RIVER BASINS

CCICED 2022–2023 SPECIAL POLICY STUDY High-quality development of river basins and adaptation to climate change



Why this research is important



CLIMATE CHANGE ADAPTATION

China's large river basins, such as the Yangtze and Yellow Rivers, are crucial for the country's adaptation to climate change and to implement the country's "dual carbon" energy transition goal.



COORDINATED RIVER BASIN MANAGEMENT

There is a need for research on the specific impacts of climate change on river basins and for policy development on coordinated river basin management, integrating all the relevant regions and sectors.



RIVER PROTECTION LAWS

The recent adoption of the Yangtze River Protection Law and the Yellow River Protection Law demonstrates the importance of sustainable development and management of river basins in China and beyond.



average temperature has increased by 0.293°C

> precipitation has increased by 3 mm

Summer of 2022 in China's Sichuan and -Chongqing regions sustained extreme high temperatures above 40°C

precipitation decreased by 51%

caused agricultural damage and power shortages

exacerbates the problems of agricultural surface pollution and cyanobacterial blooms

Speed up the formulation of the



Yangtze River Basin Development Plan and the National Land Spatial Plan.



Establish a mechanism to analyze the impacts of climate change on the Yangtze River Basin and how prepared the country is to tackle these impacts.

Recommendations



Establish a sustainable hydropower fund, expand renewable agriculture, and adopt more nature-based solutions in basin areas.



Diagram adapted from: Ligtvoet W. et al. (2023). The geography of future water challenges; bending the trend, The Hague: PBL Netherlands Environmental Assessment Agency.