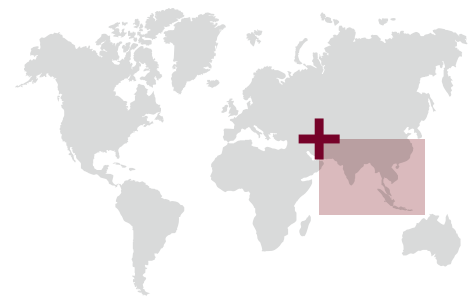


Climate and Catastrophe Risk Assessment



AT A GLANCE

Name

Climate and Catastrophe Risk Assessment – Use of Oasis LMF in the Philippines and Bangladesh

Duration

July 2018 – June 2020

Focus area

Philippines and Bangladesh

Target group

Government, academics and the insurance industry

Funds available

The project is funded with 3 million euros by the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

The project is jointly implemented by...

Oasis Loss Modelling Framework, Potsdam Institute for Climate Research Impact (PIK) and U.K. Met Office. Additional project partners include Kat Risk, Willis Re, Nat Re, University of Philippines Disaster Risk and Exposure Assessment for Mitigation (UP DREAM), Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), Kitetrackers, International Union for Conservation of Nature (IUCN), Bangladesh University of Engineering and Technology (BUET) and Tysers Insurance Brokers.

Overall aim of the project is...

...to co-develop new catastrophe risk models for flood in the Philippines and cyclone in Bangladesh, and to quantify the impacts of climate change on flood risk, to support risk management decisions and risk-based financing.

Supported by:



Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



based on a decision of the German Bundestag



BACKGROUND

Oasis' unique open-source modelling platform and simulation engines will be applied to help improve understanding about the risks associated with extreme events in the Philippines and Bangladesh, which are especially vulnerable to the impacts of climate change. The project will also see available international reinsurance capacity connected with specific in-country demand where appropriate. A key goal is linking local science knowledge and data with the decision-making needs of the risk management industry with an ultimate goal to understanding catastrophe risk and narrowing the insurance protection gap.

The two-year project will bring a wealth of insight and global standards around catastrophe modelling to decision makers within these two countries, improving long-term access to, and knowledge of, risk and catastrophe modelling to multiple stakeholders.

APPROACH

Oasis and its partners are working closely with local governments, academics and others to share their knowledge and expertise.

A key focus is to build local capacity by providing training to in-country institutions.

CHALLENGES

Early challenges to overcome are the sharing of data between the countries and foreign entities, particularly when the private sector is involved. Even though the output of the project will be delivered back to the countries and partners for their long-term ownership and updates, and the platform is free to use. Also, whilst there is much national level interest in insurance solutions, there is local community skepticism of the role of insurance and concern that insurance solutions must be designed locally to suit the needs of the communities.





OPPORTUNITIES

Both countries have a high level of national government awareness and engagement on the topic of disaster risk protection. The Philippines is already working with the World Bank and Asian Development Bank on risk-pools and insurance schemes at multiple levels such as provincial and municipal. Insurance against natural disasters is far more nascent in Bangladesh, but the oldest reinsurance broker in the country is very positive about the project and its benefits, and sees the output of being essential in the development of new risk-based financing and insurance schemes. The main benefit they see is in having these tools available at low cost which makes them accessible for a country like Bangladesh which couldn't otherwise afford them.

OUTCOMES

This exciting two-year project will deliver two new catastrophe models on the open-source Oasis software, along with in-country capacity in the development, use and understanding of catastrophe risk models, the connection of international reinsurance capacity with in-country demand where appropriate, as well toolkits for in-country users to update and sustain the models in the long-term beyond the timeframe of the project. We expect the models to directly support the development of new Insurance risk coverage and transfer solutions in both countries, thus reducing the Insurance coverage protection gap.

LESSONS LEARNED

Oasis is a not-for-profit company committed to improving the way the world understands and models the impacts of disasters. The impact we can deliver by lowering the barriers to accessing, deploying and executing sophisticated catastrophe models using a full simulation engine means there are no restrictions on the modelling approach users can take. In this way, we are supporting the IKI and BMU as well as the governments of the Philippines and Bangladesh in bringing new insights to disaster planning and resilience.



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DISCLAIMER

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