



Adapting to climate change: simple, low-cost solutions

UK-Bangladesh Climate Partnership Forum

**#UKBDcop26
#ClimateAdaptation**

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UK-Bangladesh Climate Partnership Forum

A series of webinars and an ongoing, multi-stakeholder dialogue to promote collaboration and lasting partnerships at all levels between the UK and Bangladesh

Partnership is structured around four key COP26 themes

1

**Adaptation and
resilience**

2

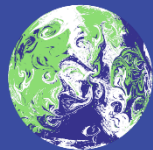
Nature

3

Clean growth

4

Finance



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Programme

Moderators

Saleemul Huq and Simon Maxwell

Opening remarks by Judith Herbertson, Director of Development, FCDO

Four exciting and innovative approaches from the UK and Bangladesh

- Addressing the adverse impacts of climate change in urban areas of Bangladesh
- Engaging communities in climate resilient housing development in the UK
- Resilient *char* land coastal communities in Bangladesh
- Improving the flood resilience of existing housing stock in the UK

Panel discussion and Q&A



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Case studies

Addressing the adverse impacts of climate change in urban areas of Bangladesh



Dr Golam Rabbani

Head of Climate Bridge
Fund Secretariat
BRAC

Engaging communities in climate resilient housing development



Brian Kilkelly

Development Lead
EIT-Climate KIC

Resilient *char* land coastal communities



Bazlul Karim

Deputy Team Leader
Char Development and
Settlement Programme

Improving the flood resilience of existing housing stock in the UK



Dr Ed Suttie

BRE Centre for
Resilience

Panellists



Prof Mashfiquis Salehin

Institute of Water and
Flood Management
Bangladesh



Dilruba Haider

Disaster Risk Reduction,
Climate Change and
Humanitarian Actions UN
Women



Denise Bower

Executive Director,
External Engagement
Mott MacDonald



Erin Roberts

Research Associate
Overseas Development
Institute

Addressing the adverse impacts of climate change in urban areas of Bangladesh

Dr Golam Rabbani

**Head of Climate Bridge Fund
Secretariat, BRAC**

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Context: Key drivers of the climate change induced migration in Bangladesh



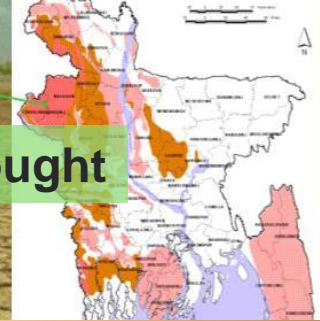
Flood



Cyclone



Drought



**Riverbank
erosion**



**Saline water
intrusion**



**SLR
and
salinity**



Heat wave



Context: Key drivers of the climate change induced migration in Bangladesh



Water logging



**Drainage
congestion**



**Erratic
rainfall**

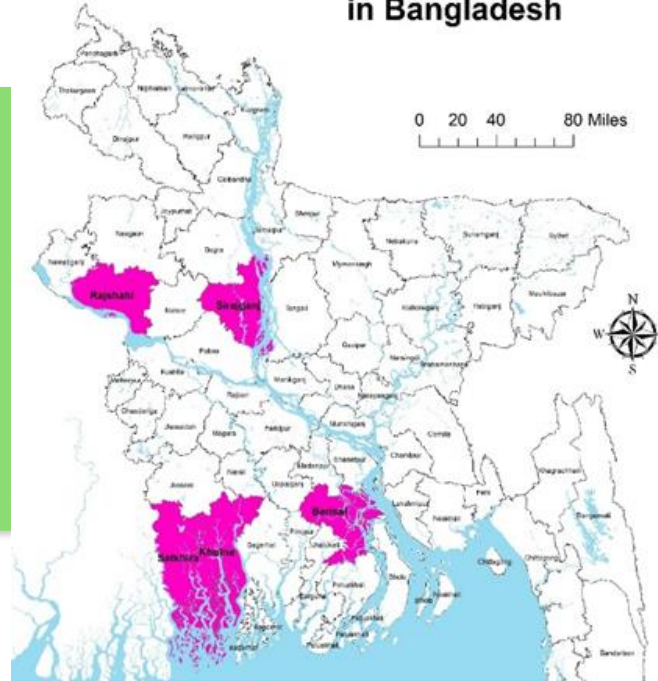


Cold wave

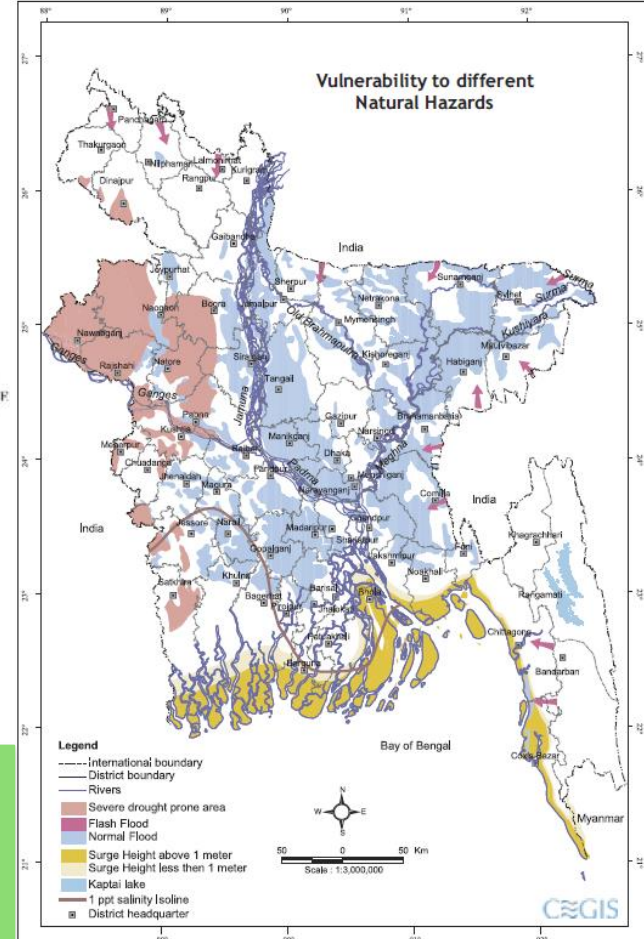
Climate Bridge Fund (CBF): Target group and areas

People vulnerable to climate-induced slow and rapid onset events: already displaced or at risk of being displaced

CBF Project Locations in Bangladesh



Khulna, Rajshahi and Barisal (City Corporations), Sirajganj and Satkhira (Pourashava)



Problems and needs of climate migrants in urban areas



Problems and needs of climate migrants in urban areas



Proposed solutions/potential interventions based on earlier learning and consultation with affected communities (Source: UDP, UPGP, CAB and Internet)



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Proposed solutions/potential interventions based on earlier learning and consultation with affected communities (Source: UDP, UPGP, CAB and Internet)



Key challenges and constraints



No specific
policy/plan/strategy
on addressing
climate induced
migration



Ownership of
land of the
HHs in the
slum areas



VS



CBF governance

Major Stakeholders

BRAC

- Legal partner for Financing Agreement
- Settlor of the Fund.
- Employer of the Trustees

KFW

- Development partner
- Provide no objection
- Progress review and fiduciary supervision

Principal Organs

Board of Trustees

- All strategic decisions
- Oversee fund management investment and disbursement

ACCF

- Advises the trustees on strategic decisions
- Selection of funded projects / awards grants

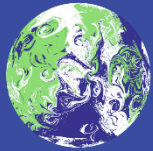
CBF Secretariat

- Overall coordination, administration, effective and efficient management of fund and implementation

Implementing Partners

- Implement the funded project
- Monitor and report to the Fund Secretariat on progress of the funded projects
- Ensure that the grant is prudently managed and solely used for project purposes

THANK YOU



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Engaging communities in climate resilient housing development

Brian KilKelly

**Development Lead
EIT-Climate KIC**

brian.kilkelly@climate-kic.org





Healthy, Clean Cities presented by **Brian Kilkelly**

Transformation, in Time

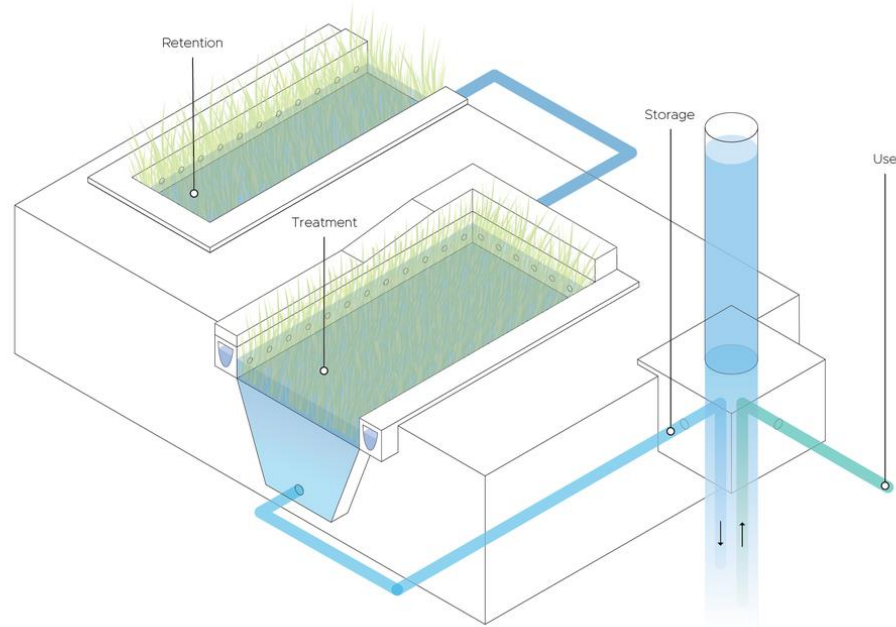
Systems Innovation for Climate Change



EIT Climate-KIC is supported by the
EIT, a body of the European Union



@ClimateKIC



biofiltration with aquifer storage technologies

avoiding the need for large infrastructures

<https://fieldfactors.com/en/technology>



SUPERBLOCKS
Barcelona

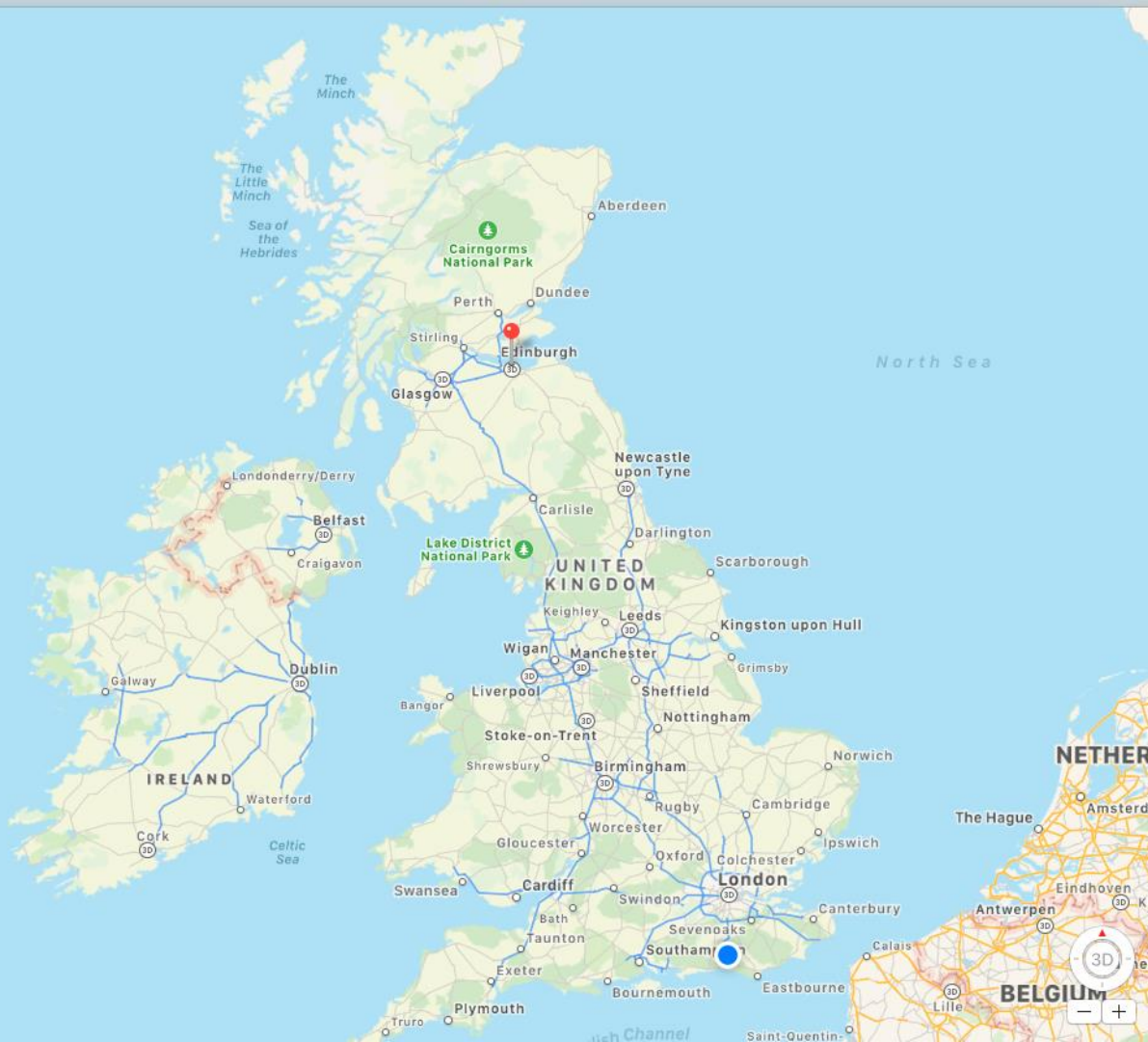
Granton Waterfront

A replicable model for a sustainable & affordable development in
Edinburgh

An aerial photograph of Edinburgh, Scotland, taken at dusk. The foreground shows the Granton Waterfront area with modern buildings and a large clock tower. The middle ground features the city skyline with various buildings and a bridge. The background shows the Scottish Highlands with mountains under a cloudy sky. A small airplane is visible in the sky.

Granton's strategic position
in Scotland's economy

Show ▾





What is Build-to-Live?

'Build-to-Live' is a type of development model that puts future residents, and those invested in their neighbourhood, at the heart of the development process.

We see four critical ingredients for Build-to-Live to succeed in Granton:



A C21st Village Development Model

Alternate model of building homes & neighbourhoods by residents, for residents.



Village-scale microgrids & energy communities

Multiplying benefits of onsite net-zero energy generation with community governance.



Design for Distributed Manufacturing & Assembly

Creating the pipeline for modern methods of construction to become the norm.

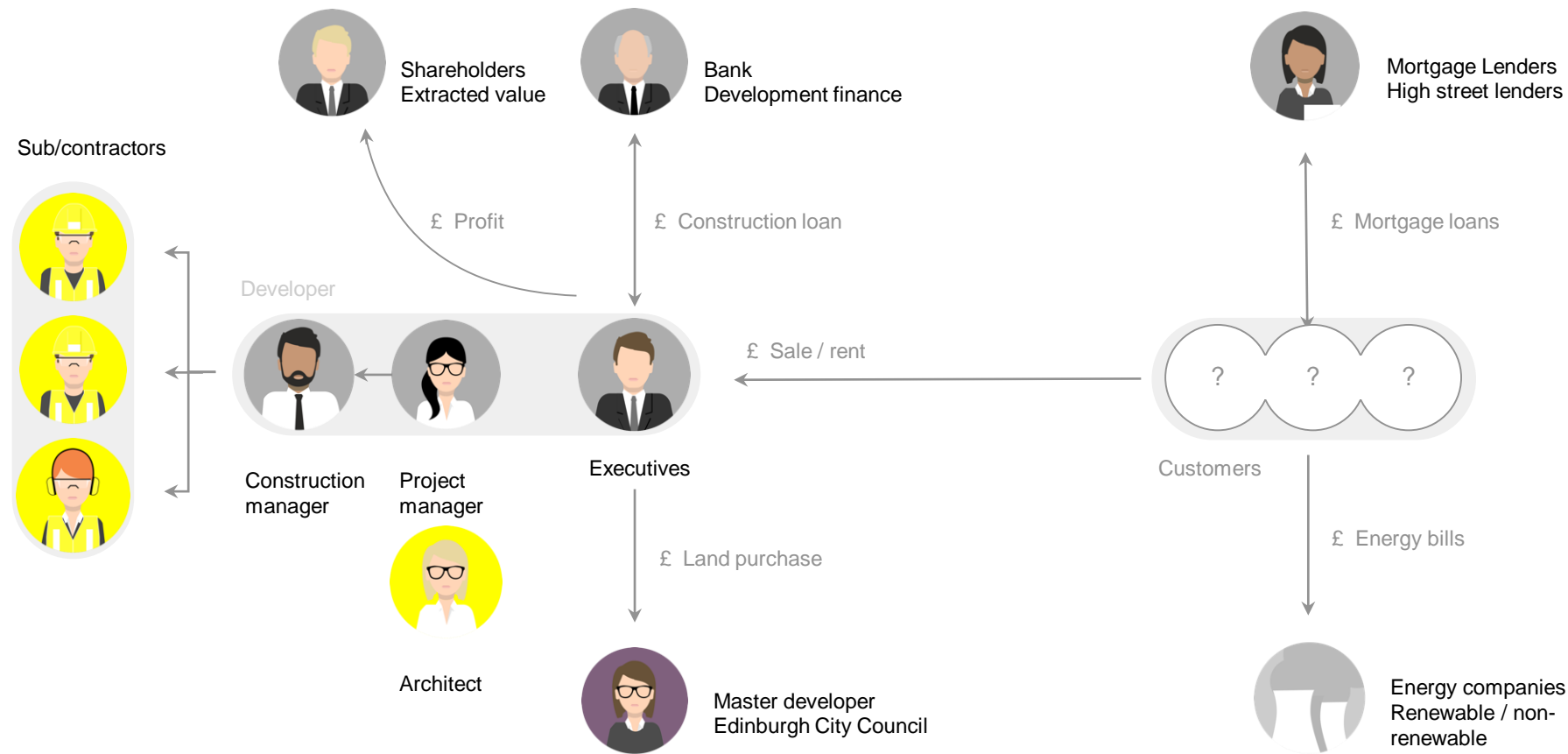


An urban natural assets strategy

Extending Granton's 'green corridor' into the heart of the urban development.

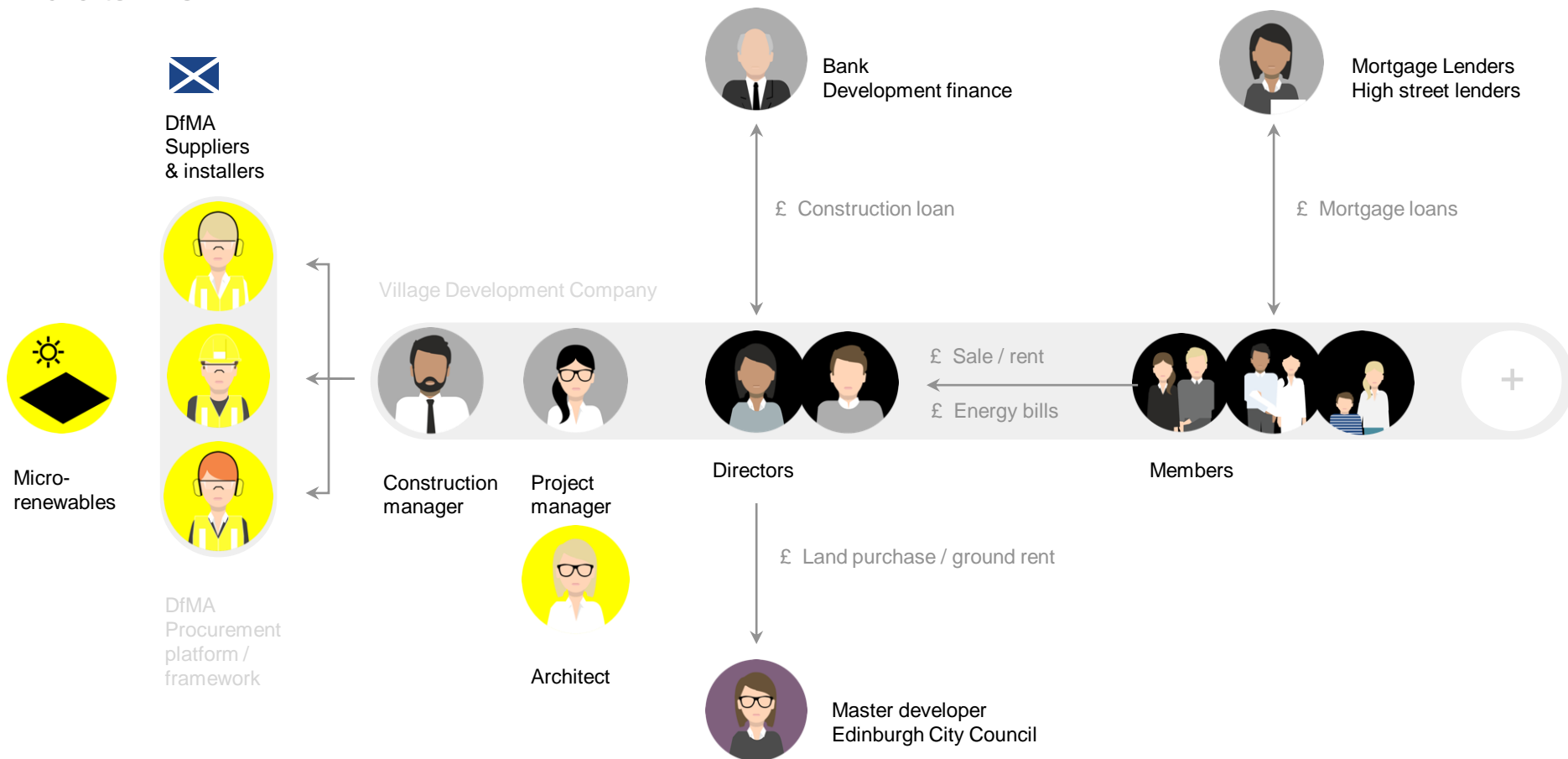
Conventional development model

Build-to-Sell or Build-to-Rent



New village development model

Build-to-Live



Thank you

Brian KilKelly
brian.kilkelly@climate-kic.org

Resilient Char Land Coastal Communities

Char Development and Settlement Project

Mr. Bazlul Karim

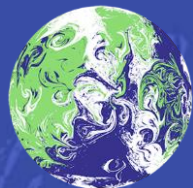
**Deputy Team Leader
(Development), CDSP-B**



Kingdom of the Netherlands



CDSP-B (AF)





Erosion and Accretion in the Southeast Delta

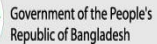


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CDSP-B (AF)

Overview

[illegible]

Accreted, Developing and Settled Land



Government of the People's
Republic of Bangladesh



Kingdom of the Netherlands



CDSP

Key Role of Participation / Field level Institutions



Government of the People's
Republic of Bangladesh



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CDSP

Integrated elements and implementing agencies

1. Protection from Climate Change

Bangladesh Water Development Board (BWDB)

Forest Department (FD)

2. Climate Change Resilient Infrastructure

Local Government Engineering Department (LGED)

including Agriculture

Department of Public Health Engineering (DPHE)

3. Land Settlement and Titling

Ministry of Land (MoL)

4. Institutional Development and Livelihood Support

Non-Government Organizations (NGOs)

5. Technical assistance and management support



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Importance of equitable and transparent land allocation



Government of the People's
Republic of Bangladesh



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CDSP

Focus on Gender Equity



Government of the People's
Republic of Bangladesh

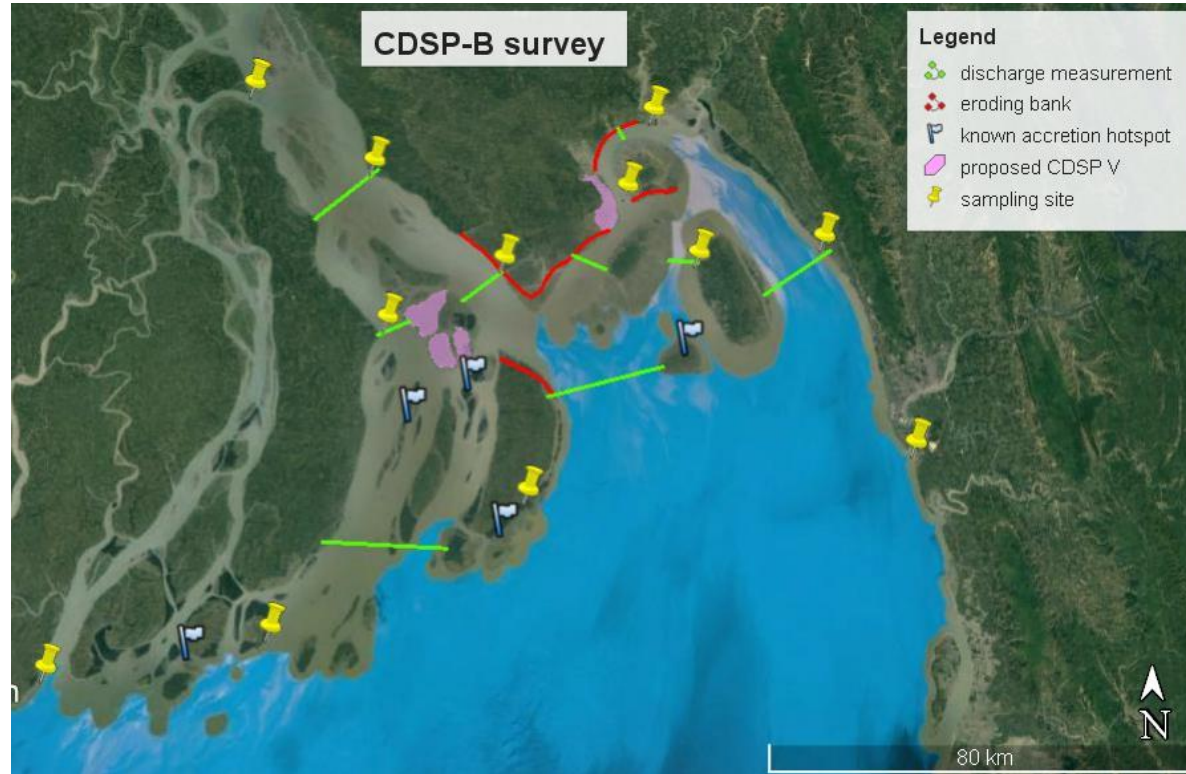


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CDSP

Essential Hydromorphological Survey



Resilience through disaster preparation.



Government of the People's
Republic of Bangladesh



Kingdom of the Netherlands



CDSP

Improving the flood resilience of existing housing stock in the UK

Dr Ed Suttie

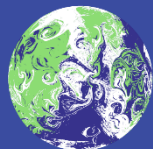
BRE Centre for Resilience

brian.kilkelly@climate-kic.org



The challenge

- **2.4 million** UK properties are at risk from river and coastal flooding every year
- **2.8 million** UK properties are at risk from surface water flooding
- **1 in 6** UK properties are located in areas where there is a significant risk of flooding
- As many as **40%** of businesses fail to re-open after a flood
- Mental health impacts of flooding can still be prevalent **2 years** after an event



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Code of Practice and Guidance

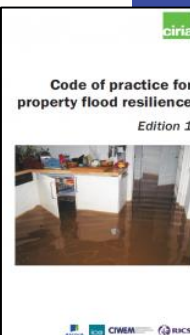
- Flood Resistance
- Flood Recoverability
- Property Flood Resilience
- Standard 1 Hazard Assessment
- Standard 2 Property survey
- Standard 3 Options Development
- Standard 4 Construction & Installation
- Standard 5 Handover & Commissioning
- Standard 6 Operation & Maintenance





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Training

 Training topics ▾ Course formats ▾ Membership ▾ Bookshop Sign in 


BRE Group statement on Coronavirus disease (COVID-19)

Our comprehensive flood resilience training courses equip you to develop in this growing area of practice




[Property Flood Resilience Surveyors](#)

Analysis from the UK Climate Change Risk Assessment indicates that the built environment will be increasingly affected by extreme weather events, and that incidence and severity of flooding will increase with higher temperatures, faster winds and changing rainfall patterns.




[Flood Resilience: Flood Risk Assessment – Part 2](#)

In this module, we will be looking at the different aspects of flood risk assessment, including key sources of information and how this should be reported to clients.




[Flood Resilience: Flood Risk Assessment – Part 1](#)

In this module we will be looking at the different requirements around legislation, and key policy that is relevant for flooding in the UK.




[Flood Resilience: Building and Construction Materials](#)

In this module we will be looking at the different building and construction materials often used across the UK today.




[Flood Resilience: Insurance](#)

This is a stand-alone training module which forms part of the BRE Property Flood Surveyor Training Course.




[Flood Resilience: Non-traditional Housing and Modern Methods of Construction](#)

This is a standalone training module which forms part of the BRE Property Flood Surveyor Training Course.




[Flood Resilience: Ageing Properties](#)

In this module we will be looking at how UK housing has changed over time.



[Flood Resilience: Building Elements](#)

In this module, we will be looking at the different building elements in construction and how these relate to flood resilience.



[How Resilient Design Will Change Homes](#)

This webinar will describe the challenges and reveal the solutions of the Flood Resistant Demonstration House and provide an insight of the learning that will inform future refurbishment and building practices.

- Flood surveyors
- Insurers
- Loss adjusters
- Local authorities
- Housing Associations

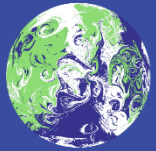


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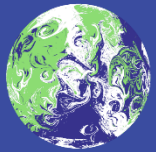
BRE Innovation Park



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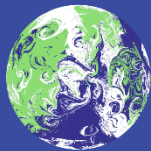
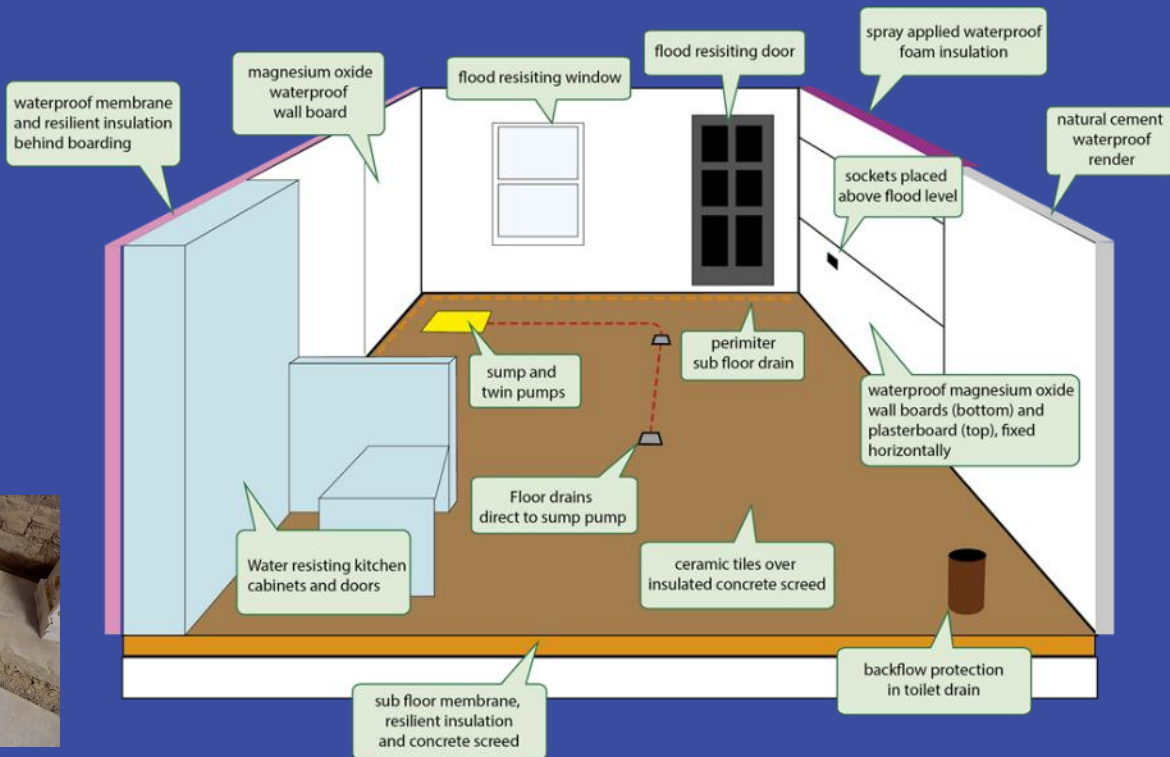
The flood resilient house



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The flood resilient house



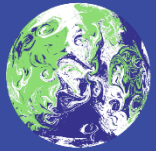
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The impact

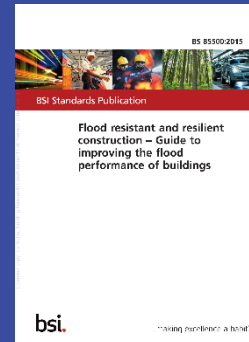
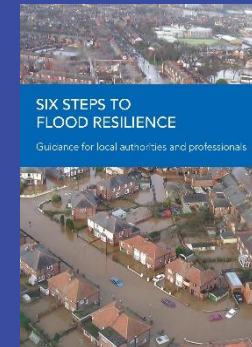


- National and local plans
- Increasing numbers of trained professionals
- Property Flood Resilience database
- Adoption of Property Flood Resilience Design and best practice
- Input to wider technical standards



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Summary

- Improving the flood resilience of existing housing stock in the UK
- Providing clear guidance for stakeholder groups
- Training professionals
- Showcasing flood resilient retrofit



Next webinar is tomorrow

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

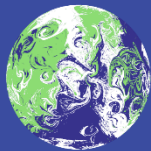
Wednesday, 25th November

<https://www.eventbrite.co.uk/e/adaptation-and-resilience-whats-been-done-and-whats-next-tickets-127685596055>

Continue the conversation on LinkedIn

Search: UK-Bangladesh Climate Partnership Forum

<https://www.linkedin.com/groups/12485053/>



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