

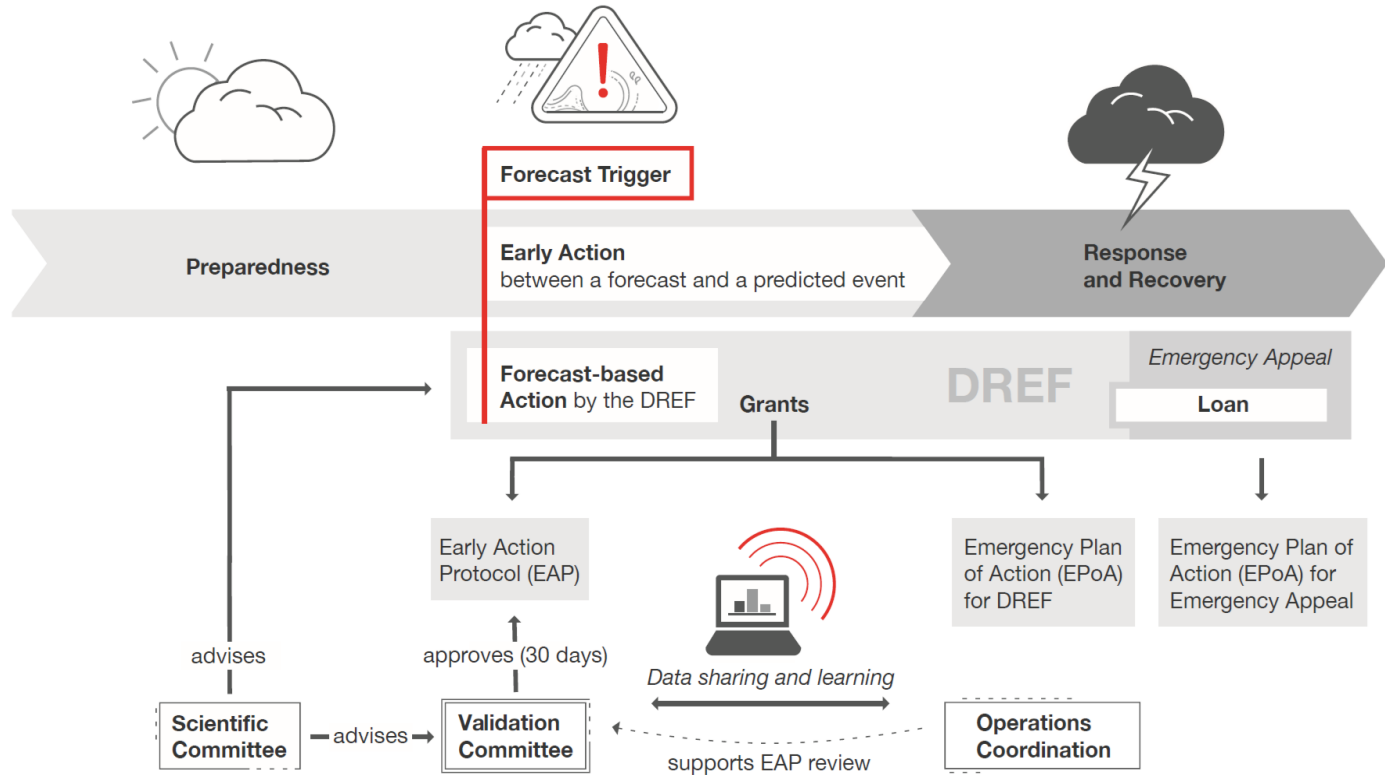


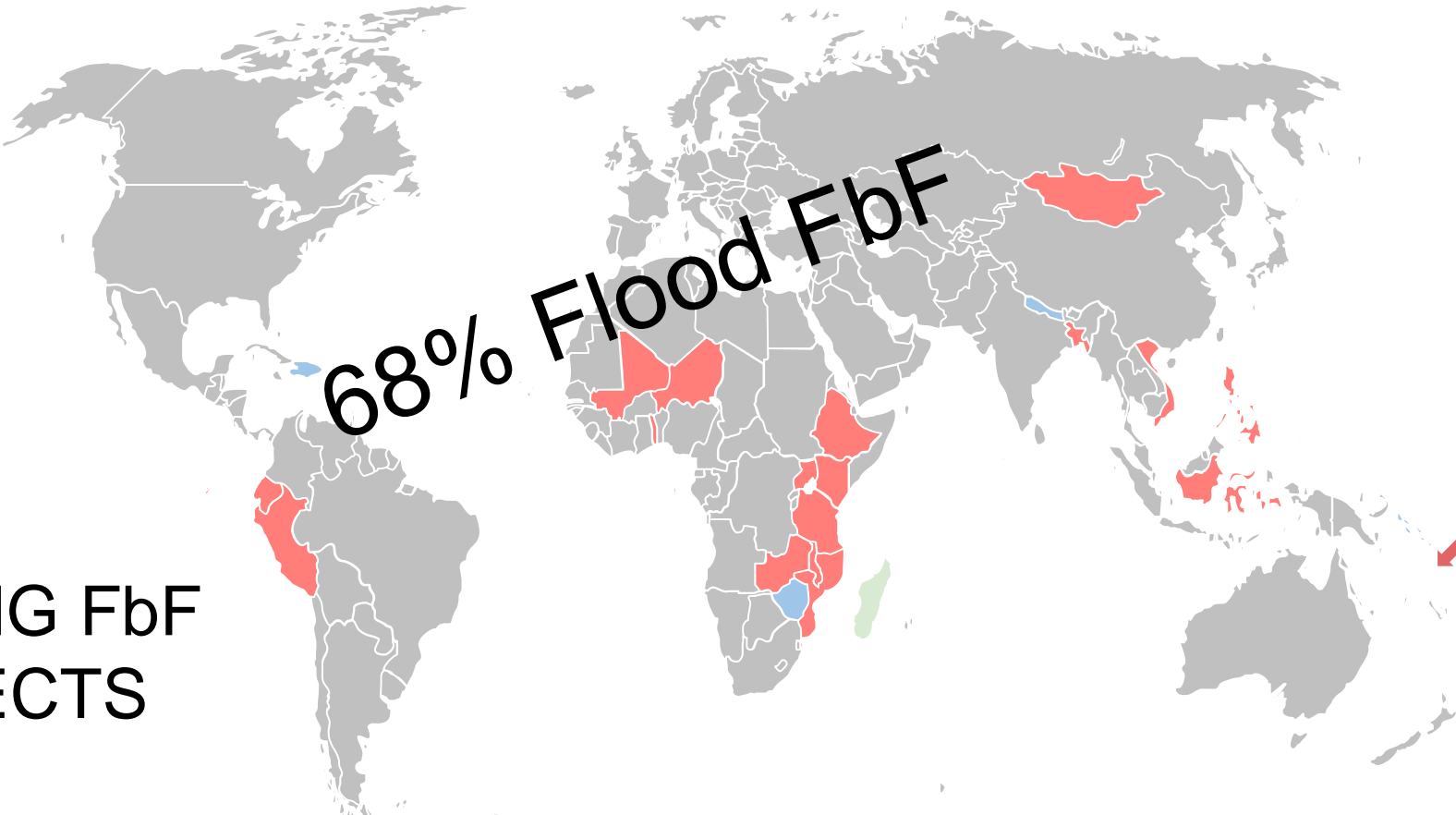
FORECAST-BASED FINANCING

The importance of hydrological services and forecast for decision making:
Example of the humanitarian sector



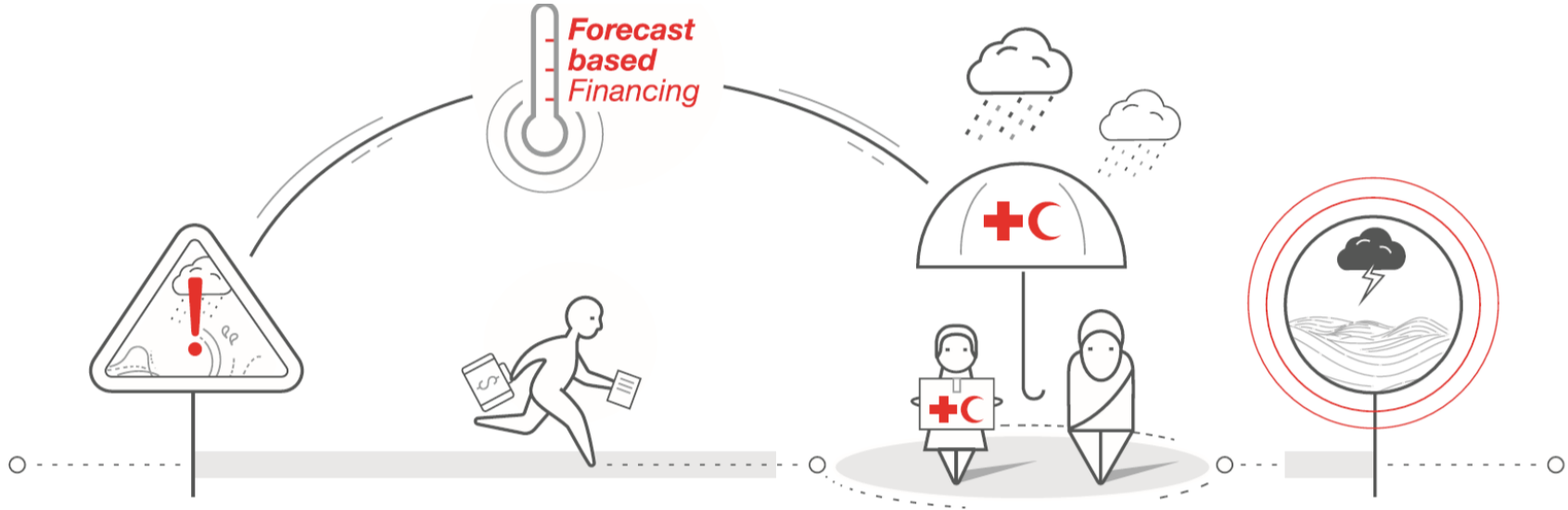
Forecast-based Action by the DREF: the mechanism





68% Flood FbF

ONGOING FbF
PROJECTS



FbF in Action: Bangladesh before the floods 2017

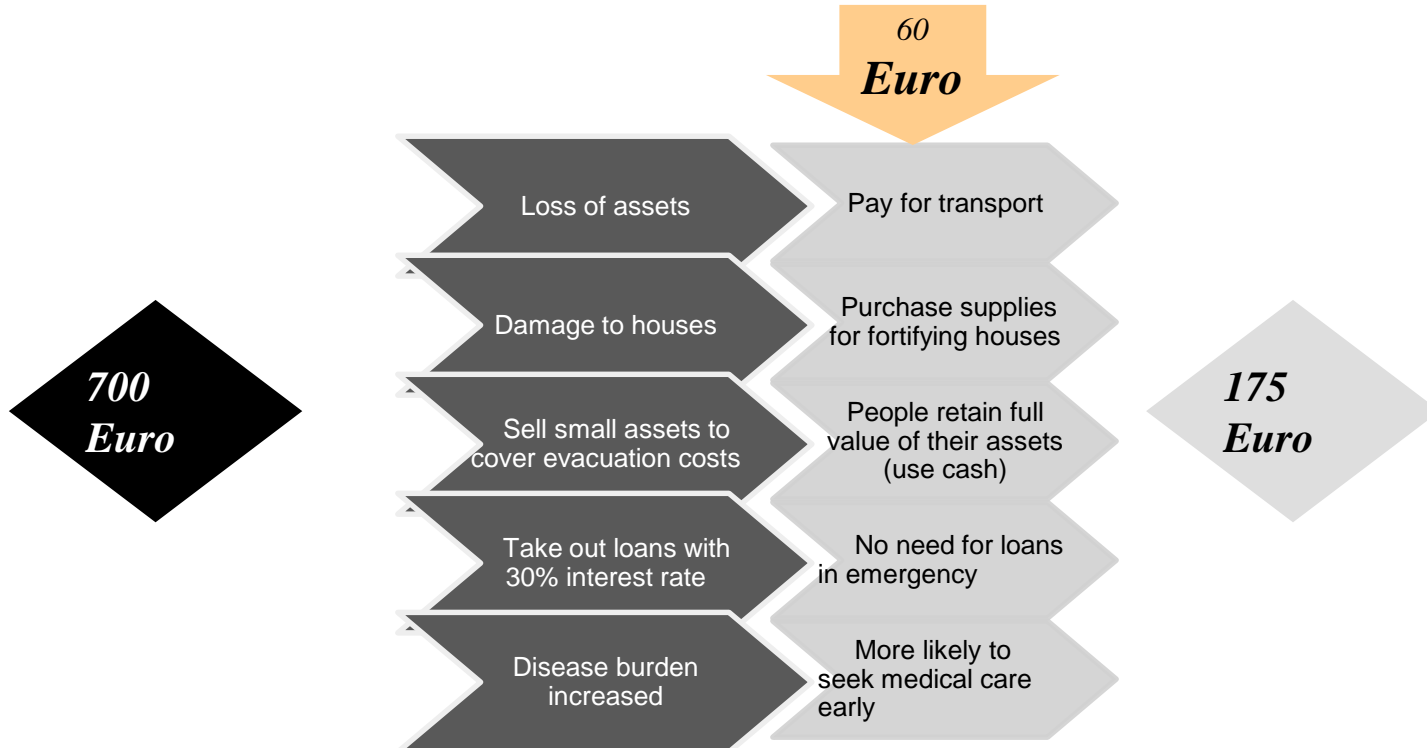


Desk Cost Benefit Analysis

*“We believe forecast-based financing (FbF) in this region would have an impact of at least 3 times the value of the initial investment – **every dollar invested in the program would save 3 dollars in beneficiary losses.** This represents a reduction in losses of about 30% for the vulnerable population”*

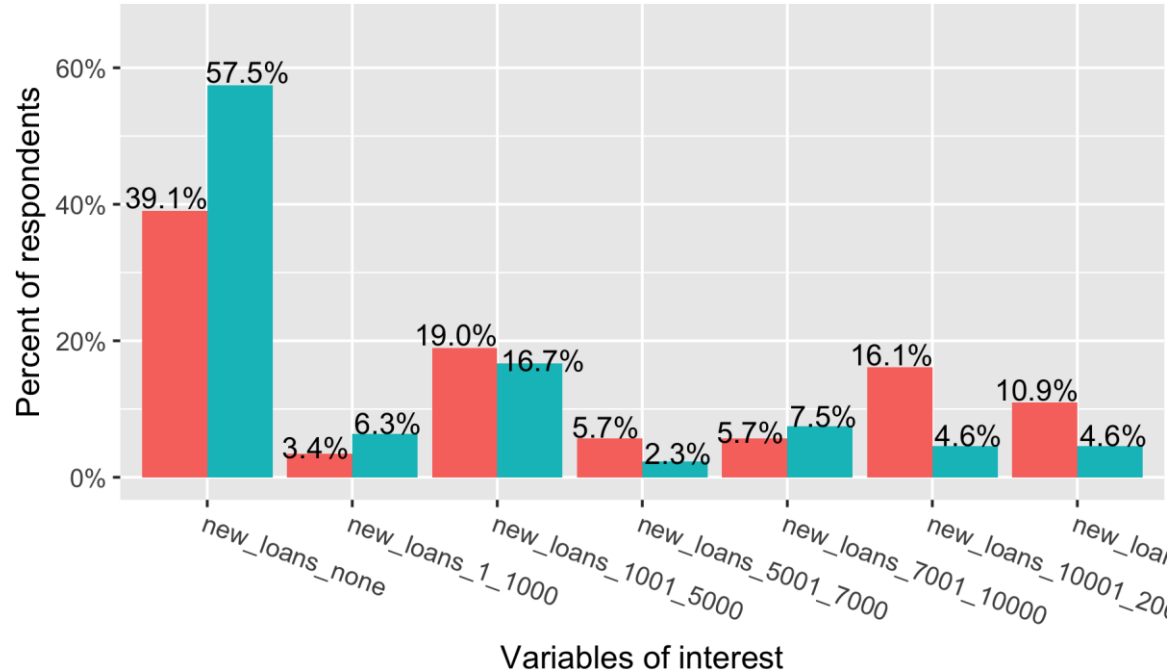


Benefits = Avoided Losses



Taken out new loans?

Legend: ■ Comparison ■ FbF assistance





Alefa Katun, Bangladesh

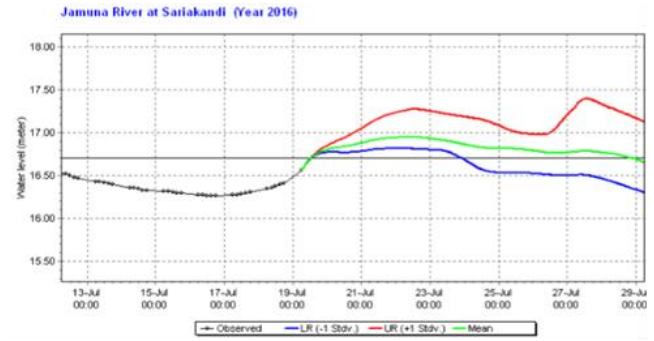
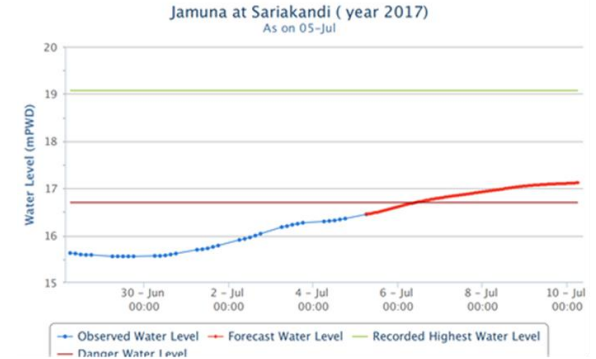
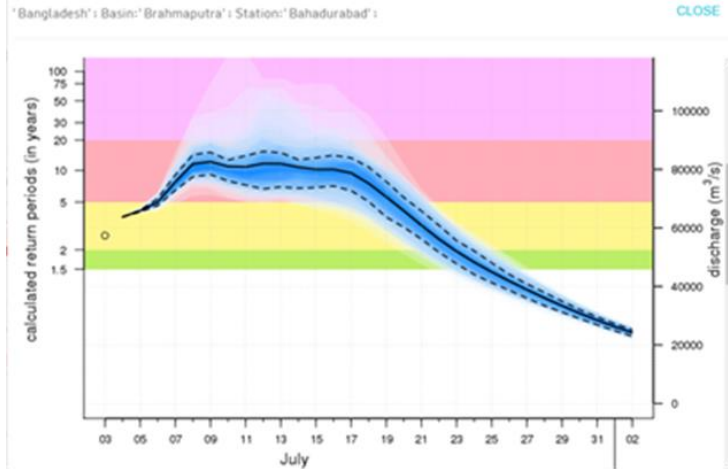
I am so grateful for the cash. I bought fodder for my cows and could evacuate them.


Without the cash, I would have had to sell them, but they are good cows, they deliver good milk and are very healthy.



Bangladesh 2017 Floods

- FFWC 1-5 days deterministic forecast: water level
- FFWC 1-10 days probabilistic forecast: water level
- GLOFAS (1-15 days probabilistic): Discharge



An aerial photograph showing a large-scale settlement in a rural, forested area. The settlement is composed of numerous small, rectangular structures with white and blue roofs, arranged in a grid-like pattern. A dirt road runs through the center of the settlement. The surrounding landscape is a mix of green vegetation and brown earth. In the background, there are rolling hills under a cloudy sky. A dark semi-transparent box is overlaid on the bottom left of the image, containing the text "Lessons 1: scale".

Lessons 1: scale

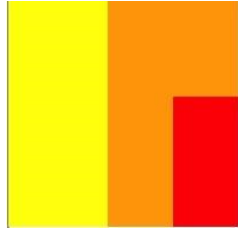
Innovative solution: Impact based forecasting

Vulnerability



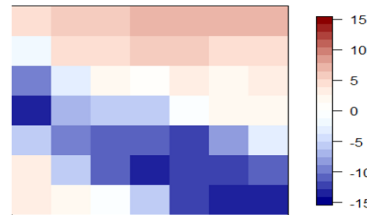
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Exposure



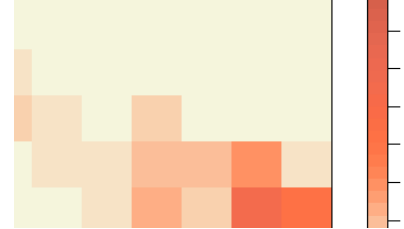
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Forecast Map



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Intervention Map



Impact-Based Forecast and Warning Services

- Impact-based warnings provide information of how hazards may impact warning recipients – **What the weather will DO**
- NMHSs issue accurate hazard warnings yet populations suffer many casualties and damage because of lack of knowledge of likely impacts of the hazard
- An NMHS cannot deliver impact-based warning services on its own
- Creating systems to support impact warnings is based on close coordination between NMHSs and different organizations e.g. Disaster Reduction and Civil Protection Agencies (DRCPAs).



WMO OMM

Lesson 2: Ownership





Lesson 3: Action

Research



Science for
Humanitarian
Emergencies
& Resilience



ForPac:
Towards Forecast-based
Preparedness Action



Thank you

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