

Adaptation & Resilience – summary report

UK-Bangladesh Climate Partnership Forum

9 December 2020

Delivered through the Expert Advisory Call-Down Service (EACDS) Lot B:
Strengthening Resilience and Responses to Crises
Service implementation by a DAI Consortium

EXPERT ADVISORY CALL DOWN SERVICE – LOT B

STRENGTHENING RESILIENCE AND RESPONSE TO CRISES

THE SERVICE

Through the Lot B: Resilience service, DAI offers rapid response, high quality support to UK Government and other donors, across a wide range of development and humanitarian challenges.

We offer support for risk informed design for development interventions across all sectors; risk and contingency financing; understanding changing systems; and strategic integration of humanitarian action and development.

We offer a clear process for users that draws upon a well-established network of relevant expertise provided through over 60 consortium partners. We are able to build strong practical partnerships for rapid and responsive delivery through:

- > A dedicated, easy-to-access Secretariat to manage new enquiries and assure delivery
- > Consistent end-to-end quality assurance
- > A user friendly, customer-oriented outlook
- > A pro-active approach to knowledge sharing and communication
- > A focus on due diligence, efficiency and cost effectiveness.

ACKNOWLEDGEMENTS AND DISCLAIMER

This document has been produced by Mott MacDonald and ODI with the assistance of The Foreign, Commonwealth & Development Office contracted through the EACDS Lot B service 'Strengthening resilience and response to crises', managed by DAI Global UK Ltd. under contract to The Foreign, Commonwealth & Development Office.

The views expressed in this document are entirely those of the authors and do not necessarily represent The Foreign, Commonwealth & Development Office's own views or policies, or those of DAI. Comments and discussion on items related to content and opinion should be addressed to the authors, via info@lotb-resilience.org.

Your feedback helps us ensure the quality and usefulness of all knowledge products. Please email: info@lotb-resilience.org and let us know whether you have found this material useful; in what ways it has helped build your knowledge base and informed your work; or how it could be improved

First Published
December 2020
© CROWN COPYRIGHT

Contents

| | | |
|----------|--|-----------|
| 1 | INTRODUCTION..... | 1 |
| 2 | KEY MESSAGES FROM THE PRESENTERS | 1 |
| 2.1 | MAIN MESSAGES FROM THE CASE STUDY SESSION | 1 |
| 2.2 | MAIN MESSAGES FROM THE KEYNOTE ADDRESS | 3 |
| 3 | MAIN POINTS RAISED IN DISCUSSION..... | 5 |
| 3.1 | INTEGRATING LONG TERM, EVIDENCE-BASED, CLIMATE-LINKED PLANNING IN DEVELOPMENT PLANNING | 5 |
| 3.2 | CREATING MORE VISIBILITY AROUND THE ASSESSMENT AND MANAGEMENT OF TRANSBOUNDARY RISKS | 6 |
| 3.3 | ENGAGING AND EMPOWERING THE MOST VULNERABLE..... | 6 |
| 3.4 | INNOVATING AND TRANSFORMING SYSTEMS TO ACHIEVE SCALE | 6 |
| 3.5 | OTHER POINTS RAISED | 7 |
| | ANNEX 1: PROGRAMME FOR ADAPTATION AND RESILIENCE SESSIONS | 8 |
| | ANNEX 2: CASE STUDIES | 10 |
| | ANNEX 3: KEYNOTE BY UNDP | 14 |
| | ANNEX 4: SPEAKERS AND PANELLISTS..... | 17 |

1 Introduction

The UK's role in organising COP26 and Bangladesh's presidency of the Climate Vulnerable Forum position both countries in a key leadership role and hence the UK-Bangladesh Climate Partnership Forum is as an important vehicle to build momentum for climate action globally.

Mott MacDonald and ODI are coordinating a webinar series on behalf of the Foreign, Commonwealth & Development Office (FCDO) as part of the UK-Bangladesh Climate Partnership Forum in advance of COP26. This initiative comprises a series of virtual events and an ongoing, multi-stakeholder dialogue to promote collaboration and lasting partnerships at all levels between the UK and Bangladesh.

The forum builds on a long history of cooperation between the UK and Bangladesh and is structured around four key COP26 themes: 1) Adaptation and resilience, 2) Nature, 3) Clean Growth and 4) Finance. The aim is to bring the two countries together to share innovative ideas, experiences, knowledge, technology and initiatives to achieve greater progress on climate change.

Beyond each event, it is expected that active members of the discussions from both countries will continue the dialogue and coalesce around key areas of interest and initiatives that can be taken forward in the run up to COP26 and beyond. Two 90 minute virtual events were held on the COP26 theme "Adaptation and Resilience" on the 24th and 25th November 2020 both co-moderated by Simon Maxwell and Saleemul Huq.

The first session was introduced by Judith Herbertson, Director of Development, FCDO and included four case studies and a panel discussion. This was followed by a keynote session with an introduction from Robert Chatterton Dickson, British High Commissioner in Dhaka and opening remarks from Mr Md. Shahriar Alam, the State Minister for Foreign Affairs; Lord Ahmad of Wimbledon, Minister for South Asia and the Commonwealth; and Anne-Marie Trevelyan, UK International Champion on Adaptation and Resilience for the COP26 Presidency. Keynotes by Khushid Alam (Assistant Resident Representative, UNDP) and Baroness Brown (Chair of the UK Climate Change Committee) on climate adaptation from both countries' perspectives were followed by a moderated discussion with questions from the audience.

"I hope the UK-Bangladesh Climate Partnership Forum will bring these two countries together to share innovative ideas, experiences, knowledge, technology and initiatives to achieve greater progress on climate change." Mr Md. Shahriar Alam, the State Minister for Foreign Affairs.

2 Key messages from the presenters

2.1 Main messages from the case study session

"A take away for me from case studies presented in #UKBDCOP26 session today (among many others): mitigation & adaptation are not separate. Building adaptive strategies and resilient communities can be a route to lower emissions. Can this be a way to unlock Loss and Damage funding?" Simon Maxwell.



Dr. Golam Rabbani, Head of Climate Bridge Fund Secretariat

"People displaced by climate-related change in their environment are increasingly ending up in in Bangladesh's urban slums – we need to act

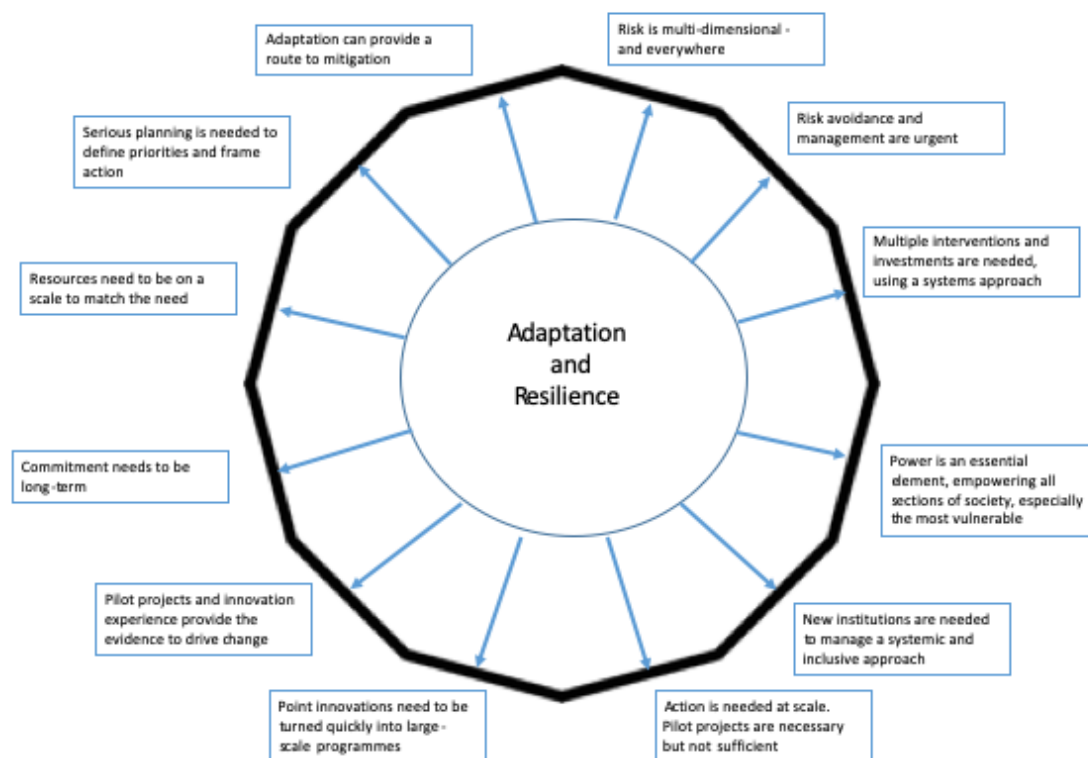
Case study 1: Addressing the adverse impacts of climate change in urban areas of Bangladesh

- Climate induced migration is increasing due to flooding, river erosion, cyclones, drought, and saline intrusion. Migrants face multiple challenges in urban areas including water logging, drainage problems, limited access to safe water and sanitation, poor housing, health issues (due to dengue, and other climate sensitive diseases).
- The Climate Bridge Fund (CBF) 'bridges' the financial gap - from short-term project funding to sustainable provision of services and infrastructure for climate-induced migrants in Khulna, Rajshahi and Barisal, Sirajganj and Satkhira.
- CBF funds climate resilient measures and technologies including: raised water points, rainwater harvesting system, extension of WASA pipe water

| | |
|--|---|
| <p><i>now to improve their resilience and prevent a humanitarian crisis”.</i></p> | <p>connection, hygienic and high toilets, better housing with transparent sheets for more light, basic health services especially for women and children, skills development, microfinance support, solid waste management, improvements to the drainage system.</p> <ul style="list-style-type: none"> • CBF partners also advocate with city corporations and WASA to increase support services for slum dwellers. |
|  <p>Brian Kilkelly Development Lead, EIT Climate-KIC</p> <p><i>“We have excellent new innovations for strong adaptation and increased resilience. But to reach scale, we also need to innovate in the area of business models and system transformation. Then we can usher in the great green transformation!”</i></p> | <p>Case study 2: Engaging communities in climate resilient housing development by the Edinburgh experience Climate-KIC.</p> <ul style="list-style-type: none"> • EIT Climate-KIC is Europe's largest public-private partnership which brings together large and small companies, scientific institutions and universities, city authorities and other public bodies, start-ups, and students to tackle climate change through innovation. • In Edinburgh, EIT Climate-KIC is applying the principle of systems innovation (over point innovation / incremental improvements) to the process of land development using a development opportunity to accelerate the transition of Edinburgh to be zero carbon by 2030. • Edinburgh is expanding and developing the Granton Waterfront as a new part of city. This is one of fifteen 'Healthy Clean Cities' initiatives experimenting with new business models such as 'Build to Live'. With 'Build to live' instead of large developers being granted planning permission and selling units onto residents, citizens are empowered to be part of the development process from the outset by creating a 'village development company' which is owned by future residents • This changes the system so it is more driven by future residents rather than the traditional actors, providing enhanced resilience to future climate change, with an increased role for communities in re-organising own cities. |
|  <p>Mr. Bazlul Karim, Deputy Team Leader (Development), Char Development and Settlement Project CDSP-B</p> <p><i>“Experience shows that, in an area highly vulnerable to climate change, resilient communities can develop after resettlement when supported by a well co-ordinated, integrated approach with full community participation and cooperation between government and civil society.”</i></p> | <p>Case study 3: Resilient <i>char</i> land coastal communities</p> <ul style="list-style-type: none"> • Every year in the Eastern Delta, about 52 km² of newly formed land accretes, and about 32 km² of old land is taken away through bank erosion. A number of key approaches have been successful in enabling communities in the coastal zone to resettle on accreted land with several measures which have been effective in increasing resilience to flooding, cyclones and the lack of fresh water. Key factors include: <ul style="list-style-type: none"> ▪ Strong community participation ▪ Integration of key Departments and NGOs to provide services. ▪ the role of the Deputy Commissioner, in ensuring: (a) effective law and order in the coastal <i>chars</i> (b) a fair and transparent land allocation process for new settlers (c) support of Union, Upazilla and District local government. ▪ An emphasis on gender equity, in participation, land allocation, and provision of training and information. ▪ A Long-term Survey and Study of the Hydro-Morphological Processes to identify areas at risk from erosion and with accretion potential. ▪ Cyclonic storm surge disaster resilience involving shelter construction, training, preparation and organisation, plus the rapid growth in agricultural production, income and assets in the project area |
|  <p>Dr Ed Suttie, BRE Centre for Resilience</p> <p><i>“Standards and training are essential, and for a stakeholder to see property flood resilience measures, and understand how they were retrofit in the context of a typical house, has a powerful influence on unlocking even wider uptake.”</i></p> | <p>Case study 4: Improving the flood resilience of existing housing stock in the UK</p> <ul style="list-style-type: none"> • In the UK 2.4 million properties are at risk from river and coastal flooding every year and a further 2.8 million are at risk from surface water flooding. Around 1 in 6 UK properties are in areas where there is a significant risk of flooding. As many as 40% of businesses fail to re-open after a flood and the mental health impacts of flooding can still be prevalent 2 years after an event. • Flooding is a significant issue, but it remains sometimes difficult to motivate stakeholders to take action for change. BRE has made 4 key interventions ts are being addressed to improve flood resilience of existing housing stock. <ol style="list-style-type: none"> 1. Code of Practice including PFR standards and guidance for homeowners, businesses and local planners 2. Training to embed best practice for construction professionals, insurers |

3. Demonstration through a flood resilient home in an Innovation Park of demonstration buildings that receive over 10,000 construction professional visitors a year.
4. Tools to enable wider adoption (eg Property Flood Resilience database)

More detail on each case study can be found in Annex 2. A 12-point charter by moderator Simon Maxwell on adaptation and resilience summarising the discussion of the UK and Bangladesh case studies.



2.2 Main messages from the keynote address

“Climate action works best when anchored within disaster reduction and development frameworks. Our key priorities include: practical action on ground, identifying, sharing and celebrating what works; increasing the level of finance, including from bilateral, multilateral and private sector sources as well as improving access to finance and tracking risks.” Anne-Marie Trevelyan.

Bangladesh has played a leading role on adaptation and resilience, it was the first country to establish a climate change trust fund and currently holds the Presidency of the CVF representing more than 1 billion people from vulnerable countries. The government recently launched the “Mujib Climate Prosperity Plan” and the “Midnight Survival Deadline for the Climate” initiative pressing for all nations to update their NDC’s by 31 Dec. Bangladesh also hosts the South Asian regional office for Global Centre of Adaptation (GCA).

The UK was the first country to commit to net zero and has committed to double climate spending with 50% allocated to adaptation and resilience. More than 119 countries have signed up to the UK’s Call to action on adaptation 1 year ago. The UK-Bangladesh partnership on climate action is built on strong bonds between two countries and have a close partnership on Track #6: Resilience and adaptation of the Climate Action Summit¹ of the UN Secretary General. However, there is still much to be done with currently only 20% of

¹ tasked with addressing the urgent requirements to adapt, especially of the most vulnerable people by scaling up finance; mainstreaming resilience and adaptation into norms, policies and long-term low emission development strategies; and initiatives on DRR, Land degradation, food security, water security nexus and planning tools and support

international climate finance allocated to adaptation investments and less than 10% reaching vulnerable communities who need it the most.



Making development stronger than risks to climate change

Khurshid Alam, Assistant Resident Representative, UNDP

“I am sure this effort will fuel a new global momentum in fighting climate change together”

Bangladesh faces many challenges from climate change. More than 90% of the waters from Himalaya region drain through Bangladesh and the Bay of Bengal is the epicentre of cyclonic deaths in the world. Yet Bangladesh is the fastest growing economy in South Asia and is the fourth largest rice producer and the fifth largest fish producer.

Bangladesh's success story includes advances in ensuring a resilient food system; reduced disaster mortality due to successful early warning system, effective management and promotion of risk informed development; and consistent economic growth. This has been driven by strong political commitment, effective use of global cooperation by the GoB, investing in innovation, setting up a financing facility, rising domestic demand for investment and an ability to translate disaster management lessons for adaptation. Bangladesh is in a strong position to support other LDCs in adaptation.

However, Bangladesh's industrial growth needs to be more green and resilient and greater regional integration and cooperation is required to address transboundary issues. With sea level rise and saline intrusion, people need new skills, new work opportunities and new homes as they migrate further inland while additional efforts are need to ensure that urbanisation is resilient and absorptive. Bangladesh is not yet ready to tackle the public health outcomes of climate change and capacity and knowledge gaps remain with inadequate integration of climate risks into disaster, ecosystem service and development planning. Private sector engagement in adaptation also remains limited.

Tackling these issues requires: 1) a risk informed approach to land use planning; 2) continued modernisation of skills; 3) investments in the food system; 4) encouraging risk informed investments and global branding; and 5) effective financing solutions that translating investment into resilience and support the localisation of adaption actions in rural and urban areas.

The UK-Bangladesh partnership can work towards building a strong evidence base, test new ideas, and influence the decisions that are taken by governments and the private sector to achieve even greater progress on adaptation. There are also opportunities to blend trade, aid and climate finance to increase the flow of climate finance, enhance absorptive capacity of climate funds and address governance issues.

Future priorities and areas for future partnership include enhancing ecosystem service capacity to build resilience through Nature based solutions (NbS), ramping up investment in adaptation and readiness, and adopting risk-informed, mid and long-term development planning and programming; ensuring adaptation investments target food, water, energy and livelihood security as well as social protection; developing regional integration and cooperation for capacity, knowledge, technology development and transfer, and climate finance; institutional strengthening and governance reform; and promoting a green and resilient finance model including concessional and blended finance; joined-up climate diplomacy; and the establishment of a central knowledge management network.



Priorities for Adaptation in the UK: the approach adaptation planning in the UK the role of the Adaptation Committee

Baroness Brown of Cambridge, Chair of the Committee on Climate Change's Adaptation Committee; Chair of the Carbon Trust

“We still have a lots to learn in developing effective adaptation strategies in the UK.”

In the UK the 2008 Climate Change Act requires a Climate Risk Assessment (CRA) every 5 years (prepared by the Adaptation Committee which is part of the UK Climate Change Committee. The last CRA in 2017, highlighted that we are already experiencing dramatic changes in our climate. There have been significant changes in the UK climate, some of which may even be irreversible. Between 1980's and the last 10 years there has been a five-fold increase in global economic losses from climatic change related event which shows that “we are just not adapting fast enough”. Further changes in the climate are inevitable and severe, pervasive and irreversible changes in climate cannot be ruled out. However, many parts of the UK economy are not prepared for climate change.

The UK faces many risks in common with Bangladesh including: increased flooding; sea level rise; coastal erosion; hotter summers; water shortages; and new pests and diseases. Without additional adaptation, the number of people living in significant flood risk areas in the UK could nearly double in the next 30 years, even on a 2°C path. The UK government recently allocated around £5.2 billion to the Environment Agency to combat flood risk in the UK over five year, however, this will not be sufficient as the need is increasing. However, there is an opportunity to pull forward this funding to create jobs lost due to the pandemic.

There were six urgent priorities for the UK highlighted in the 2017 CRA: 1) flooding and coastal change risks; 2) risks to health, wellbeing and productivity from high temperatures; 3) risks of shortages in water supply, and for agriculture,

energy generation and industry; 4) risks to natural capital including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity; 5) risks to domestic and international food production and trade; and 6) new and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals.

The UK CCC has three key priorities: 1) increasing UK adaptation ambition for COP26 with the inclusion of adaptation alongside emissions reduction in the UK's NDC; 2) completing an assessment of UK risk and adaptation by summer 2021; and 3) frameworks for measuring progress.

Currently the AC is in the process of preparing the evidence report for the third CRA which will be published on the new climate risk website in the summer 2021 along with its independent advice to the UK Government on the top climate risks and the actions that should be taken over next 5 years. The AC's other area of work is in preparing frameworks for improving resilience – here there is a real opportunity for collaboration where UK can learn a lot from BD as it has been working on these issues with a much greater intensity.

The CCC's challenges for action on adaptation are similar to Bangladesh and include:

- adaptation is under-resourced compared to mitigation;
- the 'Net Zero target (10 point plan) deflects the focus from adaptation;
- adaptation can be hard to communicate – no single vision, target or metric;
- adaptation is hard to visualise – demonstrating successful adaptation due to uncertainty associated with climate change and the timeframes over which it occurs;
- adaptation is fundamentally a process and not an outcome;
- perception of 'It won't happen again' – uncertainty is hard for people to deal with;
- investment challenge - benefits are long-term, costs are short-term, making the business case is much harder; and
- will Covid-19 give increased focus resilience?

"The key challenge is how to accelerate efforts to adapt to climate change and ensure that all sectors are better prepared in both countries. We also share the Committee's aspiration that adaptation will get equal prominence alongside mitigation in the UK's NDC and that we can help to facilitate "creative collaboration" between Bangladesh and the UK". Saleemul Huq

Key points from the keynote session:

- working across geographic (local to global) and time scales (short to long term)
- Communicating A+R effectively
- Understanding risk
- UK and Bangladesh working bilaterally and
- As [@COP26](#) Presidency and [@TheCVF](#) Presidency

3 Main points raised in discussion

"Bangladesh is working to prepare a Plan for "Mujib Climate Prosperity Decade" on the eve of 100th Birthday celebration of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman. We hope to have a better bilateral relationship with the UK which ultimately develops a strong bond and commitment between COP26 Presidency and CVF Presidency." Abul Kalam Azad, special envoy to the Climate Vulnerable Forum's (CVF) Presidency.

3.1 Integrating long term, evidence-based, climate-linked planning in development planning

"Bangladesh and the UK can learn useful lessons from each other on building climate resilience. As coastal nations, they have a unique history of developing structural and non-structural solutions to coastal and riverine flooding. Despite differences in their economic paths, both countries now recognise the need to overcome challenges in better incorporating long term, evidence-based, climate-linked planning in their future development." Anu Jogesh, Policy and Governance Lead, Acclimatise.

Risk avoidance and management are urgent and need to be based on the risk landscape of each country. Serious planning is needed to define priorities and frame action. This needs to recognise that risk is multi-dimensional and everywhere and that adaptation also provides a route to mitigation. Important to integrate climate policies, strategies and plans with other sectoral and economic developmental policies with a whole of society systems-approach in mind.

3.2 Creating more visibility around the assessment and management of transboundary risks

“We continue to see climate adaptation framed as a national-local concern, which implies its scope and effects remain within national boundaries. We know this is not the case. We know a localised flood has the potential to disrupt global supply chains, yet these transboundary climate risks are still not adequately accounted for. If COVID-19 has taught us anything it’s that we need a systems-resilience approach that takes into account the transboundary nature of climate risks. We have a great opportunity to highlight this. I would like to invite the UK COP26 presidency to create more visibility around the assessment and management of transboundary risks.” Dr Rebecca Nadin, Director of Programme – Global Risks and Resilience, ODI.

“Given the high level of transboundary climate risks focused on water in South Asia / China (major rivers in particular) could this not be an issue that UK / Bangladesh (COP / Climate Vulnerable Forum) jointly take up and provide wider lessons around? But highly political and sensitive!!” Sheelagh O’Reilly, Rockburn Consultancy.

Bangladesh’s experience in adapting to climate combined with the establishment of the South Asian regional office for Global Centre of Adaptation (GCA) in Dhaka this September means that Bangladesh is well positioned to support work on transboundary issues in S Asia. However, evaluating the loss and damage associated with transboundary climate risks will be extremely challenging.

3.3 Engaging and empowering the most vulnerable

“Bangladesh is undergoing an unprecedented combined impact of Covid-19 and Climate change-induced cyclones and flooding. These events have severely affected the vulnerable groups, including the poor farmers, women and children. This has induced a new and higher increase in poverty. The local government institutions and NGOs are the best agencies to reach the poorest. Unfortunately, Covid and repeated flooding events have undermined the service of the above delivery agents. NGOs have been greatly hurt by donor fatigue and bureaucracy”. Dr Atiq Rahman, Executive Director, Bangladesh Centre for Advanced Studies

“Without investments in enhancing the capacity of women, girls and gender diverse people, the most vulnerable section of the at risk community; to adapt with the climatic adversities, as well as strengthening their agencies to support them, our battle against climate change cannot be won”. Dilruba Haider, Programme Specialist on Disaster Risk Reduction, Climate Change and Humanitarian Actions, UN Women.

‘Citizen science initiatives’ enable/empower the public to gather environmental information, for amalgamation, are a super-effective way to grow knowledge and consciousness and keep them at high levels” Marie Dupar, CDKN.

Power is an essential element, empowering all sections of society, especially the most vulnerable. Commitment needs to be long-term and resources need to be on scale to match the need.

3.4 Innovating and transforming systems to achieve scale

“We have excellent new innovations for strong adaptation and increased resilience. But to reach scale, we also need to innovate in the area of business models and system transformation. Then we can usher in the great green transformation!” Brian Kilkelly Development Lead, Urban Transitions

“People displaced by climate-related change in their environment are increasingly ending up in in Bangladesh’s urban slums – we need to act now to improve their resilience and prevent a humanitarian crisis”. Dr. Golam Rabbani, Head of Climate Bridge Fund Secretariat.

Multiple interventions and investments are needed, using a systems approach. Action is needed at scale. New institutions are needed to manage a systemic and inclusive approach. Pilot projects and innovation provide the evidence to drive change but are not sufficient. Point interventions need to be turned quickly into large scale programmes.

3.5 Other points raised

Standards and training to scale up innovative approaches - *“Standards and training are essential, and for a stakeholder to see property flood resilience measures, and understand how they were retrofit in the context of a typical house, has a powerful influence on unlocking even wider uptake.” Ed Suttie, BRE.*

Using an integrated approach with communities, government and civil society to increase resilience - *“Experience shows that, in an area highly vulnerable to climate change, resilient communities can develop after resettlement when supported by a well co-ordinated, integrated approach with full community participation and cooperation between government and civil society.” Mr. Bazlul Karim, Deputy Team Leader (Development), CDSP-B*

Migration - developing 'conflict sensitive' climate actions that incorporate peace building - *“There is a growing interest at the UK Gov on CC impacts on conflict - where new emerging conflicts are emerging in previously very peaceful areas - all connected to resource depletion, political issues.” Sarah Knight, NIRAS-LTS.*

Annex 1: Programme for adaptation and resilience sessions

Case study session - “Adapting to climate change: simple, low cost solutions” Tuesday, 24th November

Moderators

Saleemul Huq and Simon Maxwell

Opening remarks

Judith Herbertson, Director of Development, FCDO

Case studies

1. Addressing the adverse impacts of climate change in urban areas of Bangladesh - Dr. Golam Rabbani, Head of Climate Bridge Fund Secretariat
2. Engaging communities in climate resilient housing development – the Edinburgh experience Climate-KIC. Brian Kilkelly Development Lead, EIT Climate-KIC
3. Resilient *char* land coastal communities - Char Development and Settlement Project - *Mr. Bazlul Karim, Deputy Team Leader (Development), CDSP-B*
4. Improving the flood resilience of existing housing stock in the UK - Dr Ed Suttie, BRE Centre for Resilience

Panellists

- Professor Salehin, Institute of Water and Flood Management, Bangladesh University Of Engineering and Technology
- Dilruba Haider, Programme Specialist on Disaster Risk Reduction, Climate Change and Humanitarian Actions, UN Women
- Denise Bower, Executive Director, External Engagement, Mott MacDonald
- Erin Roberts, ODI Research Associate

Format

| | |
|------------|--|
| 4 minutes | Welcome - Saleemul Huq / Simon Maxwell |
| 4 minutes | Opening remarks - Judith Herbertson |
| 5 minutes | Addressing the adverse impacts of climate change in urban areas of Bangladesh - Dr. Golam Rabbani |
| 3 minutes | Response from designated panellist – Erin Roberts |
| 5 minutes | Engaging communities in climate resilient housing development – the Edinburgh experience Climate-KIC. Brian Kilkelly |
| 3 minutes | Response from designated panellist - Dilruba Haider |
| 5 minutes | Resilient <i>char</i> land coastal communities - Char Development and Settlement Project - <i>Mr. Bazlul Karim</i> |
| 3 minutes | Response from designated panellist - Denise Bower |
| 5 minutes | Improving the flood resilience of existing housing stock in the UK - Dr Ed Suttie |
| 3 minutes | Response from designated panellist - Professor Salehin |
| 40 minutes | Panel discussion and Q&A from audience |
| 10 minutes | Round up of discussion - Saleemul Huq / Simon Maxwell |

Keynote session - “What's been done, key challenges and what's next?” Wednesday, 25th November

Moderators

Saleemul Huq and Simon Maxwell

Opening remarks

- Robert Chatterton Dickson, British High Commissioner in Dhaka
- State Minister for Foreign Affairs, Mr Md. Shahriar Alam
- Lord Ahmad of Wimbledon, Minister for South Asia and the Commonwealth
- Anne-Marie Trevelyan, UK International Champion on Adaptation and Resilience for the COP26 Presidency, MP for Berwick-upon-Tweed

Keynotes

- Keynote 1 - Climate adaptation: the Bangladesh perspective - Khurshid Alam, Assistant Resident Representative, UNDP
- Keynote 2 – Climate adaptation: the UK perspective - Baroness Brown of Cambridge, Chair of the Committee on Climate Change's Adaptation Committee; Chair of the Carbon Trust

Panellists

- Abul Kalam Azad, special envoy to the Climate Vulnerable Forum's (CVF) Presidency
- Dr Atiq Rahman, Executive Director, Bangladesh Centre for Advanced Studies
- Dr Rebecca Nadin, Director of Programme, Global Risks and Resilience, ODI
- Anu Jogesh, Policy and Governance Lead for Acclimatise South Asia, Acclimatise

Format

| | |
|------------|---|
| 5 minutes | Welcome - Saleemul Huq / Simon Maxwell |
| 5 minutes | Opening remarks and introductions - Robert Chatterton Dickson, British High Commissioner in Dhaka |
| 5 minutes | Opening remarks (series) – State Minister for Foreign Affairs, Mr Md. Shahriar Alam |
| 5 minutes | Opening remarks (series) - Lord Ahmad of Wimbledon |
| 5 minutes | Overview of adaptation and resilience Saleemul Huq / Simon Maxwell |
| 5 minutes | Opening remarks (Adaptation and resilience) - Anne-Marie Trevelyan, |
| 10 minutes | Keynote 1 - Climate adaptation: the Bangladesh perspective - Khurshid Alam |
| 10 minutes | Keynote 2 – Climate adaptation: the UK perspective - Baroness Brown of Cambridge |
| 3 minutes | Response from Abul Kalam Azad |
| 3 minutes | Response from Dr Rebecca Nadin |
| 3 minutes | Response from Dr Atiq Rahman |
| 3 minutes | Response from Anu Jogesh |
| 15 minutes | Panel discussion and Q&A from audience |
| 10 minutes | Round up of discussion - Saleemul Huq / Simon Maxwell |

Annex 2: Case studies

Addressing the adverse impacts of climate change in urban areas of Bangladesh - Dr. Golam Rabbani, Head of Climate Bridge Fund Secretariat

One of the countries most severely affected by climate induced migration is Bangladesh. Due to the continuous hit by disasters (flood, river erosion, cyclone, drought, salinity etc.), rural people suffer from a livelihood loss. They move towards the urban areas with a hope to restore their livelihood and support their families. However, they face new challenges coming to the urban areas such as water logging, drainage congestion, water scarcity, poor housing and then extreme weather pattern (heat and cold waves) specially in northern part of Bangladesh.

After years of advocacy between BRAC and German Development Bank, KfW and BRAC founded Climate Bridge Fund (CBF) Secretariat in November 2019. This initiative is established on the foundation of BRAC's long experience to support the vulnerable population in urban low-income communities and climate vulnerable areas. This fund has been set up to 'bridge' the financial gap - from short-term project funding to sustainable provision of services and infrastructure for climate-induced migrants in five most climate vulnerable areas of Bangladesh (Khulna, Rajshahi and Barisal, Sirajganj and Satkhira).

After a rigorous selection process, four projects of CBF are on the ground now. Despite the uncertainties occurred due to the pandemic COVID-19, the huge response from the non-government organizations and continuous support from the CBF management committees (ACCF and CBF Trustee Board) made it possible for the CBF Secretariat to come this far in the first year of its operation. Four implementing partners including WaterAid Bangladesh in collaboration with VERC, Caritas Bangladesh, Health, Nutrition and Population Programme (HNPP), Ultra Poor Graduation Programme (UPGP) in collaboration with Humanitarian Programme (HP) of BRAC are on board with CBF to work towards that goal and support the climate vulnerable people together.

Rajshahi and Khulna City Corporations are the first two areas where CBF funded adaptation projects are going to be implemented in next three to four years. The projects are:

- **Composite Actions for Climate Migrants in Urban Slums (CACMUS):** Implementing Partner-WaterAid Bangladesh and VERC
- **Strengthening Resilient Life and Livelihoods for Climate Migrants (SRLCM):** Implementing Partner-Caritas Bangladesh
- **Strengthening community resilience to climate sensitive diseases in City Corporations of Bangladesh:** Implementing partner- Health Nutrition and Population Programme (HNPP), BRAC
- **Strengthening Resilience of Climate-induced Migrants in Vulnerable Urban Communities in Khulna and Rajshahi:** Ultra-Poor Graduation Programme (UPGP) and Humanitarian Programme (BHP), BRAC

The problems and needs identified by the implementing partners in the selected locations are safe water crisis, lack of hygienic toilets, poor housing, water logging, no drainage facility, disrupted mobility for not having proper roads, health crisis (due to dengue, and other climate sensitive diseases) which combinedly affect the livelihood of the people living in the urban slum areas. So, climate induced migrants who shift to the urban areas to restore livelihood face livelihood crisis once again.

The selected partners consulted the communities and proposed some climate resilient measures and technologies to address the needs. High risen platform for water points, rainwater harvesting system, extension of WASA pipe water connection etc. have been proposed to address the water crisis of those areas. At the same time, hygienic and high toilets, better housing with transparent sheets for more light, basic health services specially for women and children, capacity development on livelihood skills, microfinance support to address their immediate need, solid waste management, developing pathways and drainage system for clean environment. Also the projects will work on system strengthening and will do advocacy with the duty bearers (city corporation and WASA) to introduce a separate support wing for the low income community which will eventually solve the key challenges of household ownership issue to get

government services and also the policy gap. CBF is expected to continue working to cover more climate services with better services with the guidance from its Trustee Board and ACCF members.

Engaging communities in climate resilient housing development – the Edinburgh experience. Brian Kilkelly Development Lead, EIT Climate-KIC

Intro to EIT Climate-KIC

EIT Climate-KIC is a knowledge and innovation community. Our purpose is to tackle climate change through innovation. We are Europe's largest public-private partnership with this purpose – a growing pan-European community of diverse organisations. We bring together large and small companies, scientific institutions and universities, city authorities and other public bodies, start-ups, and students. We work on innovation to mitigate climate change and to adapt to its unavoidable impacts.

From point to systemic

Our generation faces the challenge of reducing net greenhouse gas emissions to zero within the next 20–30 years by changing almost every aspect of the ways humans currently live, work and play to avert catastrophic global temperature rise. Meeting that challenge requires transformation, by which we mean radical changes happening simultaneously, holistically and faster than we have ever experienced change before. There are many promising and effective 'point' innovations, but these alone cannot meet the scale of change required.

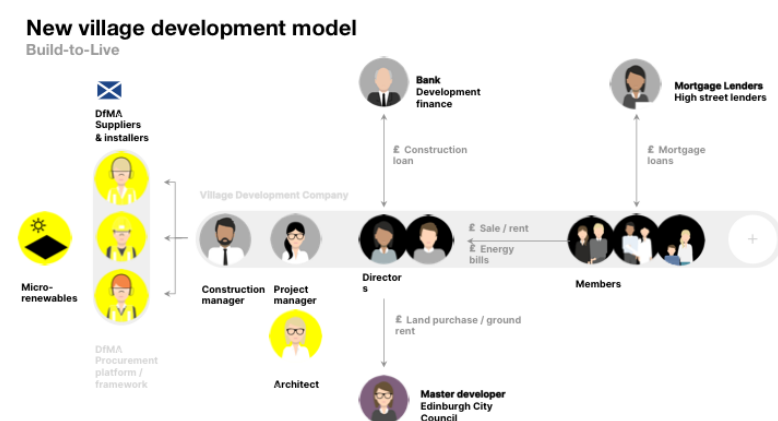
Examples of an exciting point innovation:

Field Factors: <https://fieldfactors.com/>

Rainwater management solutions for urban areas, such as public space, sport facilities and real estate.

Low-cost climate adaptation case studies

For our gathering, a case study from one of our programmes (Healthy Clean Cities) will be shared – the Granton Waterfront development in Edinburgh, Scotland. Here we will see how we are applying the principles of **systems innovation** to the very process of land development. Experimenting with new business models such as 'Build to Live'.



We will also share our insights into the need to shift from 'citizen engagement' to 'citizen empowerment'.

Brian Kilkelly, Development Lead, +44 7714 051216

Resilient char land coastal communities - Char Development and Settlement Project - Mr. Bazlul Karim, Deputy Team Leader (Development), CDSP-B

Bangladesh is a delta, built up by centuries of deposition of sediments. Satellite images show that, every year in the Eastern Delta, about 52 km² of newly formed land accretes, and about 32 km² of old land is taken away through bank erosion. As sea levels rise, as a result of climate change, this process may

accelerate. While this process threatens livelihoods on old land, it also provides new opportunities for sustainable land settlement and development and the establishment of resilient coastal communities.

A number of key approaches have been successful in enabling communities in the coastal zone to resettle on accreted land with several measures which have been effective in increasing resilience to flooding, cyclones and the lack of fresh water.

1. Community participation has been vital, fully involving both women and men both in terms of detailed planning and also through long term field level institutions, water management groups, micro-finance groups, tube-well user groups, labour contracting societies, farmer forums, social forestry groups, etc.
2. Integration of key Departments (Water Resources, Local Government Engineering, Land, Public Health Engineering, Agriculture, Forestry) and several partner Non-Government Organisations has been essential, to provide water management and transport infrastructure, clean water and sanitation, agriculture livestock and fishery extension, social forestry and social support.
3. In particular, the role of the Deputy Commissioner, through the District Administration, as the Land Project Director, ensured: (a) effective law and order in the coastal *chars* (b) a fair and transparent land allocation process for new settlers (c) support of Union, Upazilla and District local government.
4. An emphasis on gender equity, especially in terms of participation, and also in fair land allocation to both women and men, and provision of training and information on legal and human rights issues related to land and inheritance.
5. Long-term Survey and Study of the Hydro-Morphological Processes is essential in identifying areas at risk from erosion and with accretion potential.

These elements, together with the establishment of tested systems of cyclonic storm surge disaster resilience involving shelter construction, training, preparation and organisation, plus the rapid growth in agricultural production, income and assets in the project area have helped to create communities of settlers which are more confident and resilient in an area especially vulnerable to climate change.

Improving the flood resilience of existing housing stock in the UK - Dr Ed Suttie, BRE Centre for Resilience

The UK is not unique in facing the increasing and intensifying challenge of flooding which presents a life safety issue and threatens built assets and especially the housing stock.

In the UK 2.4 million properties are at risk from river and coastal flooding every year and a further 2.8 million are at risk from surface water flooding. Around 1 in 6 UK properties are in areas where there is a significant risk of flooding. As many as 40% of businesses fail to re-open after a flood and the mental health impacts of flooding can still be prevalent 2 years after an event. Flooding is a significant issue, but it remains sometimes difficult to motivate stakeholders to take action for change.

Property Flood Resilience (PFR) is achieved through a combination of flood resistant measures (such as a flood barrier for a doorway) and flood recoverability measures (such as raising electricity sockets and wiring to mid wall height) that can be integrated into a home. Three important components are being addressed to improve flood resilience of existing housing stock by enabling stakeholders to take action.

1. Code of Practice: This provides the Standards that ensure PFR is consistently well implemented in preparation. The complementary guidance for homeowners, businesses and local planners focuses on their role and how to use the Code of Practice. It is structured around 6 standards (i) Hazard Assessment (ii) Property survey (iii) Options Development (iv) Construction & Installation (v) Handover & Commissioning and (vi) Operation & Maintenance.
2. Training: To embed best practice such as the Code of Practice it is important to reach construction professionals, insurers and enable them to understand PFR through a trained and competent workforce.
3. Demonstration: We know that to ensure adoption and transfer of knowledge it is important for people to engage with real practical examples. We are doing this through our Innovation Park of demonstration buildings that receive over 10,000 construction professional visitors a year and increasing numbers of virtual visitors. Of the 15 buildings in our Innovation Park at our Watford HQ one is the flood resilient home. It is a Victorian brick terrace house which is a common form of smaller home in UK urban areas. It was refurbished and retrofitted with numerous PFR measures and on opening these measures were tested as the property was flooded by the fire service. Visitors

to the house can see the PFR measures including resistant measures (flood door, flood window, non-return valves, sump pump, floor drain) and recoverability measures (high electric sockets, resilient kitchen, tile flooring, three resilient wall linings). This helps them understanding how to apply and adopt these measures in their housing stock.

The impact of our work is evident as support for national and local plans, an increasing number of trained surveyors, a developmental Property Flood Resilience database working with insurers and adoption of Property Flood Resilience Design and best practice.

Our approach is to:

- Develop and support Code of Practice, Standards and Guidance
- Training professionals
- Demonstrate PFR so housing stock owners can see and learn first-hand
- Provide tools to enable wider adoption

Dr Ed Suttie, BRE, Watford, UK Ed.Suttie@bregroup.com

Annex 3: Keynote by UNDP

Khurshid Alam, Assistant Resident Representative, UNDP Bangladesh

1. WHAT BANGLADESH HAS ACHIEVED & DRIVERS OF CHANGE

Bangladesh's success story is the making of development stronger than disasters and climate. Three big examples:

- **A resilient food system:** Despite huge climatic impacts and recurrent disasters, with good policy, innovation, adoption of nature based solution and decisive actions, Bangladesh is successful in defeating the risk of famine. (Case: Hilsha fish success for effective regulation in rules and policy) [Data and graphs]
- **Effective disaster resilient society.** Disaster mortality has gone down significantly due to several crisis management experience, proven and successful early warning system, effective management & promotion of risk informed development. [Data and graphs]
- **Consistent upward movement of Bangladesh economy:** GoB's policy consistency in development and adaptation - shared understanding among the ministries – whole of society approach and ease of doing business; FDI, remittance etc.

I will also share a set of drivers and enablers ranges from political commitment, effective use of global cooperation by the GoB, investing in innovation, setting up financing facility, domestic demand for investment and ability to translate disaster management lessons for adaptation.

2. REMAINING CHALLENGE AND POLICY OPTIONS

- **In-situ adaptation is no longer viable:** There is a need to move from in-situ adaptation to a long-term, thought-out, sustainable adaptation. Systemic risk must be addressed with scale and transformation.
- **With the risk and reality of SLR, settlement plan requires new innovation to accommodate 180m people:** It is important to give people the essential skills, to equip them for decent livelihood after migration, lessening scopes of maladaptation; Providing work opportunities for migrants; CCA and displacement from rural to urban leads to further problems adding to unplanned urbanization- it is important to make the rest of the country ready to climate change and not solely the climate vulnerable areas; 4IR and demographic dividend
- **Transboundary challenge** – both across countries and districts, need renewed attention to regional cooperation.
- **Vulnerability of Bangladesh's industrial growth – as most are developed with little consideration of risks:** Export processing zones need further investment to encourage attractive and resilient way to continue to provide dividend. Translating Bangladesh as global hub of green and resilient investment.
- **Black hole:** Climate change and health, climate change and heritage protection; Bangladesh is yet not ready to tackle the public health outcome of CCA;
- **Capacity & knowledge gaps** (e.g. physical science, economics, social, transboundary and political aspect)
- **Inadequate integration** of climate change into disaster, ecosystem service & overall development planning & programming

- Project start up delay affecting slow progress of implementation and resilient & green development
- **Losses of institutional memory** in relevant ministries, agencies & limited mechanism for back-up
- **Limited private sector engagement in adaptation due to perceived short-term return of profit.**

Five challenges must be addressed: 1. risk informed land use plan; 2. continue to modernize skills system for moving towards knowledge economy, 3. investing in food system and 4. Promoting risk informed investments and global branding; and 5. localization of adaption actions in rural and urban area with effective financing solutions.

3. FUTURE PRIORITIES

- **Nature based solution (NbS) to climate change adaptation (CCA)** is also a big priority so that our ecosystem service capacity enhanced through adaptation.
- **Adaptation investment** with strong co-benefit in gender parity, class equality, economic equality, LNOB; Low-cost, human-centric locally led adaptation investment needed for enhanced readings, which is not heavily infrastructure dependent or techno-centric; Scientific and quantitative methods of assessing risk is critical
- **Risk-based land-use planning** can be a priority area for strategic investment because of our population density and resource struggle. Another area for strategic investment is in housing in adaptation (UK' interest in international migration) – and how housing will counter migration; how private sector (PS) can enter rural housing and also contribute in local economy promotion keeping locally led adaptation and development co-benefit in mind
- **Bangladesh's overall readiness** for climate action, adaptation and mitigation technology, and climate finance: How Bangladesh can also support other LDCs in adaptation.
- **Resilient and absorptive urbanization** should be a priority.
- **Mitigation focus:** Bangladesh has taken significant initiative and achievement in mitigation. However, these are not highlighted in international and national media.
- **Adaptation Limit** to be considered and therefore investment in adaptation with mitigation benefit is very important

4. UK-BANGLADESH JOINT APPROACH

- UK-Bangladesh partnership can work towards building evidence of success, test new ideas, and influence the decisions that are taken by governments and the private sector to achieve even greater progress on climate change. Like filling knowledge gaps and generating new ideas and new technologies, all of which can help us to both adopt a greener development pathway towards CC adaptation
- **Trade and business** - Architecture of CF in Bangladesh should be more effective. There is a scope for bilateral discussion between UK and Bangladesh for more opportunities in trade and business in blending of trade, aid and climate finance to tackle existing problems; Limited flow of climate finance, low absorbing capacity of climate funds & governance issue

UNDP – FCDO partnership towards COP26 to also support Bangladesh government to support its own aspirational role to become a champion in:

- Risk-informed, mid & long-term dev planning & programming
- Ensuring four basic security (food, water, energy & livelihood security) and social protection
- Developing regional integration and cooperation for capacity, knowledge, tech dev & transfer and climate finance
- Institutional strengthening and governance reform
- Green & resilient finance including concessional and blended finance model
- Invest more on climate diplomacy, peace-security conflict & climate negotiation
- Establishment of a central knowledge mgt network

Closing remarks: A fundamental question: since when and until when we will talk about adaptation? If mitigation is a 'no go', meaning not much we can do, and therefore should we keep doing 'adaptation' even though there is not much left to adapt?

Annex 4: Speakers and panellists

MODERATORS

Simon Maxwell

Simon Maxwell is an economist who began his career working in Kenya and India for the UN Development Programme, and then in Bolivia for the UK aid programme. He was a Fellow of the Institute of Development Studies in Sussex from 1981-1997, and was Director of the Overseas Development Institute from 1997-2009. Since 2009, he has inter alia been Executive Chair of the Climate and Development Knowledge Network (2010-17), and Specialist Adviser to the International Development Select Committee of the UK House of Commons (2010-17). He is currently on the Steering Committee of the annual UN Environment Emissions Gap Report. Simon is a past President of the Development Studies Association of the UK and Ireland. In 2007, he was awarded a CBE for services to international development. He writes extensively on development policy. In January 2016, Simon delivered the Anniversary Lecture of the Centre for Policy Dialogue in Dhaka, on the topic of 'Climate Compatible Development: Pathway or Pipedream' (see [here](https://www.simonmaxwell.net)). For further information, see www.simonmaxwell.net.

Saleemul Huq

Prof. Saleemul Huq is the Director of the International Centre for Climate Change and Development (ICCCAD) at Independent University, Bangladesh (IUB) since 2009 and Senior Fellow at the International Institute for Environment & Development (IIED) in London. He is also Senior Advisor on Locally Led Action, Global Centre on Adaptation (GCA) and Advisor of Climate Change Programme at Brac. Before that Dr Huq was the Director of the Climate Change Programme at IIED and founding Executive Director at the Bangladesh Centre for Advanced Studies (BCAS). He has worked extensively in the inter-linkages between climate change (both mitigation as well as adaptation) and sustainable development, from the perspective of the developing countries, with special emphasis on least developed countries (LDCs). He has published numerous articles in scientific and popular journals, was a lead author of the chapter on Adaptation and Sustainable Development in the third assessment report of the Intergovernmental Panel on Climate Change (IPCC), and was one of the coordinating lead authors of 'Inter-relationships between adaptation and mitigation' in the IPCC's Fourth Assessment Report (2007). He has been named among the "World's 100 Most Influential People in Climate Policy for 2019" for making a positive difference by The Apolitical, a London-based public servants' networking group.

KEYNOTE SESSION

Khurshid Alam (Assistant Resident Representative, UNDP)

Keynote speaker - Climate adaptation: the Bangladesh perspective

Khurshid Alam is a passionate advocate for the sustainable, equitable and resilient world. Currently, he is the Assistant Resident Representative of UNDP Bangladesh office, and also manages UNDP's Inclusive Growth and Resilience portfolio. The portfolio combines six practice areas: climate change, environment, disaster risk management, energy, social protection, urbanisation and gender.

Khurshid's work spans over 25 years in 40 countries in Asia, Africa, the Caribbean and Europe contributing significantly in advancing theory and practices of resilience in sustainable development context. He has been involved in many major international emergency responses over the last 25 years. Before UNDP, he was the Managing Director of ThinkAhead Limited, a UK based consulting company; and at ActionAid in various roles: International Tsunami Programme Director and Policy Advisor based in the UK.

He is a frequent keynote speaker and authored three books and numerous journal articles. He was actively engaged in major inter-governmental processes and supported global efforts in addressing climate and disaster risk.

By training, he is an anthropologist and currently lives in Dhaka.

Baroness Brown of Cambridge

Keynote speaker - Climate adaptation: the UK perspective

Baroness Brown is an engineer and a Crossbench Member of the House of Lords, with extensive experience in industry and academia. For 16 years she was an academic at Cambridge University, going on to spend eight years at Rolls-Royce plc in senior roles including Director of Advanced Engineering for the Industrial Businesses and Director of Engineering and Technology for the Marine Business. Before becoming a Member of the House of Lords in 2015, she was Vice-Chancellor of Aston University for ten years.

Julia advises the UK Government a Vice Chair of the UK Committee on Climate Change and Chair of the Adaptation Committee. She chairs The Carbon Trust and is a non-executive director of the Offshore Renewable Energy Catapult. Until its sale in 2017 she was a non-executive director of the Green Investment Bank. She led the King Review on decarbonising transport (2007) for the Chancellor of the Exchequer and is the Sector Champion for the Offshore Wind Sector Deal, part of the UK Government's Industrial Strategy.

Julia was made a Dame Commander of the British Empire for services to education and technology on 2015. She is a Fellow of the Royal Society of London and the Royal Academy of Engineering.

Abul Kalam Azad (Abul Kalam Azad, Special Envoy to the Climate Vulnerable Forum's (CVF) Presidency and Distinguished Fellow of GCA)

Panellist

Mr Md. Abul Kalam Azad possesses diverse and in-depth experience on HRD and HRM, health issues, Power Sector, investment and development of Economic Zones. Mr Azad served Honorable Prime Minister of Bangladesh as Senior Secretary, Principal Secretary and Principal Coordinator of Sustainable Development Goals (SDGs) for six years. He has 34 years of civil service experience including development administration, Judicial function, human resource development, public health management, management of Financial Institutions, consultancy and research and power sector development. Mr Md. Abul Kalam Azad completed (LL.B Hons) and Masters(LL.M) from Dhaka University. As a Harvard Alumni, Mr Md. Abul Kalam Azad has a long experience in working in Training Institutes at home and abroad.

He played a key role in the implementation of PPP projects, Coordination of skill development along with supporting private sector for growth, developing governance and appraisal system, planning and monitoring of SDG. Over the years, Mr Abul Kalam Azad acquired an excellent command on critical Climate Adaptation and Climate vulnerability issues. He played a crucial role in the negotiation with UN agencies for the graduation of Bangladesh from LDC and prepared VNR 2017 in UN.

azad2113@gmail.com

Dr Atiq Rahman (Executive Director, Bangladesh Centre for Advanced Studies)

Panellist

Dr Atiq Rahman is a prominent environmentalist, development expert and a visionary thinker in South Asia. He is the Executive Director of the Bangladesh Centre for Advanced Studies (BCAS), the Convener of a regional network – Climate Action Network South Asia (CANSAs) and the Coordinator of the Global Forum on the Environment and Poverty (GFEP), an international network mandated at UNCED. Dr. Rahman has been a consultant to the World Bank, Asian Development Bank (ADB), UNDP, UN-DESA, UNEP, IFAD, ESCAP, UNCTAD, Asian Development Bank, UNICEF, UNESCO, many national governments, several national and international NGOs. He is a long standing lead author and convening lead author of (CLA) of IPCC. As a lead author of the IPCC fourth Assessment, he was a co-recipient of the "Nobel Peace Prize" of 2007, jointly awarded to IPCC and Al-Gore. He was also awarded the highest UN- Environmental Award, the Champion of the Earth.

He is known for his wide range of national and international experiences in sustainable development, resource management, poverty and equity, disaster management, global governance and capacity building. Leading the team of the National Adaptation Plan of Action (NAPA) and a lead author of IPCC are major highlights in his volume of work. Dr Rahman, spearheads several networks and associations, he is a Coordinator of the Global Forum on the Environment and Poverty (GFEP), Chairman of the Synthesis Committee of the Bangladesh National Environment Management Action Plan (NEMAP) and also the Chairman of Steering Committee; Asia Pacific National Councils for Sustainable Development (APNCSD) which has its Secretariat based in Manila. Dr Atiq Rahman holds a PhD in Industrial and Applied Chemistry from Brunel University of West London.

Dr Rebecca Nadin, Director of Programme, Global Risks and Resilience, ODI

Panellist

Dr Rebecca Nadin is the Director of the Global Risks & Resilience team at the Overseas Development Institute (ODI). She has more than 15 years' government and advisory experience in China and Asia, specializing in climate adaptation. She has designed and managed multi-stakeholder climate change and sustainable development initiatives, led climate risk and vulnerability assessments and policy formulation at the national and sectoral level. Rebecca is also a China policy expert with a focus on China's emerging geopolitical strategy and socioeconomic priorities.

Before joining ODI, Rebecca was Director of the Adapting to Climate Change in China Project (ACCC Phase I and II), the largest climate risk policy project of its kind in China. Previously, Rebecca worked in the British Embassy Beijing's political section, covering VIP visits, Japan-China relations, Central Asia and energy security. She served as the Deputy Director of the British Council's Global Climate Change Programme, leading roll out in 60 countries. She was also the British Council's China Director, Climate Change & Science, leading the UK's Climate Change Public Diplomacy Campaign in China. Rebecca is the founder of PLAN8 Risk Consulting, a start-up that specialises in helping clients to manage climate and political risk, and a platform for women in the field of science and social science to showcase their leadership potential. She is an adjunct lecturer at the Centre for Environment & Population Health, Griffith University Australia.

Rebecca holds a PhD in Chinese foreign policy in Central Asia, MA in International Relations, BA in Politics from the University of Sheffield. She studied Chinese at Peking University and is working towards an LLM in International Law.

Anu Jogesh, Policy and Governance Lead for Acclimatise South Asia

Panellist

Anu Jogesh is the Policy and Governance lead at [Acclimatise](https://www.acclimatise.org/) which is part of the Climate and Resilience Hub at Willis Towers Watson. Based in New Delhi, Anu coordinates adaptation and risk resilience projects globally with a special focus on South Asia. She is a qualitative researcher with over 13 years' experience centred around the multi-level governance of climate change. Her work has spanned diverse regional topics such as sub-national climate strategies, multiple benefits-based development planning, greening financial flows, and infrastructure resilience among others.

Prior to joining Acclimatise, Anu worked with a think-tank focusing on state climate plans in the region as well as how climate change is communicated by the media. She was a business and environmental journalist between 2001 and 2009. Anu is a Chevening scholar and holds an MSc. in Environmental Change and Management from the University of Oxford.

Email: [a.jogesh\(at\)acclimatise.uk.com](mailto:a.jogesh(at)acclimatise.uk.com)

Twitter: @AnuJogesh

CASE STUDY SESSION

Dr. Golam Rabbani, Head of Climate Bridge Fund Secretariat

Case study presenter – Addressing adverse impacts of climate change in urban areas of Bangladesh - Climate Bridge Fund.

Md. Golam Rabbani is a seasoned climate change specialist. Over the years, he has managed a variety of projects in the field of environment, climate change resilience, adaptation and disaster risk management. His expertise is in climate risk assessment, adaptation policy and institutional analysis, climate finance, climate change negotiation, and coordination with donors and development partners.

Dr Rabbani holds a PhD on climate change adaptation, and two Master's Degrees in Environmental Science (University of New South Wales, Australia) and in Fisheries (University of Dhaka). His works/contribution to research have been well acknowledged and published by different international journals/Book Publisher including Springer, Journal of Global Warming, Journal of Water and Climate Change, Routledge, Emerald, Earthscan, Sage, MDPI and others.

Bazlul Karim, Deputy Team Leader (Development), CDSP-B

Case study presenter – Resilient *char* land coastal communities - Mr. Bazlul Karim, Deputy Team Leader (Development), Char Development and Settlement Project - B

Mr. Karim is responsible for supervising, monitoring and supporting all related activities of senior national consultants, mid-level consultants and field staff to implement CDSP-B activities. He supported the preparation of the Feasibility Study for CDSP-V and has visited remote chars including Dhal Char, Teliar Char, Sabuj Char, Char Kolatali, Char Mozammel, Ghasiar Char, Moulavir Char etc. located in Chittagong, Noakhali, Lakshmipur, Bhola and Patuakhali. Mr. Karim was also responsible for supervising and monitoring the activities of the Forest Department in implementing CDSP-IV and proposed the CDSP-V area. He also directly supervised the four partner NGOs with around 300 staff covering micro-credit, WatSan, WASH, legal and human rights, climate change and disaster management, homestead agriculture, value chain development, fisheries, and poultry and livestock. He is a member of Project Management committee and observer of Inter-ministerial Steering Committee.

Before CDSP-IV he was the Senior Agronomist/Agricultural Expert for the Feasibility study of Sureshwar FCDI project of BWDB and Feasibility Studies and Detailed Design of the Sub-projects under the Small Scale Water Resource Development Project and Rubber Dam Project of LGED. From 2001 to 2009, Mr. Karim was the Joint Director (Seed Marketing/ Seed Processing/ Fertilizer Marketing) of BADC under the Ministry of Agriculture. Before that he held several important positions in BADC since 1976 in different regions of Bangladesh. Mr. Karim has an M.Sc.Ag. in Agronomy from Bangladesh Agricultural University Mymensingh, and B.Sc.Ag. Hons in Agronomy from Bangladesh Agricultural University Mymensingh.

Brian Kilkelly, Development Lead, EIT Climate-KIC

Case study presenter – Innovative business models to drive citizen empowerment and resilience.

Brian is Development Lead at EIT Climate-KIC, the EU's largest public private partnership addressing climate change through innovation to build a low carbon economy. Working with colleagues and partners across Europe, he is passionate about bringing business, civic, and public leaders together to discover ways to improve the lives of citizens and the planet through knowledge sharing and innovation. He is currently supporting a mission to convene a global consortium of cities, businesses, experts, and funders to build an ambitious new programme to dramatically accelerate the transformation of cities to reach carbon neutrality by 2030.

Dr Ed Suttie, Director of Strategic Advisory, BRE

Case study presenter – Improving the flood resilience of existing housing stock in the UK

Ed is Director of Strategic Advisory, BRE. He leads a team delivering research and consultancy programmes on sustainability, circular economy, health and wellbeing, resilience and material sustainability for industry, UK Government, the European Commission and International agencies. He is responsible for coordinating BRE's work on Property Flood Resilience and has worked with the wider construction industry for 25 years on innovative products, resource efficiency and service life prediction. He was part of the team that delivered

the timber procurement policy for the London 2012 Olympic and Paralympic Games and leads pioneering office research on biophilic design. He has published widely in the field of construction, sits on the Executive Committee of Grown in Britain and Low Carbon Devon and contributes extensively to British and European Standards.

Ed.Suttie@bregroup.com



[@Ed_Suttie](https://twitter.com/Ed_Suttie)

Professor Salehin, Institute of Water and Flood Management, Bangladesh University of Engineering and Technology

Panellist

Dr Salehin is a professor of hydrology, with more than 25 years of experience in research on large basin scale (GBM) hydrology, coastal hydrogeology and saline water intrusion, disaster vulnerability and risk analysis, climate change adaptation, socio-eco-technical approaches to water management, integrated analysis of physical and human systems, and physical process-water security-livelihood dynamics. He has led and co-led Bangladeshi research consortiums in several large international collaborative projects (e.g. REACH, ESPA Deltas, DECCMA, UKRI Living Deltas Hub) and has a major interest in transboundary water management. He has served in several government expert committees, linked to the Bangladesh Delta Plan, Sustainable Development Goal 6, and transboundary water management. He has been the key resource person in numerous training programmes on integrated water resources management (IWRM) and water diplomacy/ transboundary issues, organized by different government agencies. Prof. Salehin teaches post-graduate courses on Advanced Watershed Hydrology, Groundwater Resource Assessment, IWRM, Interdisciplinary Field Research Methodology, and Integrated Flood Risk Management.

Dilruba Haider - Programme Specialist on Disaster Risk Reduction, Climate Change and Humanitarian Actions, UN Women

Panellist

Dilruba Haider is an expert in the field of Disaster Risk Reduction, Climate Change, Humanitarian Actions and Gender, working in these fields for 27 years; worked at DFID as the Disaster Management focal point for ten years till 2004; then joined UNDP as the Assistant Resident Representative for Disaster Risk Reduction. Currently, she is heading the Climate Change, Disaster Risk Reduction and Humanitarian portfolio of UN Women Bangladesh.

She supported introducing the Master's programme at BRAC University on disaster management and was a part-time lecturer there on community-based disaster management till 2010. She also worked at FCDO HQ in the UK in 2003; at UN Women HQ at New York and Geneva, and at Myanmar UN Women office, and in Bhutan on a special assignment with ITU in 2010.

She was instrumental in setting up the national level disaster response coordination system called Disaster Emergency Response (DER) group in 2001; design of the flagship DRR programme of Bangladesh: CDMP on behalf of DFID; and integrated DRR in the country's first Interim Poverty Reduction Strategy Paper (PRSP) in 2003. She has made a significant contribution on integrating gender aspects in the Climate Change chapter of the 7th five-year plan, and the Revised SOD 2019, on behalf of UN Women.

She was also a media personality doing newscasting in Bangladesh Television from 1992 to 2004, and anchoring talk shows on various social issues.

Denise Bower (Director of Programme, Global Risks and Resilience, ODI)

Panellist

Professor Denise Bower OBE joined the Mott MacDonald Executive Board as Group external engagement director in January 2020. She is responsible for client and partner relationships, thought leadership activity and driving improvements in the delivery of major projects. Denise is responsible for Mott MacDonald's corporate commitments on global issues and works with external organisations that are bringing about transformative action on climate change. Denise sits on the steering committee of the Coalition for Climate Resilient Investment (CCRI), which is a flagship initiative for COP 26 in the UK.

Denise has had an impressive career in the infrastructure industry. She is very well known through her role as the executive director of the Major Projects Association and as Professor in the School of Civil Engineering at the University of Leeds. Denise was a long-standing member of the Infrastructure Client Group and has worked closely with the Infrastructure and Projects Authority to improve major project preparation and delivery. She has worked with numerous sponsor and client organisations, helping to shape major projects and programmes.

Twitter: @denisebower1310

Erin Roberts, ODI research associate

Panellist

Erin Roberts, a Research Associate in ODI's Risk and Resilience Programme, has been working in the global climate policy space for over eight years and has worked on national climate policy in both South Asia and Africa. She coordinated research in Bangladesh to enhance understanding of how loss and damage could be better addressed in a national context which was part of a global project aimed at shaping the Loss and Damage discussions under the United Nations Framework Convention on Climate Change (UNFCCC). Her PhD research focused on the role of policy entrepreneurship in the evolution of Loss and Damage policies in Bangladesh. She has also worked for the African Climate Policy Centre to identify entry points for building resilience in the African Small Island Developing States and has been a technical advisor to the Africa Adaptation Initiative. She has advised both the Least Developed Countries and the African Group of Negotiators in the adaptation and Loss and Damage negotiations under the UNFCCC.

Erin Roberts: e.roberts@odi.org.uk

