## ADAPTING TO CLIMATE CHANGE



## **Project Partners**

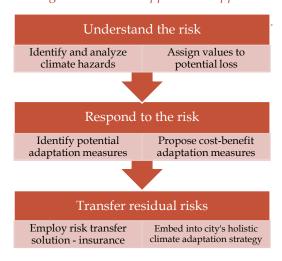
GIZ works on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) with the private sector to support innovative projects in developing and emerging countries through the develoPPP.de programme. In January 2020, GIZ and Swiss Re jointly established a Strategic Alliance (STA) to strengthen climate risk management capability of Chinese partners as well to enhance climate resilience of pilot cities.

Swiss Re is the private partner. It is a global leader in reinsurance, insurance and other insurance risk transfer solutions. In China, Swiss Re is working on innovative risk management solutions for the public sector, such as parametric risk transfer solutions, to technically support cities to strengthen their ability to adapt to climate change and to strengthen their resilience strategies to reduce physical shocks and financial loss on human life, property, and critical infrastructure.

**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.

### What Does the CRR Offer?

The project offers participating pilot cities an Integrated Climate Risk
Management (ICRM) approach, which empowers local stakeholders to assess, analyze, and quantify hazards under a changing climate and to employ costbenefit adaptation measures to enhance socio-economic resilience as well as to reduce the impacts of climate-driven disasters. In particular, the project will highlight the importance of incorporating insurance, the risk-transfer solution, into pilot cities' long-term adaptation strategies. An ICRM approach is applied:



#### Contact Us

Qi Lan, Project Director, GIZ <u>lan.qi@giz.de</u> Web: http://climatecooperation.cn/crr Implemented by











# Climate Risk and Resilience in China (CRR)

GIZ & Swiss Re Strategic Alliance

**Duration: Jan 2020 - Jan 2023** 

## ADAPTING TO CLIMATE CHANGE



#### Introduction

China ranks first in the world on expected annual GDP losses from climate induced natural disasters <sup>i</sup> . 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.

Project Objective: The CRR project aims to enhance climate resilience of China's urban centers and their rural surroundings in order to reduce human and economic losses. The project will empower local pilot cities with an 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 asset geographic locations and values; 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

#### 1. 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
- Propose cost-benefit adaptation measures based on scientific research and develop risk transfer 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

### 2. 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 the climate change induced hazards at pilot city and emphasize the urgency and importance of adopting the risk transfer solution enabled by insurance. The project will advise pilot city government agencies a forward-looking climate resilience urban planning, which incorporates the climate

The Integrated Climate Risk Management (ICRM) framework is characterized by a holistic approach to the following components of risk management: risk prevention, risk transfer, preparation, response, and recovery. ICRM aims to reduce social, economic and ecological vulnerabilities caused by extreme natural disasters, as well as to take measures transferring and managing residual risks and preventing new risks. ICRM is a continuous process including planning, implementation, assessment, and adjustment of strategies and measures, aiming to strengthen the coping and adaptation capacity of society.



#### 3. International Exchange

The knowledge and experience developed by the

BMZ 2015: Disaster Risk Management. Approach and Contribution of German Development Cooperation

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.

<sup>&</sup>lt;sup>i</sup> SHI Peijun et al.: Mapping and ranking global mortality, affected population and GDP loss risks 2016.