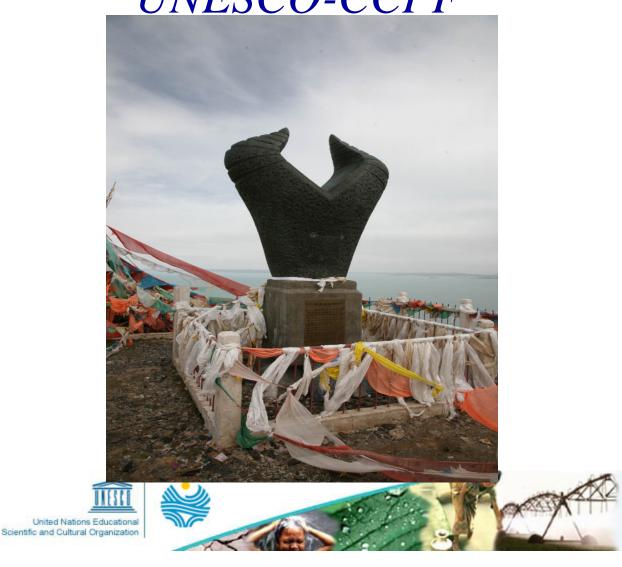
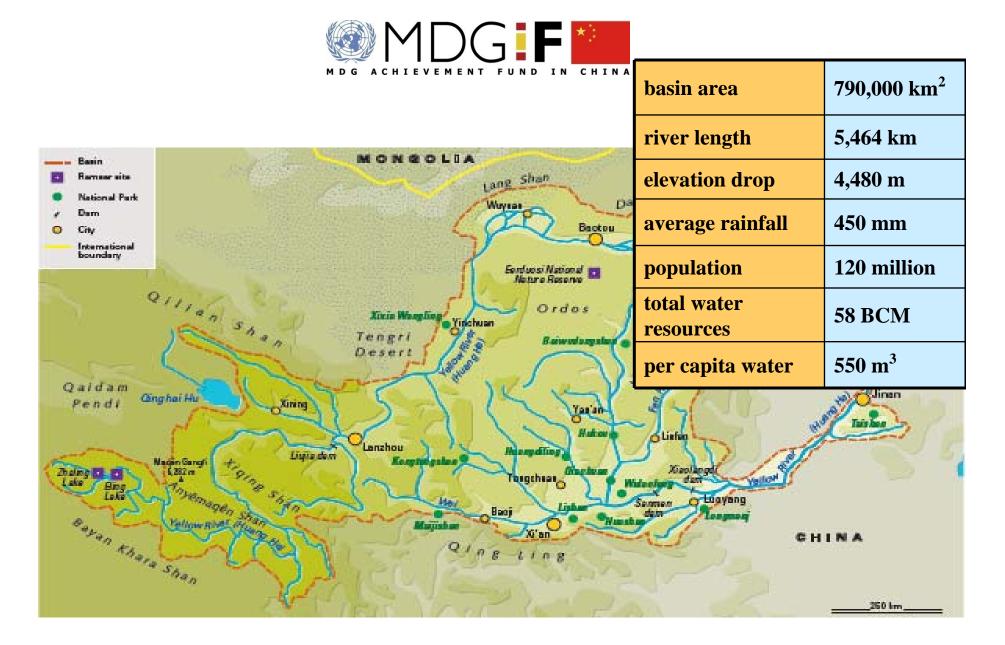


Tending to the Mother River of China <u>UNESCO-CCPF</u>









The Yellow River Basin (YRB) is located in the semi-arid and cold arid areas, where water resources are great sensitivity to the climate changes.

Population growth and socio-economic development in the basin mounted water demands against limited supply, leveraged sensitivity to climate change impacts





Aims

Improve capacity and policies for adaptation of water resources to climate change in Yellow River Basin (YRB)

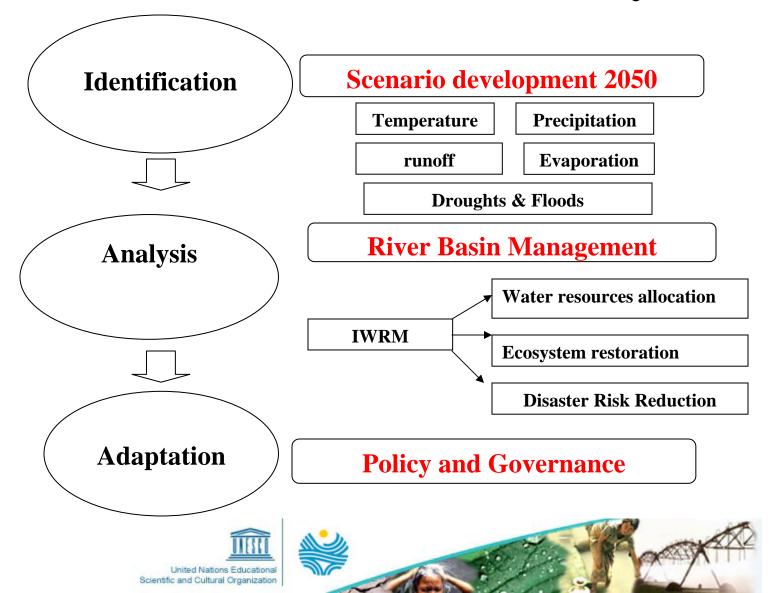
Objectives

- I. Assess impacts of climate change on water resources in YRB
- II. Assess water related climatic risks and uncertainties in YRB
- III.Formulate adaptation strategies of water resources at the basin scale



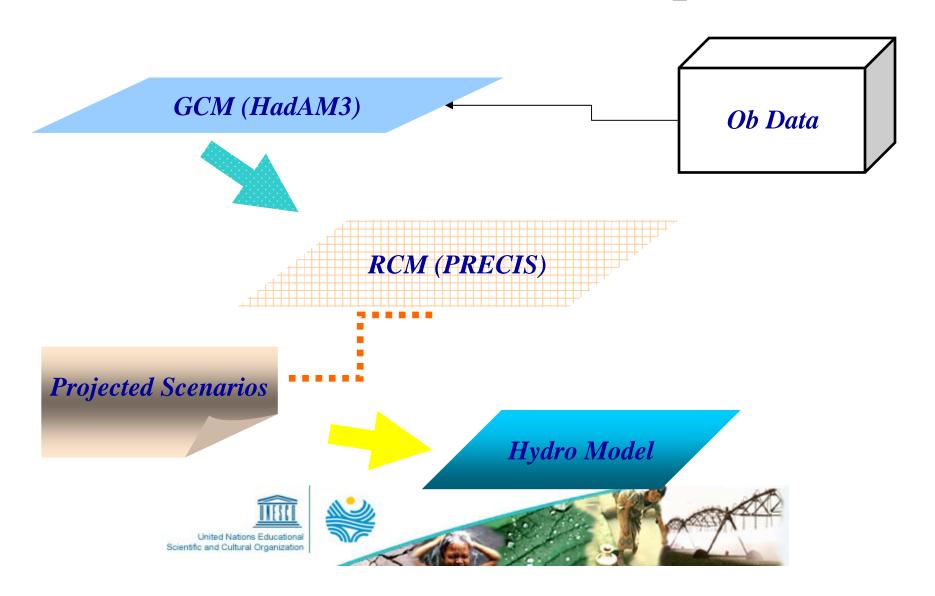


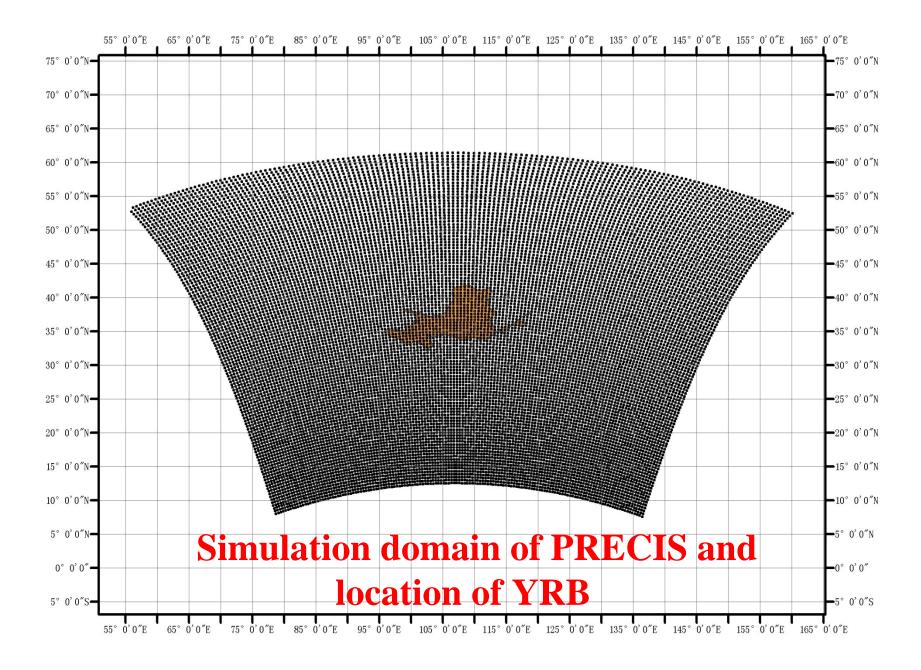
Research Pathway





Flow of scenario development

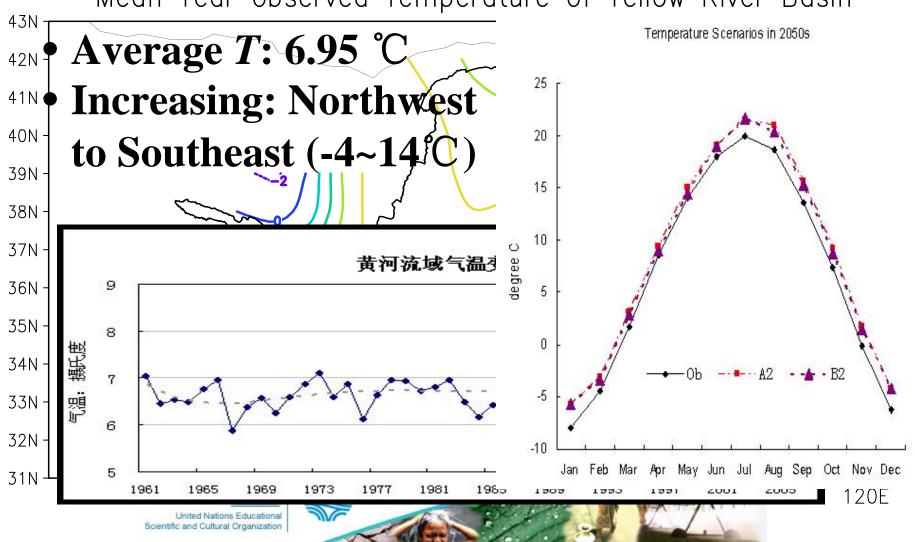






Spatial distribution of *Temperature* of YRB

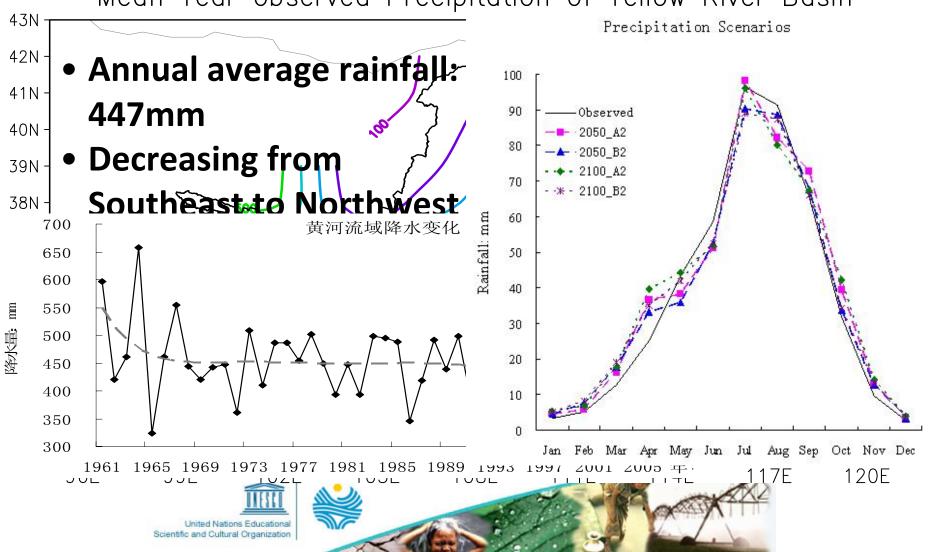
Mean Year observed Temperature of Yellow River Basin





Features of **Precipitation** in YRB

Mean Year observed Precipitation of Yellow River Basin





Regional Differentiation of Climate Change impacts on Runoff

- <u>upper reaches</u> runoff reduction mainly due to climate change impacts, making up 75%; human activities 25% (water consumption 16%, other engineering 9%);
- <u>middle reaches</u>, climate change results in 43% of runoff reduction; human activities results in 57% (water consumption 18%, soil and water conservation 24%, water conservation engineering 15%);
- <u>lower reaches</u>, "suspended river", stream runoff status mainly depends on human withdrawal for agricultural, industrial and domestic purposes. Balancing requests of eco-flow and water demands of humans is a big challenge in this part of the river.







