The Three Gorges Project of the Yangtze River and its Eco-environmental Protection Policy

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CONTENTS

◆ INTRODUCTION
◆ MAIN TASKS OF TGP
◆ THREE GORGES PROJECT
◆ ECO-ENVIRONMENTAL POLICY
The river Yangtze is the largest river both in China and in Asia. It is 6,300 km long, with a catchment area of 1.8 million km², about 19% of the nation’s total land area.

The gross industrial and agricultural output of this river basin occupies about 40 percent of the whole nation.
From Fengjie to Yichang, a 200-kilometer-long stretch of the Yangtze River, it rushes through the majestic Qutang, Wuxia and Xiling gorges, after which the Yangtze Three Gorges is named.
Water Resources

★ Its annual runoff into the sea amounts to nearly 1,000 billion m³

★ However, as low as 18% of the available water resources in the Basin has been developed.
The Yangtze Basin, particularly in the middle and lower reaches, is one of the most socially and economically developed regions in China.
Features of Flood Control

At the same time, due to the limited flood carrying capacity of the Jingjiang channel, the region is the most frequently flooded areas.
Historic Flood

As the historic records indicate, there had been 216 floods during the 2000 years, averaging almost once every ten years.

The 1931 Flood

The 1954 Flood

The 1998 Flood

As the historic records indicate, there had been 216 floods during the 2000 years, averaging almost once every ten years.
After overall planning, repeated studies and verifications, the conclusion has been reached that the TGP is the key to the comprehensive control of the floods and exploitation of the resources of the Yangtze River.
In 1992, the fifth session of the 7th National People’s Congress passed the “Resolution on the construction of the Three Gorges Project”
CONTENTS

◆ INTRODUCTION
◆ MAIN TASKS OF TGP
◆ THREE GORGES PROJECT
◆ ENVIRONMENTAL POLICY
The TGP is a multipurpose hydro-development project producing comprehensive benefits mainly in flood control, power generation and navigation improvement.
the flood control capability of the Jingjiang River section would be able to be improved from the 10-year frequency flood to the 100-year.
TGP will provide with a total installation of generation capacity of 18,200MW
The 660 km long waterway from Yichang to Chongqing will be improved after the completion of the TGP.
CONTENTS

◆ INTRODUCTION
◆ MAIN TASKS OF TGP
◆ THREE GORGES PROJECT
◆ ENVIRONMENTAL POLICY
The project is composed of a dam, two power plants and navigation facilities.
The main river was successfully closed on Nov. 8 of 1997, which marks the end of the Stage I construction.
Navigation Facilities

The ship lock is schemed out as a double-way and five-step locks, each lock chamber is capable of passing 10,000 tons of barge fleet.

The Permanent shiplocks have been operating since Jun of 2004.
Night of Three Gorges Project
CONTENTS

◆ INTRODUCTION
◆ MAIN TASKS OF TGP
◆ THREE GORGES PROJECT
◆ ENVIRONMENTAL POLICY
In order to protect the bio-diversity in the Yangtze basin, a series of measures have been adopted along with TGP’s construction.
Water and soil conservation forest

Terrace in reservoir region
Artificial Reproducing and Releasing of Chinese Sturgeon

Return back to sea

Capturing Chinese Sturgeon
Artificial Reproducing and Releasing of Chinese Sturgeon

Raising young Sturgeon

One month old Chinese Sturgeon

Artificial Releasing of Chinese Sturgeon

25
Protection of Species Resources

Chinese river dolphin in reserve reach

Baiji--Chinese river dolphin
Natural Reserves for Migrant Birds

Location of Poyang Lake Migrant Birds Reserve

Siberia Crane

Marabou
Monitoring of Ecology and Environment

- A special monitoring system of ecology and environment for TGP has been established and put into operation since 1996

- It monitors the potential modification of eco-environmental factors providing valuable information for management and decision making.
We are aiming to work out new strategy to protect sustainable development and promote harmonious coexistence between human and nature.
Integrated Water Resources Management

**Strategy**: Ensuring health of the Yangtze and promoting harmony between human and nature

**Master Plan**: comprehensive planning of whole basin is revised to meet social and economical requirement on water demand as well as ecosystem demand.

**Regulatory framework** for river basin water resources management is well established

**The information** is available for decision making. 6400 hydrological and meteorological stations have been set up in the river basin.

**Disaster management**: flood control and drought prevention