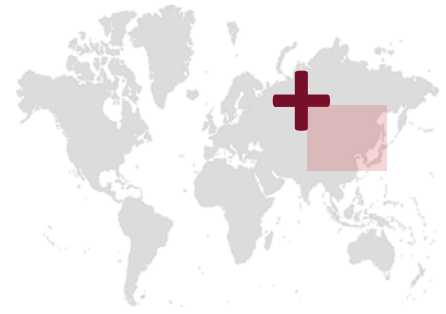


Climate Risk and Resilience in China



AT A GLANCE

Name of Project

Climate Risk and Resilience in China

Duration

January 2020 – January 2023

Focus

Urban centers and their rural surroundings in China

Target Group

1. Chinese ministries and affiliated think tanks in charge of climate adaptation planning and climate risk reduction
2. Responsible departments of 2 pilot cities on climate adaptation and risk management

Funds available

0.8 million euros funded by the German Federal Ministry for Economic Cooperation and Development (BMZ); 0.8 million euros in-kind contribution by Swiss Re.

The project is jointly implemented by ...

the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Swiss Re.

The overall aim of the project is ...

to enhance climate resilience of China's urban centers and their rural surroundings in order to reduce human and economic losses.

On behalf of



BACKGROUND

China ranks first in the world for expected annual GDP losses from climate-induced natural disasters. At the same time, China has experienced an unprecedented level of urban growth with exceptional speed. In 2020, more than 60% of China's population (840m inhabitants) live in cities. The combination of urban growth and climate vulnerability poses significant challenges to China's sustainable development. Extreme weather events caused expected annual economic losses of up to 1.3 percent of GDP.

OUR APPROACH

The project will empower local pilot cities with an Integrated Climate Risk Management (ICRM) approach to identify climate hazards, exposures, and vulnerabilities. Based on the risk analysis, the Chinese government can analyze occurrence probability, frequency, and severity due to climate change; localize geographic locations and values of assets, and quantify the economic losses. By incorporating comprehensive socioeconomic impacts, local governments are enabled to apply climate adaptive, risk-informed measures for selected city areas and their rural surroundings to protect assets, businesses, and individuals.

Pilot Cities

The project offers participating pilot cities:

- An integrated risk management approach to better address the needs and challenges of climate adaptation

- To identify and analyze risk hazards and minimize risk exposures and vulnerability, and draw flood risk mapping
- Suggestions for cost-benefit adaptation measures based on scientific research and to develop risk transfers solutions (insurance) for those risks that cannot be mitigated via preventive measures
- A pool of international and national expertise on adaptation solutions
- Opportunities to exchange with other cities locally, regionally, and globally

Capacity Building

The project will offer national and local partners a series of case studies on climate adaptation, including domestic and international cases on different hazards.

Technical workshops and trainings on climate risk assessment tools, integrated climate risk management approach, and adaptation measures will be organized for both national and local-level partners.

The project will highlight climate change-induced hazards for pilot cities and emphasize the urgency and importance of adopting risk transfer solutions enabled by insurance. Moreover, the project will advise pilot city government agencies on a forward-looking climate resilience urban planning, which incorporates the climate (flood) risk analysis, risk management and risk transfer considerations in its mid- to long-term adaptation and investment strategy.





International Exchange

The knowledge and experience developed by the project will be effectively communicated and promoted in China, regionally and globally. This will be done through knowledge dissemination via various communication channels and public awareness development activities. The intention is to use China as a successful demonstration case for peer-learning and upscaling in the Asian region to promote climate resilience and reduce economic and human losses.

CHALLENGES

Climate adaptation planning calls for a cross-ministry, cross-discipline, and cross-department coordination. The coordination among multiple stakeholders requires substantial efforts. Moreover, the availability and quality of data for risk analyses will be in particular a big challenge.

OPPORTUNITIES

In 2017, the Ministry of Ecology and Environment (MEE) and the Ministry of Housing and Urban and Rural Development (MoHURD) jointly launched the 1st Cities Action Plan for Climate Change Adaptation in China. The action plan assigns 28 pilot cities to create awareness of climate risks, to improve early warning systems against climate hazards, and to prioritize adaptation actions. The pilot scheme is meant to test solutions on a city level to make the case for national policy upscaling. In 2020-2021, ministries are updating the Climate Adaptation Strategy. The project will offer technical support to the MEE and 2 pilot cities on climate adaptation planning and risk management.

China is the 2nd largest economy worldwide and the 2nd largest insurance market, with a trend to become the largest. China is the country most hit by climate-induced natural disasters. However, China is also one of the countries with the greatest uninsured gap. In China, governments at all levels undertake bold steps to reduce the liability of climate risks exposed to fiscal budgets. Hence, providing risk transfer solutions, such as insurance schemes to Chinese government units will ease public budgets and will prevent additional fiscal and economic risks.

EXPECTED OUTCOMES

- City piloting and benefits for the population
- National policy advice
- International exchange

LESSONS LEARNED

Climate risk analysis modelling, especially quantification of economic loss of climate / disaster risks is still in the initial development stage in China. The project needs to involve cross-scientific experts and insurers in the research.



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Registered offices

Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Deutschland
T +49 228 44 60-0 | F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1 – 5
65760 Eschborn, Deutschland
T +49 61 96 79-0 | F +49 61 96 79-11 15

CONTACT

Qi Lan, Project Director (GIZ)

E lan.qi@giz.de

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