

Flood Foresight: Extending GloFAS for forecast-based financing and parametric insurance applications

Copernicus EMS Global Flood Forecasting and Monitoring Meeting

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Disaster risk financing schemes

JBA is supporting development of DRF schemes around:

- Humanitarian anticipatory action
- Parametric insurance
- Sovereign catastrophe risk pools

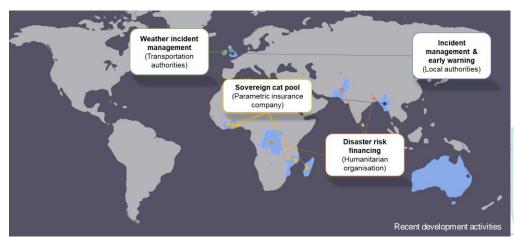
We have available technology which allows us to move from global to local data and models:

- Global flood hazard data and cat. risk model
- Flood forecasting software and systems











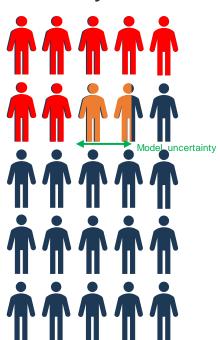
JBA's Global Flood Maps - global 30m flood hazard data



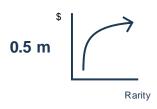
DRF scheme requirements

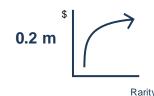
DRF schemes require:

Forecasts of no. people affected by floods



Profiles of flood risk







To be developed rapidly/efficiently











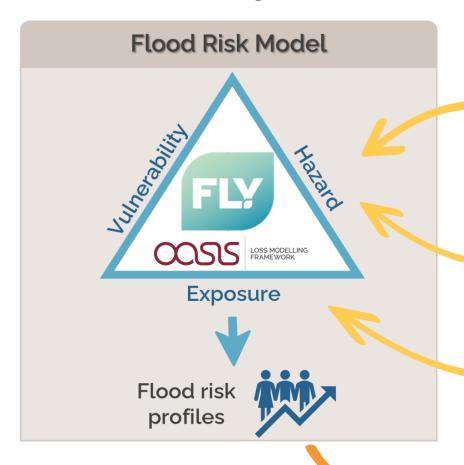








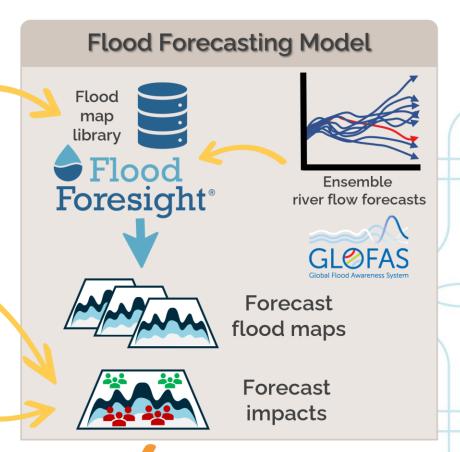
Risk analytics



Global Flood Maps

Flood Defence Data

Population Data



Structure insurance cover Design of anticipation actions



Take action



Forecast / monitor Operational index triggering



Multi-resolution framework

Broad-scale / · Global probabilistic risk model preliminary Global flood forecasting model Broadscale flood mapping Generalised flood defence data We are here Phase 1: · Global exposure models Broadscale system **Benefits** Operationally ready to trigger · Integration of more local data and models, e.g. anticipatory and early Hydrological forecasting model(s) response financing? Yes Flood hazard data Flood defence data Statistically underpinned to Phase 2: Exposure data enable financial products? Yes Broadscale-local Use broadscale data models where local data are not available hybrid Limitations acknowledged? Yes Potential to enhance with additional local data and Continuous enhancements of Phase 2 models and data models? Yes · Ow nership and operation by national technical entity Phase 3: Locally ow ned and managed Localised /

Summary

- Flexible framework for risk analytics supporting DRF schemes
- Allows for range of impacts to be forecast
- Ongoing skill assessment based on historic event validation (inc. GFM)
- In-country engagement to improve systems to integrate more local knowledge, models and data

Integrated