

The Problem

The rising costs of natural disasters, driven by climate change, is making insurance increasingly inaccessible. Additionally, governments in developing nations lack the financial capacity to act as insurers of last resort. **Nowhere is this crisis more urgent than in Bangladesh, one of the world’s most climate vulnerable countries.** Today, <1% of households in Bangladesh have insurance protection against climate-related disasters. Even in urban areas, coverage barely reaches 5%. This leaves families and SMEs **one disaster away from financial devastation.** Without intervention, worsening climate shocks will only deepen poverty, widen inequality and slow economic resilience. **A blended finance mechanism is needed to make climate risk insurance affordable for households, viable for investors and scalable to protect communities before the next disaster strikes.**

Our Solution: Parametric Insurance for Households and SMEs

Dual-component Facility

**Resilience Financing Facility:** Established and managed as a centralised fund, the facility offers loans for household and SME resilience investments, predominantly plinth raising.

**Parametric Insurance:** Premiums priced at affordable levels for household/SMEs, subsidised by concessional capital layer in fund.

Parametric Insurance Modality

**Data-Driven Trigger Mechanism:** Triggers payouts via real-time climate data thresholds; automated validation and payout within hours by utilising e-payment platform.

Phased Rollout

To **target different flood zones, diversify risk, and allow for initial pilot testing**



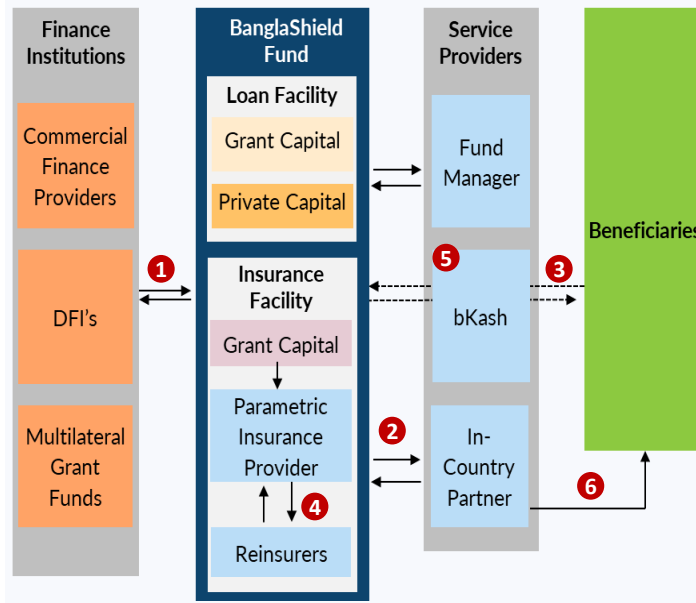
- Pilot phase (yrs 1-2):** Low-income households & microenterprises vulnerable to river, rainfall & flash floods in NGO partner areas
- Scale-up phase (yrs 3-5):** Low-income households & SMEs vulnerable to tidal, cyclonic and flash flood
- National phase (yrs 6+):** Low & middle income households & SMEs vulnerable to climate related floods

Fund Details	
Investment Type	Equity
Fund Size	US\$10m initially (increasing to \$100m)
Addressable Market	170,000 households
Fund Term	10 Years
Interest on Loans	12.2% (2% over Government Bond Rate)
IRR	13.9%
Management Fee	2.0% p.a.

Household Climate Vulnerability in Bangladesh

In Bangladesh, rural families spend US\$2 billion annually on disaster repairs and risk management – 12x more than international aid received and 50% more than government climate budget. Uninsured losses account for 96% of costs in developing nations versus 40% in wealthy countries, forcing families to drain savings, sell assets, or take high-interest loans. The cost of investing in resilience, while materially lower than the cost of recovery, is still too significant for low-income households to bear. Female-headed households spend up to 30% of income on resilience due to lower earnings (~10,000 BDT/month). 68% of beneficiaries take high-interest loans (avg. 9,000 BDT debt, 25% interest rates) for resilience measures, amplifying long-term costs. Only 9% of the population receive government/NGO subsidies for plinth-raising.

BanglaShield Operating Structure



Operating Structure Details

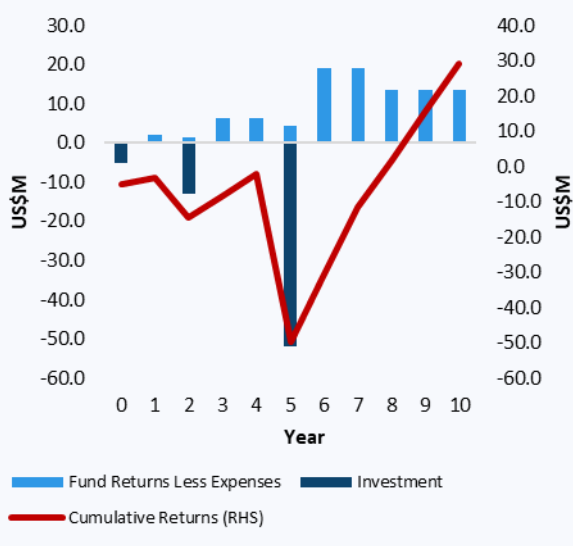
- The Loan Facility is capitalised with concessional capital, grant funding and private investors; the Insurance facility is financed with just grant funding
- Flood insurance is provided at cost to Bangladeshi households from third party parametric insurance providers, with the Insurance Facility paying for the insurers margin
- The Loan Facility funds Bangladeshi households and SMEs to invest in resilience building activities to protect against floods (primarily plinth-raising)
- Insurance provider will purchase re-insurance to diversify risk protect against loss
- bKash will facilitate the loan and insurance products through their mobile payments platform
- An NGO with deep in-country expertise will assist with the education of potential beneficiaries

Financial Analysis





Key Modelling Assumptions

Phase	1	2	3
Average House Value	US\$1,000	US\$1,000	US\$3,000
Average Plinth Cost	US\$300	US\$300	US\$1,000
Total Loan Fund Size	US\$10m	US\$30m	US\$100m
% Market / Grant Capital	50% / 50%	60% / 40%	70% / 30%
Insurance Subsidy (Grant Funds)	US\$0.43m	US\$0.97m	US\$3.40m
Incremental Homes Covered	33,300	66,700	70,000
Loan Term	5 Year Fully-amortising		
Insurer Operating Ratio	20%		
Insurer Profit Margin	20%	15%	10%
Pre-Intervention Risk Factor	5% p.a.		
Post-Intervention Risk Factor	1% p.a.		
Local Partner Admin Fees	5% p.a.	4% p.a.	3% p.a.
Allowance for Bad Debts	1% p.a.		

Market-Rate Capital Return Profile (Multi-Phase)



Risk Assessment

Risk Category	Description	Mitigation Strategy	Severity
 <b>Environmental &amp; Geographic</b>	Exposure to <b>widespread damage</b> from climate disasters and increasing <b>disaster frequency</b>	<ul style="list-style-type: none"> <li><b>Diversify coverage</b> across coastal and inland areas</li> <li>Offer premium reductions and mitigation loans to incentivize household-level resilience actions</li> </ul>	<b>HIGH</b>
 <b>Financial &amp; Operational</b>	Challenges in <b>premium collection</b> and <b>inefficiencies in payment</b> infrastructure	<ul style="list-style-type: none"> <li>Work with one or more <b>experienced in-country NGO partners</b> on operational tasks</li> <li>Leverage digital platforms like <b>bKash</b> to enable efficient payments and bundling</li> </ul>	<b>MODERATE</b>
 <b>Data &amp; Technology</b>	Dependence on <b>accurate, timely climate data</b> for parametric insurance to function properly	<ul style="list-style-type: none"> <li>Partner with <b>established climate data providers</b> such as Floodbase to improve accuracy of risk assessments</li> </ul>	<b>MODERATE</b>
 <b>Political &amp; Market</b>	Shifting <b>political landscapes</b> , <b>limited insurance uptake</b> , and low investor incentives	<ul style="list-style-type: none"> <li>Run <b>awareness and financial literacy</b> campaigns</li> <li>Pool capital to de-risk private investment</li> <li>Build <b>partnerships with gov'ts</b> and multilaterals</li> </ul>	<b>MODERATE</b>





KEY:

**HIGH** – Significant threat requiring strong mitigation

**MODERATE** – Manageable risk with proper controls

**LOW** – Minimal impact to be monitored

Impact Measurement

SDG	Target	Impact Metric for BanglaShield
 <b>11</b>	<b>11.10</b> Support least developed countries in sustainable and resilient building	<b>Reduction in number of people displaced annually</b> because of floods ( <b>currently 1.5 million</b> ), enabling households to repair fast
 <b>13</b>	<b>13.1</b> Strengthen resilience and adaptive capacity to climate-related disasters	<b>Reduction in annual US\$ volume of economic loses (currently US\$ 2 billion)</b> by encouraging fortification of households against floods
 <b>1</b>	<b>1.5</b> Build resilience to environmental, economic and social disasters	<b>Reduction in percentage of disaster-induced poverty</b> (20-25% of households live near or below poverty threshold)
 <b>8</b>	<b>8.10</b> Universal access to banking, insurance and financial services	<b>Increase in proportion of Bangladeshis who have access to formal insurance coverage</b> (only 0.5% currently have access)