NCRD's commitment to creating a welcoming and eco-friendly workplace.



Please visit us on [www.ncrd.gov.pk](http://www.ncrd.gov.pk)  
You can apply online to participate in any of the programs.

## Snippets from the Interview

“Pakistan is facing a convergence of high-impact climate risks that are already translating into economic losses and humanitarian stress.”

“Gilgit-Baltistan and Khyber Pakhtunkhwa, are increasingly exposed to glacial melt, glacial lake outburst floods (GLOFs), and landslides, driven by rising temperatures in high mountain areas.”

for climate smart agriculture; compilation of GHG Inventories for AFOLU sector, Development of MRV Frameworks; CC communications and science – policy linkages are his prime areas of interest. He has contributed to several book chapters, produced more than 50 publications in the journals of international repute and is presently involved in a number of research projects related to climate change, water, agriculture and food security. Overall, Mr. Goheer is recognized for his significant contributions to agricultural research, technology development, and the dissemination of scientific knowledge.

Keeping in view his expertise with regards to current dynamics of climate change, NCRD invited Mr. Arif for an interview regarding climate change dynamics in Pakistan. The following paragraphs present the excerpts from our conversation with him.

**Q: Pakistan is often ranked among the most climate-vulnerable countries—what are the most urgent risks the country faces today?**

**Mr. Goheer:** Pakistan is facing a convergence of high-impact climate risks that are already translating into economic losses and humanitarian stress. The most immediate threat is extreme heat, with temperatures in parts of Sindh and Balochistan exceeding 50°C, increasing mortality risks, reducing labor productivity, and stressing energy and water systems. At the same time, intensifying floods as seen in 2022 and 2025, highlight the growing variability and concentration of monsoon rainfall.

Another critical risk is water insecurity. Per capita water availability has declined to below 1,000 cubic meters, placing Pakistan in the water-scarce category, while glacier melt initially increases flows but threatens long-term supply stability. This is compounded by glacial hazards, as the country hosts over 13,000 glaciers and hundreds of glacial lakes, some at high risk of sudden outburst floods.

In parallel, drought conditions are intensifying in arid regions like Balochistan and Tharparkar, affecting agriculture and livelihoods. These risks are further amplified in urban



**Mr. Muhammad Arif Rasheed Goheer, Executive Director of Global Climate Change Impact Studies Centre (GCISC)**

areas such as Karachi and Lahore, where heat stress, flooding, and infrastructure limitations create complex, compounding vulnerabilities. Overall, Pakistan's climate challenge is not a single hazard, but a systemic risk landscape where heat, water stress, floods, and food insecurity are increasingly interconnected.

**Q: How has Pakistan's climate profile changed over the past decade in terms of temperature, rainfall, and extreme events?**

**Mr. Goheer:** Over the past decade, Pakistan's climate profile has shifted noticeably toward warmer and more volatile conditions. Average temperatures have risen by approximately 0.8°C, with a clear increase in the frequency, duration, and geographic spread of heatwaves, particularly in southern and central regions. Night-time temperatures are also rising, reducing recovery periods and increasing health risks.

Rainfall patterns have become significantly more erratic. While total annual rainfall has not changed uniformly across the country, there is a clear trend toward greater variability and intensity; fewer rainy days but more high-intensity precipitation events. The monsoon season has become less predictable in timing and distribution, with a tendency for southward shifts and concentrated downpours, as seen during the 2022 season when some areas in Sindh received several times their normal rainfall. Extreme events have correspondingly increased in both frequency and severity. Pakistan has experienced recurrent major floods (2010, 2014, 2022, 2025), more frequent and

prolonged heatwaves, and heightened risks of drought in arid zones. What were once considered rare, high-return-period events are now occurring much more often, indicating a clear intensification of climate extremes linked to broader climate change trends.

**Q: Are extreme events like floods and heatwaves becoming more frequent or more intense in Pakistan? What does the data show?**

**Mr. Goheer:** Yes, data shows that extreme events in Pakistan are becoming both more frequent and more intense. Heatwaves are occurring more often, lasting longer, and reaching higher temperature thresholds (frequently exceeding 40–45°C), especially in southern Pakistan. These events are also starting earlier in the season, indicating a clear shift in the thermal climate regime.

On the rainfall side, Pakistan is experiencing fewer rainy days but more intense downpours, increasing the risk of flash and riverine floods. The 2022 floods are a clear example, where extreme monsoon rainfall led to unprecedented impacts across large parts of the country.

Overall, what were once rare, high-return-period events are now occurring more frequently, reflecting a transition toward a more volatile and extreme climate system in Pakistan.

**Q: Which regions in Pakistan are currently the most at risk, and why?**

## Expert Viewpoint (cont'd from page 6)

**Mr. Goheer:** Climate risks in Pakistan are highly uneven and region-specific, driven by geography, hydrology, and socio-economic vulnerability. The lower Indus basin, particularly Sindh, is among the most at-risk regions due to its exposure to riverine and pluvial flooding, compounded by sea intrusion in coastal areas and extreme heat. During the 2022 floods, this region experienced unprecedented rainfall intensities, highlighting its vulnerability to concentrated monsoon systems.

South Punjab is another high-risk zone, facing a combination of heatwaves, floods, and agricultural stress, making it particularly sensitive in terms of food security. In contrast, Balochistan is predominantly affected by chronic drought, water scarcity, and occasional flash floods, with limited infrastructure further amplifying its vulnerability. The northern regions, including Gilgit-Baltistan and Khyber Pakhtunkhwa, are increasingly exposed to glacial melt, glacial lake outburst floods (GLOFs), and landslides, driven by rising temperatures in high mountain areas. Meanwhile, major urban centers such as Karachi and Lahore are emerging as climate hotspots due to urban heat island effects, flooding from extreme rainfall, and inadequate infrastructure.

Overall, the risk landscape reflects a combination of high exposure, fragile ecosystems, and limited adaptive capacity, making certain regions disproportionately vulnerable to climate change impacts.

**Q: The 2022 floods were devastating—what long-term lessons has Pakistan learned from that crisis?**

**Mr. Goheer:** The 2022 floods were a watershed moment for Pakistan, highlighting that climate disasters are no longer isolated events but systemic risks. One of the most important lessons is the need to shift from reactive disaster response to proactive risk reduction. Large populations were exposed because of settlements and infrastructure in floodplains, underscoring the importance of risk-informed land-use planning and enforcement. The crisis also revealed significant infrastructure vulnerabilities. Roads, irrigation systems, and drainage networks were not designed to withstand extreme climate events of this magnitude. This has reinforced the need to climate-proof infrastructure and adopt “build back better” approaches during recovery, rather than restoring pre-existing vulnerabilities.

Another key lesson is the importance of integrated river basin management. The Indus Basin requires coordinated upstream-downstream planning, improved reservoir operations, and better floodplain management to handle increasingly erratic monsoon flows.

While early warning systems did provide alerts, the floods exposed gaps in last-mile communication and local preparedness, meaning warnings did not always translate into timely action.

Finally, the floods underscored the strong link between climate change, development, and social vulnerability. Recovery and reconstruction must therefore integrate climate resilience, social protection, and livelihood restoration to reduce future risks rather than perpetuate them.

**Q: How prepared is Pakistan today to respond to another large-scale climate disaster?**

**Mr. Goheer:** Pakistan’s preparedness for large-scale climate disasters has improved since 2010, but it remains moderate and still insufficient for extreme, multi-province events like the 2022 floods. Institutional frameworks such as NDMA and PDMAs, along with early warning systems and response planning, have strengthened coordination and forecasting capacity. However, major gaps persist in last-mile evacuation, urban resilience, and local government capacity, which were clearly exposed during the 2022 and 2025 floods. Overall, Pakistan is better prepared than in the past, but not yet resilient enough to fully manage increasingly frequent and compound climate disasters.

**Q: What are the most effective climate adaptation strategies Pakistan should prioritize right now?**

**Mr. Goheer:** Pakistan’s most effective climate adaptation strategy is to shift from reactive disaster management to planned, risk-informed development. The highest priority is building climate-resilient infrastructure, including flood protection systems, climate-proof roads, irrigation networks, and safer housing in high-risk zones.

Second, Pakistan must urgently invest in integrated water resource management, including improved storage, groundwater regulation, and basin-scale planning for the Indus system, as water variability is becoming one of the country’s most critical constraints.

Third, climate-smart agriculture is essential to protect food security, including heat- and drought-resistant crop varieties, improved irrigation efficiency, and climate-informed planting systems. This is particularly important for wheat and other staple crops. In parallel, nature-based solutions such as restoring wetlands, forests, and mangroves can significantly reduce flood risk, protect coastlines, and enhance ecosystem resilience at relatively low cost. Finally, strengthening urban resilience, through heat action plans, drainage upgrades, and urban greening is critical, as

cities are emerging as major climate hotspots in Pakistan.

**Q: What role does your Centre play in shaping climate policy and decision-making in Pakistan?**

**Mr. Goheer:** GCISC serves as a key science-policy interface in Pakistan, providing robust climate projections, vulnerability assessments, and sectoral impact analyses to support evidence-based decision-making. It contributes directly to the development of national frameworks such as NDCs, adaptation plans, and climate policies by translating scientific research into actionable policy inputs. In addition, the Centre supports federal and provincial governments through data, modeling, and technical advisory services, helping integrate climate risks into planning across sectors like water, agriculture, and energy. Overall, GCISC plays a critical role in mainstreaming climate science into policy and strengthening informed, long-term climate governance in Pakistan.

**Q: Do you think that Pakistanis being the most vulnerable have enough awareness about climate science and climate change?**

**Mr. Goheer:** Awareness of climate change in Pakistan has increased in recent years, particularly after major events like the 2022 floods. Many people now recognize climate change as a real and immediate threat, especially in highly affected communities. However, climate literacy remains limited. Understanding of climate science, long-term risks, and adaptation options is still low, particularly in rural and vulnerable areas. Climate change is often perceived as a series of isolated disasters rather than a systemic, ongoing challenge. This highlights the need for stronger, localized science communication, using simple language and community-based approaches to bridge the gap between scientific knowledge and public understanding.

**Q: If you could recommend one urgent action for Pakistan today to better prepare for climate change, what would it be?**

One most urgent action for Pakistan is to mainstream climate risk into all development planning and investment decisions. Every infrastructure project, urban expansion plan, and agricultural policy must be systematically screened for climate risks to ensure it is resilient to future extremes. This shift from reactive disaster response to risk-informed, climate-proof development is critical to avoid locking in future vulnerabilities.

## The Legacy of Dr. Akhtar Hameed Khan in Participatory Development

Dr Akhtar Hameed Khan was one of the most influential social scientists, development practitioners, and reformers from Pakistan, widely respected across South Asia and beyond for his pioneering work in community-led development. Akhtar Hameed Khan dedicated his life to understanding poverty not as a passive condition, but as something that could be transformed through organized community action, local participation, and institutional innovation.

One of his most remarkable contributions was the Orangi Pilot Project (OPP) in Karachi, which became a global model for low-cost urban development. Instead of relying solely on top-down government interventions, he emphasized empowering local residents to take responsibility for sanitation, housing, and infrastructure improvements. His philosophy was simple yet powerful: people are not merely beneficiaries of development, they are its most important drivers. This approach reshaped thinking in urban planning and community development worldwide.

Earlier in his career, Dr Akhtar Hameed Khan also established the Comilla Cooperative Model in what was then East Pakistan (now Bangladesh). This initiative focused on rural development through cooperatives, agricultural training, and decentralized governance. It significantly improved livelihoods in rural areas and is still studied today as a landmark example of participatory development in practice. His work consistently bridged theory and practice, making him both an academic thinker and a hands-on reformer.

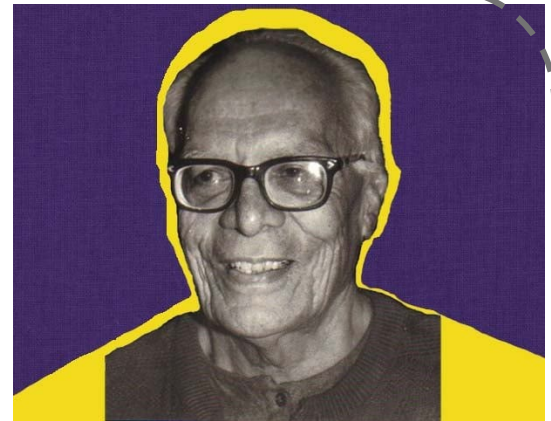
Beyond his projects, his intellectual legacy lies in his human-centered philosophy of development. He strongly believed that sustainable progress could only be achieved when communities are trusted, organized, and given ownership of their problems. His writings and experiments continue to inspire development professionals, policymakers, and researchers who seek alternatives to conventional top-down planning mod-

els.

What set Dr. Akhtar Hameed Khan apart was not just his projects, but his character. Dr. Akhtar being an Indian Civil Services Officer who gave up prestige to live among villagers, choosing a charpoy (woven bed consisting of a wooden or metal frame on four legs) over an office chair. He had no patience for bureaucratic jargon or foreign-funded pilot projects that collapsed when the money ran out. Instead, he practiced "intellectual honesty with dusty feet." He would spend hours listening without interrupting, believing that development workers had to "unlearn" before they could help. His colleagues recalled him rejecting cars for site visits, walking through Orangi's lanes in the Karachi heat, because "you cannot plan for people from behind a windshield."

Dr. Khan saw development as a moral act, not a technical one. He was deeply suspicious of charity that created dependence. His core belief: the poor are not objects of pity but "partners in progress" with untapped organizational capacity. He was famously straightforward, even with donors, telling one agency that "people do not need your sympathy, they need your trust." This integrity made him difficult for governments to co-opt, but it's the reason why his ideas outlived him. For Dr. Khan, development wasn't about building things — it was about building people's confidence to build for themselves.

Dr. Akhtar Hameed Khan's life embodies a unique blend of intellectual rigor, humility, and transformative action. His pioneering work in community-driven development, microfinance, and social entrepreneurship continues to inspire and inform solutions for pressing issues in Pakistan and beyond. As a champion of participatory development and grassroots empowerment, his legacy offers valuable lessons for addressing contemporary challenges such as urban poverty, inequality, and ineffective governance. His remarkable impact on development practice and policy is a testament to the enduring power of visionary thinking and compassionate leadership.



*"Pakistan's  
development will  
not come from  
the top, it will  
come from the  
bottom."*

### **Editor-in-Chief:**

*Dr. Abdul Rehman Khan Niazi, Director (Training), NCRD*

### **Assistant Editor:**

*Ms. Maira Razzaq, Assistant Director, NCRD*

### **Contact**

*Address: NCRD, Park Road, Chak Shahzad, Islamabad.*

*Ph. # 051-9255194; Fax # 051-9255157;*

*Email: [adt2@ncrd.gov.pk](mailto:adt2@ncrd.gov.pk); Website: [www.ncrd.gov.pk](http://www.ncrd.gov.pk)*