

## 扬子江项目



Contact:  
G. Subklew  
E-mail: g.subklew@fz-juelich.de  
Phone: +49 (0)2461 61-4002

Forschungszentrum Jülich GmbH  
Institute of Chemistry and Dynamics  
of the Geosphere (ICG)  
D-52425 Jülich (Germany)  
Internet: www.yangtze-project.de

# The Yangtze Project

## Environmental Research at the Yangtze

Chinese and German scientists intend to work together and investigate the impact that the construction of the "Three Gorges Dam" has on the environment. Research Centre Jülich from Germany and the "State Council Three Gorges Project Construction Committee" in China are coordinating this cooperation of numerous research institutions in both countries, which is known as the "Yangtze Project".

## Situation

As an important element in Chinese politics for the development of the Western parts of the country, a large hydraulic engineering project is drawing to a close in the region where the famous "Three Gorges" are located on China's longest river. The river will be dammed for a length of over 600 km. At the same time, the height of the water level in the dammed region will fluctuate by up to 30 m with seasonal variations. This will result in ecological, technical and social problems of a magnitude hardly dealt with before.

## Major Motives Behind the Three Gorges Project

- Prevention of flooding
- Protection and promotion of shipping
- Generation of electrical energy

## An Exceptional Project Collaboration

The damming of the river has an enormous influence on the ecosystem of the river and its catchment area. The reduced groundwater velocity and the extremely changeable water levels will impact on the removal and transport of pollutants and the sedimentation behaviour of suspended matter, as well as on the flora and fauna.

Chinese and German scientists want to work together on the resulting issues and investigate the ecological effects of the Three Gorges Project and formulate solutions for sustainable management. Scientists' exchanges, supporting young scientists and joint seminars will support coordinated research projects.

## The Three Gorges Project in Numbers

Construction	1993 – 2009 (planned)
Height of the dam	185 m above sea level (Cologne Cathedral: 157 m)
Water level	145 m – 175 m above sea level
Total storage capacity	39 billion m <sup>3</sup>
Water surface	1085 km <sup>2</sup> (approx. twice Lake Constance)
Length of impoundment	663 km
Installed capacity	18.200 megawatts
Flooded cities	13
Flooded factories	> 600
People to be relocated	approx. 1,3 million

## Problem Definition

- Pollutants in the reservoir
- Sedimentation in the reservoir
- Changes in the vegetation conditions
- Land use change
- Landslips
- Resettlement

