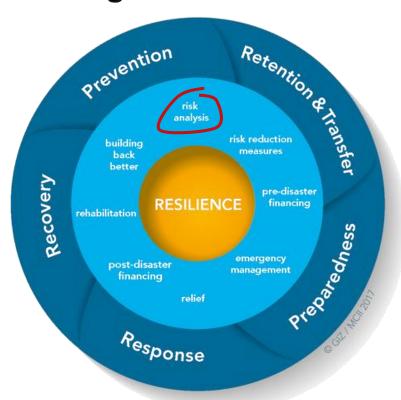


Presented at A2ii-IDF Workshop on Risk Modelling for Insurance Supervisors 07.12.2023; Nihar Jangle



Our view on comprehensive climate and disaster risk

management



A Comprehensive Risk Management approach contributes jointly to international agendas:





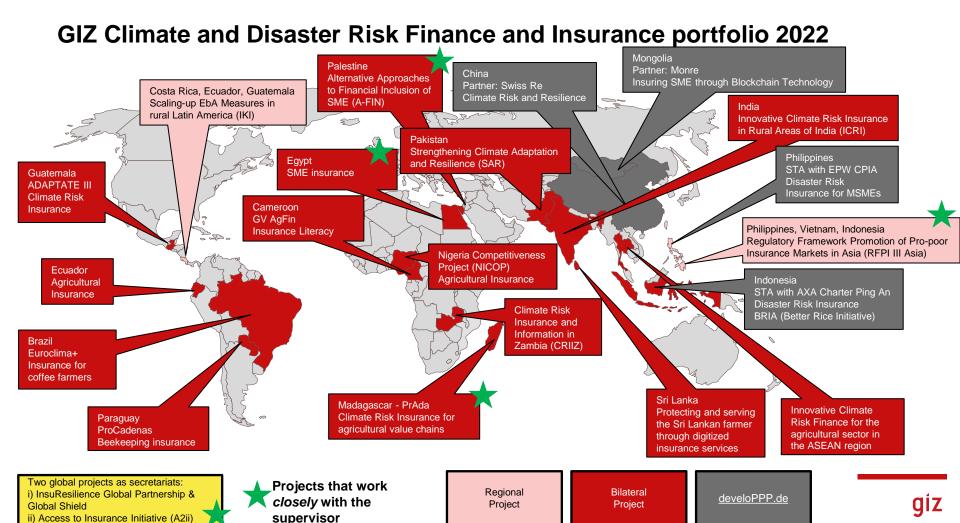
**United Nations**Framework Convention on Climate Change



→ protecting the most vulnerable against climate and disaster risks while preserving development achievements

Risk assessments: basis for governments to prioritize investments in

- risk-reducing measures
- good disaster preparedness
- **financial protection** through risk retention and risk transfer addressing the residual risk



## **Enhancing Risk Assessments (ERA) Project - Overview**

**Objective:** Provide enhanced risk assessments to the Governments in Egypt and Thailand, informing their adaptation and risk financing strategies.

**Approach**: Enhancing the open-source risk modelling tool CLIMADA and piloting it within the Economics of Climate Adaptation (ECA) approach in both project countries – including a cost-benefit analysis of adaptation measures.

**Partners**: GIZ Thailand, GIZ Egypt, Munich Climate Insurance Initiative (MCII) / United Nations University – Institute for Environment and Human Security (UNU-EHS), Department of Agriculture Thailand (DoA), Financial Regulatory Authority Egypt (FRA)

#### **Project Components**

Assessing physical & economic impact;

Assessing noneconomic impact Assessing macroeconomic impact, combining CLIMADA with CRED model

Assessing adaptation measures

Building graphical user interface (GUI)

Standard CLIMADA tool

Innovation

Innovation

Standard CLIMADA tool

Innovation





# **Envisioned outputs from the ERA project I:** Illustrated for Egypt

Economics of Climate Adaptation (ECA), powered by CLIMADA and based on 2 climate scenarios for 2050, producing several outputs:

Maps / datasets for Egypt showing expected damages of heatwaves & flash floods

**Economic impact:** Non-economic impact:

Crops Water systems

Livestock Mobility (roads, railways)

Hotels Health Systems

Power plant Education

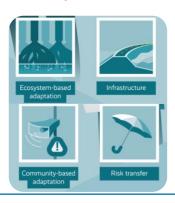
Information on **impact on macroeconomic indicators**(e.g. GDP, employment) of the **sectors**:
agriculture, tourism, real estate, financial sector,
manufacturing, energy, health



## **Envisioned outputs from the ERA project II**

Maps and datasets on the expected risk reduction & impact mitigation benefits of adaptation measures

**Cost-benefit analysis** of these adaptation measures

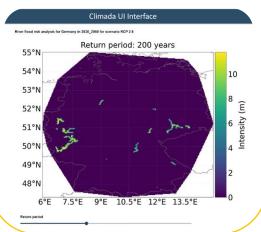


Integrating a macroeconomic model into CLIMADA

Implementing this new module within the ECA framework in Egypt and Thailand



Simple graphical user interface of CLIMADA (building on EIOPA's work) to facilitate use by government representatives



### Role of supervisors and value of risk insights for them

In Egypt FRA, regulator and long-standing partner of GIZ, is the project's lead partner. They

- host the project workshops
- make the outreach to other government agencies
- will eventually use CLIMADA themselves

FRA can potentially benefit from the project in a variety of ways:

- Positioning FRA as a key agency within the government for conducting risk assessments for climate and disaster risks that inform a comprehensive risk management strategy
- Building capacity of FRA staff to conduct risk assessments
- Increasing FRA's capacity to incorporate risk insights into their sectoral strategy for NBFI supervision
- Strengthening FRA's role in **spreading investment culture and awareness with respect to climate and disaster risks**



