



NEWSLETTER | ISSUE NO. 13



DR JAI DAS RECEIVES AKU AWARD FOR EXCELLENCE IN RESEARCH

Dr Jai Das, Associate Director at the Institute for Global Health and Development (IGHD), was awarded the University Award for Excellence in Research at Aga Khan University's 2026 Convocation Ceremony. This prestigious award recognizes individuals demonstrating sustained excellence and high-impact contributions to research.



Dr Das's work has significantly advanced the evidence base in maternal, newborn, and child health, nutrition, and the growing field of climate and health. Over the years, he has led and contributed to a wide range of large-scale studies and systematic reviews that have informed global guidelines, policy frameworks, and programmatic interventions across low- and middle-income countries. His work reflects a strong commitment to translating rigorous evidence into practical solutions that respond to the needs of vulnerable populations and strengthen health systems in resource-constrained settings.

His research spans critical areas including infectious disease prevention, nutrition interventions, and the health impacts of environmental and climate-related exposures. In addition to his research contributions, Dr Das has played a central role in mentoring early-career researchers and strengthening research capacity within IGHD and beyond. Through his leadership and collaboration, he has helped foster multidisciplinary approaches to complex public health issues, contributing to a stronger and more responsive research environment.

“Dr Jai Das has made outstanding contributions to research that is both scientifically rigorous and highly relevant to real-world public health challenges. This recognition from Aga Khan University is richly deserved and reflects not only his academic excellence, but also the impact of his work in informing policy, strengthening programmes, and improving health outcomes for vulnerable populations”

- Dr Zulfiqar Bhutta | **Director, IGHD**



This recognition reflects not only his sustained academic contributions, but also the real-world impact of his work in shaping policies and improving health outcomes for vulnerable populations globally. It also serves as a reflection of the growing strength of IGHD's research portfolio and its continued contribution to generating evidence that informs both policy and practice.

COCHRANE REVIEW ON UMBILICAL CORD ANTISEPTICS HIGHLIGHTS IMPACT ON NEWBORN SURVIVAL



On March 26, 2026, a major Cochrane systematic review on umbilical cord antiseptics for preventing sepsis and death among newborns was published, contributing important new evidence to global newborn care. The review brings together findings from 18 randomized controlled trials involving more than 143,150 newborns, making it one of the most comprehensive assessments to date of how antiseptic cord care can support newborn survival, particularly in settings where the risk of infection remains high.

The findings show that the use of 4% chlorhexidine in low- and middle-income countries (LMICs) likely reduces the risk of umbilical cord infections and may also help reduce neonatal deaths. Infection rates were observed to decrease from around 87 to 62 per 1,000 newborns, while mortality rates may fall from approximately 18 to 15 per 1,000 live births. The review also found that chlorhexidine likely delays cord separation slightly, by about one to two days. While this is generally not harmful, it is an important consideration for families and care providers.

The review also assessed other antiseptics, including alcohol, povidone iodine, and silver sulfadiazine, but the evidence for these interventions was less certain, especially in LMIC settings. In places with stronger obstetric care systems and lower neonatal mortality, the findings continue to support dry cord care as the preferred routine approach. Overall, the review highlights the importance of choosing cord care practices that are suited to local conditions, health system capacity, and hygiene realities, rather than relying on a single universal solution.

Click the image on the **Right** to view the **News Article**



Click the image on the **Left** to view the **Review** in the **Cochrane Library**

The publication is also significant because it reinforces current World Health Organization guidance while adding updated evidence to support context-specific newborn care strategies. Reflecting on the findings, Dr Aamer Imdad, lead author of the review and an IGHD Associate Faculty Member, noted that simple and accessible cord-care interventions can significantly reduce infections in settings where hygiene conditions remain poor. Prof. Zulfiqar Ahmed Bhutta, senior author and Founding Director of IGHD, further emphasized that the benefits of these interventions depend strongly on the settings in which babies are born and cared for. The review also identified important gaps in data sharing across studies, pointing to the need for stronger research transparency and collaboration to guide future policy and programme decisions.



“In many parts of the world, newborns are still born into environments where hygiene conditions are poor. Simple and accessible cord-care interventions can significantly reduce infections in these settings, which is critical given the large share of neonatal deaths linked to infection.”

- Dr Aamer Imdad | **Associate Faculty, IGHD**

“The findings highlight that low-cost interventions such as chlorhexidine can make an important difference for newborn survival in high-risk settings. At the same time, they emphasize the need to tailor newborn care recommendations to context, rather than assuming one approach will work equally well everywhere. Evidence is most useful when it helps us make decisions that are both scientifically sound and responsive to local realities.”

- Dr Zulfiqar Bhutta | **Director, IGHD**



The review also received notable attention across Pakistani media, with coverage appearing in Dawn, The News, Business Recorder, The News Eyes, and other print outlets, helping bring this important newborn health evidence to a wider national audience.

To view news articles on the respective papers, click the news agency and newspaper logos below.

DAWN

INTERNATIONAL
THE NEWS
PAKISTAN

BUSINESS
RECORDER
Founded by M.A. Zuberi

THE NEWS EYES
Eyes in Search of Truth

STRONG REPRESENTATION AND AWARDS AT THE 27TH NATIONAL HEALTH SCIENCES RESEARCH SYMPOSIUM

The Institute for Global Health and Development (IGHD) had a particularly strong presence at the 27th National Health Sciences Research Symposium, held at Aga Khan University, Karachi, on February 3, 2026. Through poster and oral presentations, as well as hands-on workshop facilitation, IGHD researchers showcased the breadth of the Institute's growing work in climate and health, mental health, air pollution, resilience, and field-based implementation research.

A total of eight poster presentations were delivered by IGHD team members: Humaira Nazir, Syeda Kanza Naqvi, Farhana Tabassum, Maira Niaz, Hafsa Azhar, Asma Abdul Malik Qureshi, Bhavita Kumari with Ahmed Atiullah and Abdullah Babar, and Muzna Hashmi with Noureen Rehman. IGHD was also represented through two verbal presentations by Farhana Tabassum and Dr. Ammad Waheed Qazi, with Arjumand Rizvi presenting Dr. Ammad's work on his behalf during his absence.

POSTER PRESENTATIONS



VERBAL PRESENTATIONS



The Institute achieved outstanding recognition at the symposium, securing all three top poster awards—awarded to Humaira Nazir for her work on health facility assessment, Bhavita Kumari and team for the PREPARE Pakistan Project, and Hafsa Azhar for her master's research on heat and youth mental health. In the verbal presentation category, Arjumand Rizvi received third place for presenting Dr. Ammad Waheed Qazi's work.

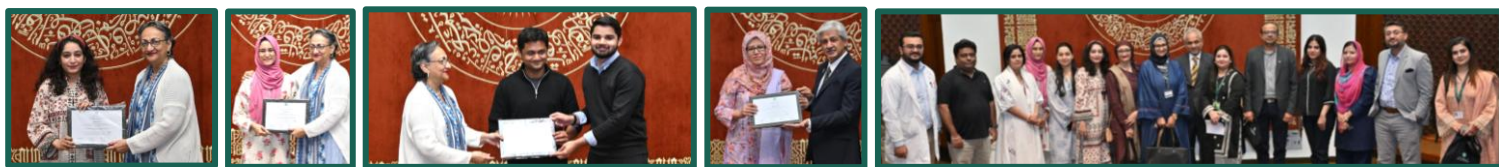
CELEBRATING IGHD'S AWARD-WINNING Posters and Presentations



IGHD SWEEPS THE TOP 3 POSTER PRESENTATION AWARDS



IGHD SECURES THIRD PLACE IN THE VERBAL PRESENTATION CATEGORY



In addition to these achievements, three IGHD-linked teams conducted workshops at the symposium. These included a workshop on mental health screening and resilience-building counselling facilitated by Maira Niaz, Zoya Naveed Ansari, and Rekha Bai; a participatory assessment workshop on hazards, vulnerabilities, and resilience led by Bhavita Kumari, Ahmed Atiullah, Abdullah Babar, Dr. Asim, and Dr. Siddique Ullah Baiq; and a hands-on workshop on gravimetric measurement of PM_{2.5} and air pollution exposure assessment conducted by CERL, facilitated by Kehkashan Begum, Rabia Zuberi, Asif Ahmed, and Dr. Junaid Iqbal. Together, these presentations, awards, and workshops reflected IGHD's strong and multifaceted contribution to the symposium.

WORKSHOP ON MENTAL HEALTH SCREENING AND RESILIENCE-BUILDING



WORKSHOP ON HAZARDS, VULNERABILITIES, AND RESILIENCE



WORKSHOP ON GRAVIMETRIC MEASUREMENT OF PM_{2.5} AND AIR POLLUTION EXPOSURE ASSESSMENT



DR BHAVITA KUMARI REPRESENTS IGHD AT INTERNATIONAL PUBLIC HEALTH CONFERENCE

On February 4, 2026, Dr Bhavita Kumari represented the Institute for Global Health and Development (IGHD) as a guest speaker at the 6th International Public Health Conference organized by Khyber Medical University, Peshawar.

The conference, themed “Navigating a Changing World: Building Resilience, Equity and Innovation in Public Health,” convened national and international experts to explore emerging public health priorities. Dr Kumari contributed to discussions on strengthening resilient and equitable health systems, with a focus on climate change and its implications for vulnerable populations.

Her presentation drew on IGHD’s ongoing work in climate and health, maternal and child health, and implementation research, highlighting the importance of integrated, cross-sectoral approaches in addressing evolving public health challenges.



IGHD CONTRIBUTES TO NATIONAL POLIO STRATEGY DISCUSSIONS AT EOC MEETINGS

On March 10, 2026, Farhana Tabassum, Mushtaq Mirani, Amal Khalid, and Dr. Jai Das participated in strategic meetings held at both the Sindh Emergency Operations Centre (EOC) and the National EOC.

These meetings brought together key stakeholders involved in Pakistan’s polio eradication efforts to review progress, identify operational bottlenecks, and strengthen strategies aimed at improving vaccination coverage in high-risk areas.

The IGHD team contributed to discussions focusing on demand-side barriers, including vaccine hesitancy, community-level resistance, and challenges in reaching marginalized populations. The discussions emphasized the importance of behavioural insights, strengthened community engagement, and the development of context-specific communication strategies to improve programme effectiveness.



“ These discussions reaffirmed that addressing demand-side barriers is essential to reaching missed children in high-risk areas. Behavioural insights, community engagement, and context-specific communication must remain central to the national polio response. In many settings, progress depends not only on service delivery, but also on building trust, addressing misinformation, and ensuring that strategies are tailored to the realities of the communities being served ”

- Mushtaq Mirani | Project Manager, IGHD



IGHD HOSTS HEC DELEGATION FOR STRATEGIC DISCUSSION ON COLLABORATIONS IN NUTRITION, CLIMATE CHANGE COURSES AND WOMEN IN SCIENCE



On January 31, 2026, the Institute for Global Health and Development (IGHD), Aga Khan University, hosted a high-level delegation from the Higher Education Commission (HEC), Pakistan, at AKU in Karachi for a strategic meeting on higher education, research, and national capacity development. The HEC delegation included Prof. Dr. Zia-ul-Haq, Executive Director, HEC; Dr. Noor Amna Malik, Managing Director, National Academy of Higher Education/HEC; Dr. Amjad Hussain, Director General (Academics); Mr. Nasir Shah, Director General, Quality Assurance Agency; Mr. Sulaiman Ahmed, Director/Incharge, HEC Regional Centre, Karachi; and Prof. Dr. Muhammad Ali Nasir, Advisor, Research and Innovation Division, who joined virtually. Their participation reflected the importance of the engagement and the shared interest in strengthening collaboration between HEC and IGHD.



THE AGA KHAN UNIVERSITY
INSTITUTE FOR GLOBAL HEALTH
AND DEVELOPMENT

The meeting focused on several of IGHD's key educational and research initiatives, including heat exposure research, online learning, nutrition education, climate change courses, and women's advancement in science. Discussions covered the IGNIT3 Online Nutrition Courses, developed by IGHD and the SickKids Centre for Global Child Health and adapted for the Pakistani context, as well as IGHD's broader educational initiatives and the upcoming Climate Change and Health Massive Open Online Course. Participants explored opportunities to scale up the nutrition courses nationally, position them as Continuing Professional Development modules, and align them with HEC's evolving curriculum for health-related disciplines.

The conversation also highlighted shared priorities in research, innovation, and gender equity. IGHD presented its work on heat exposure and climate-related health research, alongside its flagship Supporting Women in Science initiative, while HEC shared perspectives on research funding, inclusivity, and support for women researchers through its existing programmes. Both sides expressed strong interest in continued engagement, including follow-up discussions on collaborations in nutrition, climate change courses, and Women in Science activities. The meeting marked an important step toward deeper institutional partnership in support of research excellence and equitable development in Pakistan.



PODCAST PANEL EXPLORES GENDER EQUITY IN SCIENCE AND TECHNOLOGY

Following the meeting with the Higher Education Commission (HEC), the Institute for Global Health and Development (IGHD), Aga Khan University, convened a live recorded podcast panel discussion on Supporting Gender Equity in Science & Technology on January 31, 2026, at AKU, Karachi. Moderated by Prof. Dr. Zulfiqar A. Bhutta, the session brought together a distinguished panel comprising Mr. Javed Jabbar, noted writer, filmmaker, former senator and federal minister; Prof. Dr. Zia-ul-Haq, Executive Director, HEC and Vice Chancellor, Khyber Medical University; Prof. Zahra Hasan, Professor, Department of Pathology and Laboratory Medicine, Aga Khan University; and Dr. Tania Bubela, Provost and Vice President, Academic, Aga Khan University.



Starting from left: Moderator Dr Zulfiqar A. Bhutta, and panelists Mr Javed Jabbar, Dr Tania Bubela, Dr Zia-ul-Haq, and Prof. Zahra Hasan

The panel created space for thoughtful cross-sector dialogue on the structural barriers affecting women's participation and leadership in science and technology in Pakistan. Framed around the realities of gender inequity in education, research, and innovation ecosystems, the discussion explored the drivers of these disparities, the role of institutions and public policy, and the practical steps needed to foster a more supportive and inclusive environment for women in science. Designed as a blended live conversation and podcast recording, the session also engaged a small curated audience of academic leaders, faculty, and students, followed by an interactive question-and-answer segment.



The panel reflected IGHD's growing role in convening timely conversations that connect research, policy, and institutional leadership around issues of national importance. The participation of Prof. Dr. Zia-ul-Haq as a panelist following the HEC delegation's earlier visit further strengthened the day's broader focus on collaboration, leadership, and advancing equitable academic and scientific systems in Pakistan.

To View the Full Podcast Panel Discussion, Click the Image on the Right to Watch the Recording on **YouTube**.



IGHD SHOWCASES SHAPES RESEARCH AT HEATNEXUS INTERNATIONAL CONVENING



From February 9–13, 2026, Prof Zulfiqar A Bhutta and Dr. Syeda Kanza Naqvi represented IGHD at the HeatNexus Network Convening held in Kuala Lumpur, Malaysia. The convening brought together global researchers, policymakers, and practitioners working at the intersection of heat, health, and urban resilience.

The IGHD team presented a flash poster on the SHAPES Trial, highlighting its focus on addressing heat adaptation challenges in both urban informal settlements and rural communities in Pakistan. The presentation outlined the study’s use of passive cooling strategies, including shading, urban greening, reflective materials, and energy-efficient interventions, alongside community-driven behavioural approaches.

The team also shared insights into the trial’s methodological design, including the use of cluster randomized approaches, real-time environmental monitoring, wearable devices, and participatory community frameworks. Discussions at the convening highlighted both the scalability of such interventions and the operational challenges encountered in field implementation.

Participation in the HeatNexus convening provided an important platform for IGHD to contribute to global knowledge exchange and strengthen collaboration with international partners working on climate resilience and health.

CERL AND NRL VISIT BY AKU DEAN OF MEDICINE

In early 2026, Prof. Zulfiqar A. Bhutta, along with members of the IGHD team, hosted Dr. Karim Damji, Dean of the Medical College at Aga Khan University, for a visit to the Nutrition Research Lab (NRL) and its Climate and Environmental Research Laboratory (CERL). The visit highlighted CERL as an interdisciplinary platform for advancing research on the health impacts of climate change, including heat stress, air pollution, water contamination, and food system vulnerabilities. The facility supports integrated analyses linking environmental exposures with biological and health outcomes, enabling IGHD to generate robust multidisciplinary evidence. Discussions also focused on CERL’s role within IGHD’s wider research agenda and its potential to develop into a national reference laboratory and regional hub for climate-health research, training, and innovation.



FIELD VISIT TO JACOBABAD FOR CLIMATE-RESILIENT HEALTH SYSTEMS RESEARCH

As part of the Climate-Resilient and Environmentally Sustainable Health Systems project, Humaira Nazir, Mushtaque Mirani, and Dr. Jai Das conducted a field visit to Jacobabad in early 2026.

The visit focused on assessing public healthcare facilities in one of Pakistan’s most heat-affected regions to better understand infrastructure challenges and opportunities for climate-responsive design. The team carried out detailed on-site evaluations examining ventilation systems, cooling mechanisms, building materials, and overall facility layout.

These assessments provided insights into how extreme heat conditions affect both patient care and healthcare worker performance. The findings are informing the development of practical, low-cost, and locally adaptable solutions aimed at improving resilience of healthcare facilities in resource-constrained settings.



IGHD PARTICIPATES IN AKU STUDENT RESEARCH CONFERENCE



On February 8, 2026, the Institute for Global Health and Development (IGHD) participated in the Faculty of Arts and Sciences (FAS) Student Research Conference at Aga Khan University. As part of the conference, Dr Jai Das, Associate Director at IGHD, delivered the keynote address, while Humaira Nazir, Postdoctoral Fellow at IGHD, joined a panel discussion titled “Is Sustainability a Luxury? Access, Affordability and Climate Equity” as a panelist.

The conference provided a multidisciplinary platform for students to present research and engage with faculty and researchers across diverse academic fields. In his keynote, Dr Das highlighted the growing convergence between environmental change and human health, particularly the impacts of heat stress, environmental degradation, and climate variability on maternal and child health outcomes. He emphasized the importance of interdisciplinary collaboration across public health, environmental sciences, and social research to address complex global health challenges.



In his keynote, Dr Das highlighted the growing convergence between environmental change and human health, particularly the impacts of heat stress, environmental degradation, and climate variability on maternal and child health outcomes. He emphasized the need for interdisciplinary collaboration across public health, environmental sciences, and social research to address complex global health challenges.

CHOICE WORKSHOP STRENGTHENS CROSS-COUNTRY DIALOGUE ON HEALTH AND HEALTH-RELATED SDGS

On January 20, 2026, Prof. Zulfiqar Bhutta participated in an in-country CHOICE workshop on Health and Health-Related Sustainable Development Goals (HHSDGs) held in Accra, Ghana, under the theme Advancing Progress Towards the Attainment of the HHSDGs: The Role of Multi-Sectoral Think Tanks. The workshop formed part of the wider CHOICE platform and brought together country partners from Kenya, Tanzania, Ghana, and Kyrgyzstan to exchange perspectives and strengthen collective efforts to advance health and health-related sustainable development goals.

As part of the programme, Prof. Bhutta delivered special remarks on global efforts to support countries in achieving the HHSDGs and also shared remarks in his capacity as Principal Investigator of the CHOICE Project, highlighting the importance of building a consortium to address the complex and interconnected challenges influencing human health. The workshop provided an important forum for reflecting on progress, identifying opportunities, and discussing the role of multi-sectoral think tanks in supporting national and regional action.

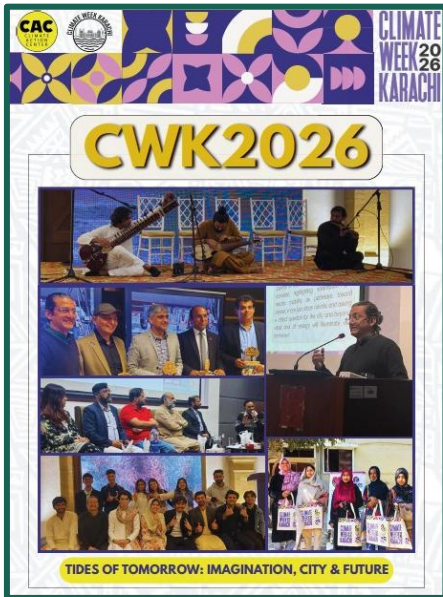
Prof. Bhutta’s participation reflected IGHD’s continued engagement in international collaboration and evidence-informed dialogue on health systems, policy, and sustainable development. It also highlighted the value of cross-country learning and partnership in addressing shared challenges and accelerating progress towards the health and health-related SDGs.

In-country Workshop on Health and Health-Related Sustainable Development Goals (HHSDGs)

ADVANCING PROGRESS TOWARDS THE ATTAINMENT OF THE HHSDGS: THE ROLE OF MULTI-SECTORAL THINK TANKS

Tuesday 20 January 2026 Time 9am-2:00pm Fiesta Royale Hotel, Accra

DR SYEDA KANZA NAQVI CONTRIBUTES TO PANEL ON EXTREME HEAT AT CLIMATE WEEK KARACHI 2026



Dr Syeda Kanza Naqvi from the Institute for Global Health and Development (IGHD) participated as a panelist in a session on “Extreme Heat” held on February 2, 2026, at the Institute of Business Administration (IBA), Karachi, as part of Climate Week Karachi 2026.

The panel, moderated by Mahmood Alam Khalid, brought together a diverse group of practitioners and experts to discuss the growing challenge of rising temperatures in Karachi.

The discussion revisited the 2015 Karachi heatwave as a critical turning point, highlighting systemic gaps in governance, preparedness, and response mechanisms. A key focus of the session was the recognition that heat exposure is not limited to outdoor environments—indoor spaces, particularly in low-resource settings, often trap heat long after sunset, significantly increasing health risks for vulnerable populations.

The panel emphasized the urgent need for heat-resilient housing, improved monitoring and early warning systems, and the formal recognition of extreme heat as a disaster category within urban planning frameworks.



IGHD TEAM MEMBERS ATTEND CLIMATE WEEK KARACHI 2026 CLOSING CEREMONY



Farhana Tabassum, Humaira Nazir, Hafsa Azhar, and Rekha Bai from the Institute for Global Health and Development (IGHD) attended the closing ceremony of Climate Week Karachi 2026, held on February 4, 2026, at the Arts Council Amphitheatre.

Organised by the Climate Action Centre (CAC), Climate Week Karachi represents Pakistan’s first citywide climate movement, bringing together researchers, practitioners, artists, and community stakeholders to engage in dialogue around climate action, urban resilience, and sustainable futures. The 2026 theme, “Tides of Tomorrow: Imagination, City & Future,” highlighted the intersection of climate, culture, and urban transformation.

The closing ceremony served as a platform for reflection and collective engagement, featuring discussions, performances, and collaborative exchanges focused on advancing climate awareness and action within urban contexts. The event emphasized the importance of interdisciplinary approaches and community-driven solutions in addressing the growing challenges posed by climate change in cities like Karachi.

The event provided an opportunity for IGHD team members to engage with interdisciplinary discussions linking climate, urban resilience, and community engagement. The presence of IGHD at Climate Week Karachi also highlights its growing involvement in platforms that connect research with broader public and policy dialogue

HUMAIRA NAZIR CONTRIBUTES TO PANEL ON DESIGN, MENTAL HEALTH AND WELLBEING AT IMDCS 2026



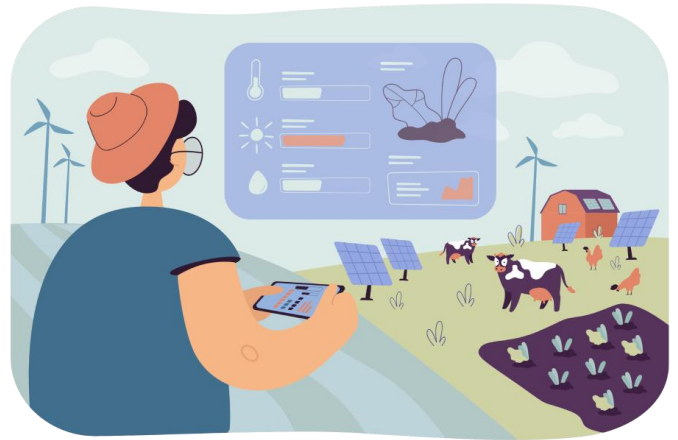
On January 6, 2026, Humaira Nazir from the Institute for Global Health and Development (IGHD) participated in a panel discussion titled “Designing for Mental Health and Wellbeing with Natural Elements” at the International Media and Design Conference on Sustainability (IMDCS) 2026, organized by the Faculty of Communication and Design at Indus University.

The session brought together experts across disciplines to explore how built environments can support mental health and wellbeing through thoughtful design and integration of natural elements.

Humaira contributed perspectives on how architectural design and environmental conditions influence psychological wellbeing, particularly in climate-vulnerable and resource-constrained settings, highlighting the importance of interdisciplinary approaches linking design, environment, and health.

SHAPES TRIAL ADVANCES TO FULL-SCALE IMPLEMENTATION

On January 1, 2026, the Structural Heat Adaptation and Education in Rural and Urban Settings (SHAPES) Trial transitioned from its pilot phase to full-scale implementation. Led by Prof Zulfiqar A Bhutta and Dr Jai Das, the trial is one of the largest cluster randomized controlled studies focused on heat adaptation in low- and middle-income country settings.



Implemented across urban informal settlements in Karachi and rural communities in Matiari District, the study spans 44 clusters, including 22 intervention and 22 control clusters, reaching over 3,000 households and approximately 21,000 individuals. Key IGHD team members include Anjum Abbas Naqvi, Dr. Syeda Kanza Naqvi, Mohammad Khan Jamali, Shameer Qamar and a multidisciplinary research team working across public health, environmental science, and architecture.



“Scaling the intervention across diverse urban communities has required strong coordination with field teams and continuous engagement with households. The transition to full implementation reflects both the feasibility of these interventions and the commitment of communities to adopt practical heat adaptation measures”

- Anjum Abbas Naqvi | **Field Operation Lead - Karachi**

“Working in rural settings presents its own challenges, but the pilot phase allowed us to build strong relationships with communities. This has been critical in ensuring smooth implementation as we expand the trial and maintain consistency across clusters”

- Muhammad Khan Jamali | **Field Operation Lead - Matiari**



The trial evaluates low-cost structural and behavioural interventions, including double roofing systems, roof and façade shading, reflective coatings, ventilation improvements, and community-based awareness strategies. Early findings from the pilot phase demonstrated reductions in indoor temperatures and improved thermal comfort, providing a strong foundation for the expanded trial.

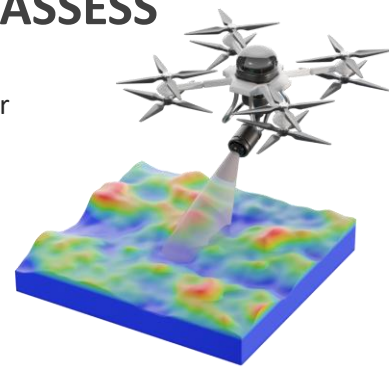
The technical and scientific oversight of the trial across both sites is led by Dr. Syeda Kanza Naqvi, ensuring alignment in study design, data collection protocols, and overall research quality. The full-scale implementation is expected to generate robust evidence to inform scalable climate adaptation strategies and policy for heat-vulnerable populations.

DRONE-BASED THERMAL MAPPING INITIATIVE TO ASSESS HEAT EXPOSURE

In the first quarter of 2026, IGHD launched a drone-based thermal mapping initiative to better understand spatial patterns of heat exposure in vulnerable communities across Karachi and Matiari, with planned expansion to Tando Muhammad Khan.

The initiative utilizes DJI Matrice 30T drones to capture high-resolution thermal and RGB imagery, enabling detailed mapping of surface temperatures and identification of localized heat hotspots. This aerial data is complemented by ground-level environmental monitoring using temperature and humidity data loggers, alongside household-level surveys capturing demographic, structural, and exposure-related variables.

The work involves collaboration between multidisciplinary teams, including environmental researchers, field teams, and technical specialists. By integrating geospatial thermal data with on-ground environmental and health data, the initiative aims to generate granular insights into heat exposure risks, particularly for vulnerable populations such as pregnant women and children.



“The use of drone-based thermal mapping adds an important new dimension to our work on heat exposure. It helps us move beyond general assumptions and identify localized heat hotspots with greater accuracy, which is essential for informing targeted adaptation strategies and community-level interventions.”

- Hassan Naqvi | Data Manager - IGHD

IGHD RESEARCH FEATURED ON SOUTH ASIAN URBAN CLIMATES PLATFORM

In 2026, the SHAPES Trial was featured on the South Asian Urban Climates platform, a transnational and interdisciplinary initiative focused on the intersections of climate, urbanism, and socio-political dynamics across South Asian cities.



The case study, authored by IGHD researchers including Dr. Jai Das, Dr. Syeda Kanza Naqvi and Shahmeer Qamar under the leadership of Prof. Zulfiqar A. Bhutta, highlights community-driven structural heat adaptation strategies implemented in peri-urban Karachi.



DR ZULFIQAR BHUTTA



DR JAI DAS



DR KANZA NAQVI



SHAMEER QAMAR

The publication details the integration of local knowledge, environmental monitoring, and participatory research approaches in designing and implementing low-cost, scalable interventions. It also situates the work within broader discussions on urban inequality, climate vulnerability, and adaptive capacity.

The feature enhances the global visibility of IGHD's work while contributing to ongoing academic and policy discourse on climate adaptation and urban resilience in low- and middle-income settings.

Visit the **SHAPES Trial** feature on the **South Asian Urban Climates** platform by clicking here:

SHAPES

Structural Heat
Adaptation in Peri-Urban
Settlements of Pakistan

Jai Das, Shahmeer Qamar,
Syeda Kanza Naqvi, Zulfiqar Bhutta

JANUARY 20, 2026
CASE STUDIES
WEATHERING EXTREMES
HEAT
URBANIZATION
PAKISTAN
COMMUNITY
COOL INFRASTRUCTURES

DOCUMENTING INDIGENOUS KNOWLEDGE FOR CLIMATE ADAPTATION AND RESILIENCE IN PAKISTAN

IGHD is undertaking a research initiative titled Embracing Ancestral Wisdom: Harnessing Indigenous Knowledge for Climate Adaptation and Resilience in Pakistan, led by Dr. Jai Das and managed by Farhana Tabassum, Project Manager. The project is being carried forward by an IGHD team comprising Amal Khalid, Sujeet Lohana, Hafsa Azhar, Arsala Farooqui, and Dr. Khadija Vadsaria, with support from Dr. Muhammad Asim of the Department of Community Health Sciences (CHS). The initiative explores how indigenous knowledge can support climate adaptation and resilience in communities affected by extreme heat and flooding.

The study is being carried out across Gilgit-Baltistan, Multan, and Tharparkar, each representing a distinct environmental and climatic context. Gilgit-Baltistan offered an opportunity to explore indigenous knowledge and adaptation practices in mountainous communities, while Multan provided important insights into coping strategies in areas affected by extreme heat and floods. Tharparkar, with its arid landscape and recurring environmental challenges, served as a significant site for understanding local resilience and community-based adaptation. Fieldwork began with the first visit in November 2025 to Gilgit-Baltistan, followed by a second visit in January 2026 to Multan, where Dr. Jai Das, the project's Principal Investigator, joined the team during field activities and data collection alongside faculty from Bahauddin Zakariya University (BZU).

A highlight of the project was the January 2026 field visit to Tharparkar, Sindh, which was joined by the project's international collaborators Dr. Zohra Lassi of the University of Adelaide and Dr. Salimah Maherali of the University of Alberta, alongside Dr. Jai Das. Their participation added notable value to the field activities and reflected the strong collaborative nature of the project. Dr. Lassi's wider contribution to climate and maternal-newborn health research was also reflected in the recent paper '*Disproportionate climate burden of rising temperatures on low birth weight in Pakistan*', which highlighted the growing risks of extreme heat for pregnant women and newborns in Pakistan. The visit also underscored the significance of building international academic partnerships around locally grounded climate research, especially in areas where communities are already living with the effects of environmental stress, recurring heat, and resource insecurity.



UNIVERSITY OF ALBERTA

DR. SALIMAH MAHERALI



THE UNIVERSITY of ADELAIDE

DR. ZOHRA LASSI



Through this work, the project aims to generate evidence on the role of indigenous knowledge in strengthening climate resilience and supporting locally grounded adaptation strategies for vulnerable communities across Pakistan. By documenting community experience and traditional practices across diverse settings, the study seeks to contribute to a broader understanding of how local knowledge can inform more effective, inclusive, and context-sensitive climate responses.

IGHD CONTRIBUTES TO NATIONAL DIALOGUE ON SUSTAINABLE FOOD SYSTEMS TRANSFORMATION

Representatives from the Institute for Global Health and Development (IGHD), Aga Khan University, participated in the stakeholder meetings and National Results Dissemination Workshop on the Integrated Roadmap for Sustainable Food Systems Transformation in Pakistan, held in Islamabad on February 9–10, 2026. Organized by The Food and Agriculture Organization of the United Nations (FAO) Pakistan, in collaboration with partners under the UN Joint Programme on Food Systems Transformation, the meetings brought together key stakeholders from government, UN agencies, development partners, academia, and allied sectors to discuss evidence-based pathways for addressing Pakistan’s food security, nutrition, and climate-related challenges. Arjumand Rizvi and Dr Jai Das represented IGHD in these important national discussions.



Food and Agriculture
Organization of the
United Nations



World Health
Organization



World Food
Programme



The initiative focused on strengthening Pakistan’s food systems through a more integrated approach linking agriculture, nutrition, trade, health, and climate policy. The National Results Dissemination Workshop, held on February 10, 2026, provided a platform to present key findings on food availability, policy scenarios, and transformation pathways, while also encouraging dialogue on how these insights can inform national planning, investment, and decision-making. The discussions emphasized the need for coordinated action to improve dietary diversity, strengthen food security, and promote more nutrition-sensitive and climate-resilient food systems in Pakistan.

“This dialogue highlighted the importance of bringing research, policy, and implementation closer together. Strengthening food systems in Pakistan will depend on how effectively we align evidence with national priorities and support integrated action across sectors. It is through this kind of coordinated approach that more nutrition-sensitive, climate-resilient, and sustainable systems can be developed.”

- Arjumand Rizvi | Assistant Professor - IGHD



The broader mission also aimed to validate final findings with key national counterparts and strengthen cross-sectoral policy coherence by aligning agriculture, nutrition, health, and development planning priorities through high-level engagement. In addition to the national workshop, the agenda included meetings with UN representatives, the Ministry of National Food Security and Research, development partners, and the Ministry of Planning, Development and Special Initiatives, reflecting the wide institutional interest in the initiative and the importance of building shared ownership around future action.

IGHD’s participation reflected the Institute’s continued commitment to contributing to national policy dialogue on nutrition, health, and sustainable development. By engaging in these exchanges, IGHD helped support broader efforts to align research and evidence with Pakistan’s evolving policy landscape and to advance practical, cross-sector approaches for long-term food systems transformation.

MAJOR RESEARCH GRANTS LAUNCHED IN EARLY 2026



In early 2026, the Institute for Global Health and Development (IGHD) initiated several major externally funded research projects focused on maternal and child health, climate resilience, and environmental sustainability, further strengthening its research portfolio and expanding its programmatic reach.

The project *Translation of Research-Based Breastfeeding Knowledge*, led by Prof Zulfiqar A Bhutta, commenced on January 1, 2026, and focuses on improving the uptake of evidence-based breastfeeding practices through strengthened knowledge translation strategies and more effective dissemination of research findings.

Two large-scale climate-focused projects led by Dr Zulfiqar Bhutta and Dr Jai Das also commenced in January 2026. The first focuses on delivering and evaluating community-based, multi-sectoral adaptation interventions for women and children affected by climate change in vulnerable settings. The second aims to generate evidence on scalable interventions to support populations affected by climate-related risks across Pakistan, with a focus on implementation and impact at scale.

Additionally, the project *Impact of Green Energy for Cooking and Heating on Household Air Pollution and Health in Rural Communities of Pakistan*, led by Dr Jai Das and managed by Dr Khadija Vadsaria, commenced on March 1, 2026. The study evaluates sustainable energy solutions to reduce household air pollution and improve health outcomes in rural communities by assessing the transition from traditional fuels to cleaner energy sources.



“ This project provides an important opportunity to generate rigorous evidence on how clean energy transitions can directly improve household environments and health outcomes, while ensuring that the interventions remain practical and adaptable within rural community contexts ”

- Dr. Khadija Vadsaria | **PROJECT MANAGER**

The project integrates environmental monitoring, exposure assessment, and health outcome evaluation to generate evidence for scalable and sustainable interventions

COMMUNITY-BASED MENTAL HEALTH SCREENING FOR FLOOD-AFFECTED WOMEN PUBLISHED IN BMJ OPEN

A study titled *“Community-based mental health screening and referral for flood-affected women in rural Pakistan: an intervention feasibility study protocol”* was published in BMJ Open in 2025, contributing important evidence to the growing field of climate-related mental health research.

The study is led by Dr Jai Das, with key contributions from Farhana Tabassum, Arjumand Rizvi, and Prof Zulfiqar A Bhutta, alongside a multidisciplinary research team. The protocol outlines a community-based approach to addressing mental health challenges among women in flood-affected rural settings, where access to mental health services remains limited.

The research focuses on evaluating the feasibility of integrating mental health screening, referral systems, and resilience-building interventions within primary healthcare structures. By training community health workers and leveraging existing health systems, the study aims to improve early identification and management of anxiety and depression among vulnerable populations.

This work addresses a critical gap in mental health service delivery in low-resource and climate-affected contexts and has important implications for scaling community-based mental health interventions across similar settings.



To read the full publication on **BMJ Open** please click here:

BMJ Open

CoMIC STUDY HIGHLIGHTS ROLE OF COMMUNITY ENGAGEMENT IN IMPROVING CHILD HEALTH OUTCOMES

Findings from the Community Mobilization and Community Incentivization (CoMIC) trial were published in PLOS Global Public Health in December 2025, providing valuable insights into how community-driven approaches can improve child health outcomes in rural Pakistan.

The study includes contributions from Farhana Tabassum, Mushtaq Mirani, Sana Khatoun, Muhammad Khan Jamali, Prof Zulfiqar A Bhutta, and Dr Jai Das, among others. It examines the impact of participatory community engagement strategies and conditional, community-based incentives on promoting sustained behaviour change.

The research highlights how interventions focused on community mobilization, collective ownership, and incentivization can improve key health behaviours, including immunization uptake, water, sanitation and hygiene (WASH) practices, infant and young child feeding, and care-seeking for common childhood illnesses.

By identifying key drivers of community participation—such as collectivism, altruism, and shared responsibility—the study provides important evidence for designing scalable, sustainable public health interventions in low-resource settings.



To read the full publication on **PLOS General Public Health** website, please click here:



MR MUHAMMAD KHAN JAMALI COMPLETES PROJECT MANAGEMENT TRAINING PROGRAMME



Mr Muhammad Khan Jamali, Manager at the Institute for Global Health and Development (IGHD), successfully completed a three-day Project Management Hands-on Workshop held from March 26–28, 2026, organized for Aga Khan University (AKU) management staff.

The training programme aimed to strengthen participants' understanding of internationally recognized Project Management Institute (PMI) standards while supporting their progression towards PMP certification. The workshop was facilitated by Mr Asad Ullah Chaudhry, Founder & CEO of AUC (Pvt.) Ltd., an Oxford alumnus and certified PMP professional, who brought extensive practical experience into the sessions.

The workshop adopted a highly interactive, application-oriented approach, moving beyond traditional lecture-based learning. Participants engaged in discussions, case-based exercises, and real-world problem-solving, enabling them to directly connect project management principles with their ongoing work. A key feature of the programme was its emphasis on two-way learning, where participants shared field experiences and operational challenges, which were then translated into practical and applicable management strategies.

Through this training, Mr Jamali further strengthened his skills in project planning, implementation, and adaptive problem-solving—key competencies for managing complex, field-based research initiatives at IGHD. The programme also contributed to his preparedness for PMP certification.



IGHD TEAM GATHERINGS STRENGTHEN COLLABORATION ACROSS KARACHI AND MITHI

In the first quarter of 2026, the Institute for Global Health and Development (IGHD) organized two team dinners in Karachi and Mithi, bringing together colleagues from across project sites to strengthen connections beyond the workplace.

Both gatherings were hosted by IGHD, and were attended by team members working across research, field implementation, and project coordination. The dinners provided an opportunity for colleagues from different locations to come together in an informal setting, fostering interaction across teams that often collaborate remotely or in the field.

The evenings offered a welcome space to unwind, reflect on ongoing work, and share experiences from diverse project contexts. For field-based teams, particularly those working in Mithi, the gathering also served as a meaningful moment of recognition and appreciation for their continued efforts in challenging environments.

These gatherings highlight IGHD's commitment to nurturing a collaborative and supportive work culture, where strong professional relationships underpin impactful research and implementation. The dinners were widely appreciated by attendees and reinforced a shared sense of purpose across the Institute.

KARACHI



MITHI



IGHD FACULTY SUPPORT EMERGING PHD RESEARCH IN CLIMATE AND PUBLIC HEALTH

IGHD is pleased to be supporting a number of promising PhD research projects through the supervisory and mentorship contributions of its faculty. These projects, within the Population and Public Health stream, focus on important issues at the intersection of climate change, environmental exposures, maternal and child health, nutrition, and youth wellbeing, and reflect IGHD's continued commitment to nurturing emerging researchers.

Among these scholars, Kehkashan Begum is working on a study on climate-resilient dietary interventions, with Dr Junaid Iqbal as Primary Supervisor and supervisory support from Dr Jai Das and Arjumand Rizvi of IGHD. Anum Rafiq is pursuing research on antenatal co-exposure to heat and household air pollution under the primary supervision of Dr Jai Das. Syeda Kisa Zehra is undertaking research on a heat resilience and adaptation bundle for young people, also under the supervision of Dr Jai Das, with support from Prof. Zulfiqar A. Bhutta and others.

Through these roles, IGHD is helping foster the next generation of researchers addressing some of the most pressing public health and climate-related challenges of our time, while continuing to strengthen a culture of mentorship, collaboration, and academic growth.

PHD PROJECTS 2026



ANUM RAFIQ

Project Title: Effect of Antenatal Co-Exposure to Heat and Household Air Pollution (HAP) on Fetal Growth and Birth Outcomes: A Cohort Study



SYEDA KISA ZEHRA

Project Title: Assessing the Impact of a Heat Resilience and Adaptation Bundle (ReHAB) on the Quality of Life of Young People: A Cluster Randomized Controlled Trial



KEHKASHAN BEGUM

Project Title: Impact of a Balanced and Climate Resilient Dietary Intervention to Mitigate the Effects of Heat Stress on Pregnancy and Birth Outcomes

IGHD TEAM CELEBRATES DR JAI DAS'S RESEARCH EXCELLENCE AWARD

IGHD recently came together for an internal team celebration in honour of Dr Jai Das, following his receipt of the Aga Khan University Award for Excellence in Research at the 2026 Convocation Ceremony. The gathering was a wonderful opportunity for colleagues to celebrate this significant achievement and to recognize Dr Das's valued contributions to the Institute as a researcher, mentor, and leader.

The celebration marked a proud moment for the entire team, reflecting both the importance of the award and the strong culture of collaboration and academic excellence at IGHD. It was also an opportunity to share in the success of a colleague whose work continues to make an important contribution to research and public health.



SHAPES TEAM PICNIC TO MITHI



As part of IGHD's continued efforts to foster team connection and well-being, Anjum Abbas Naqvi and Mohammad Khan Jamali, team leads for the SHAPES project, organized a picnic to Mithi for members of the SHAPES team. The outing gave colleagues a welcome chance to step away from routine responsibilities, enjoy time together in a relaxed setting, and strengthen bonds beyond the workplace.

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CELEBRATING CONTRIBUTIONS AND NEW BEGINNINGS AT IGHD

In early 2026, the Institute for Global Health and Development (IGHD) bid farewell to two valued team members, Dr Bhavita Kumari and Dr Zainab Farhan, as they moved on to the next stages of their professional journeys.

Dr Bhavita Kumari has been an integral part of IGHD's climate and health research portfolio, contributing across a wide range of initiatives spanning field-based research, systematic reviews, intervention design, and programme coordination. Her work included leading multi-district community vulnerability and resilience assessments, managing end-to-end research processes from data collection to policy translation, and contributing to the design of community-based climate adaptation interventions.

“My time at IGHD has been central to my growth as a climate researcher, particularly through hands-on leadership of diverse, policy-relevant work. The experience strengthened my ability to work across the full research pipeline—from field implementation and stakeholder engagement to evidence synthesis and policy translation. IGHD provided a unique platform to integrate rigorous research with real-world application.”

- Dr Bhavita Kumari



She also played a key role in advancing evidence synthesis work on heat adaptation and climate vulnerability, and contributed to the coordination of the Supporting Women in Science (SWIS) programme, further strengthening cross-country collaboration and leadership capacity within the Institute. Dr Kumari has now relocated to the United States under the EB2-NIW pathway, where she will continue to build on her work in climate and health research.

“My experience at IGHD played a meaningful role in shaping my clinical and academic interests, particularly in understanding public health challenges and evidence-based care. Working in a research-focused environment strengthened my analytical skills, attention to detail, and ability to contribute to collaborative projects. This experience has been an important stepping stone in my journey toward pursuing residency training.”

- Dr Zainab Farhan



Dr Zainab Farhan also contributed to IGHD's work during her time at the Institute, where she gained valuable experience in a research-focused environment that helped shape her evolving clinical and academic interests. Her time at IGHD strengthened her analytical skills, attention to detail, and ability to contribute effectively to collaborative work, while also deepening her understanding of public health challenges and evidence-based care.

She is currently preparing to apply for the Match while gaining further clinical exposure through an observership at MedStar, which is helping her better understand the U.S. healthcare system and further refine her clinical approach.

IGHD extends its sincere appreciation to both Dr Bhavita Kumari and Dr Zainab Farhan for their contributions to the Institute. We are proud to see them take the next steps in their careers and wish them continued success in their future endeavours.

THANK YOU



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