The Yangtze River
Taming the dragon



WWF–Canon/Edward Parker

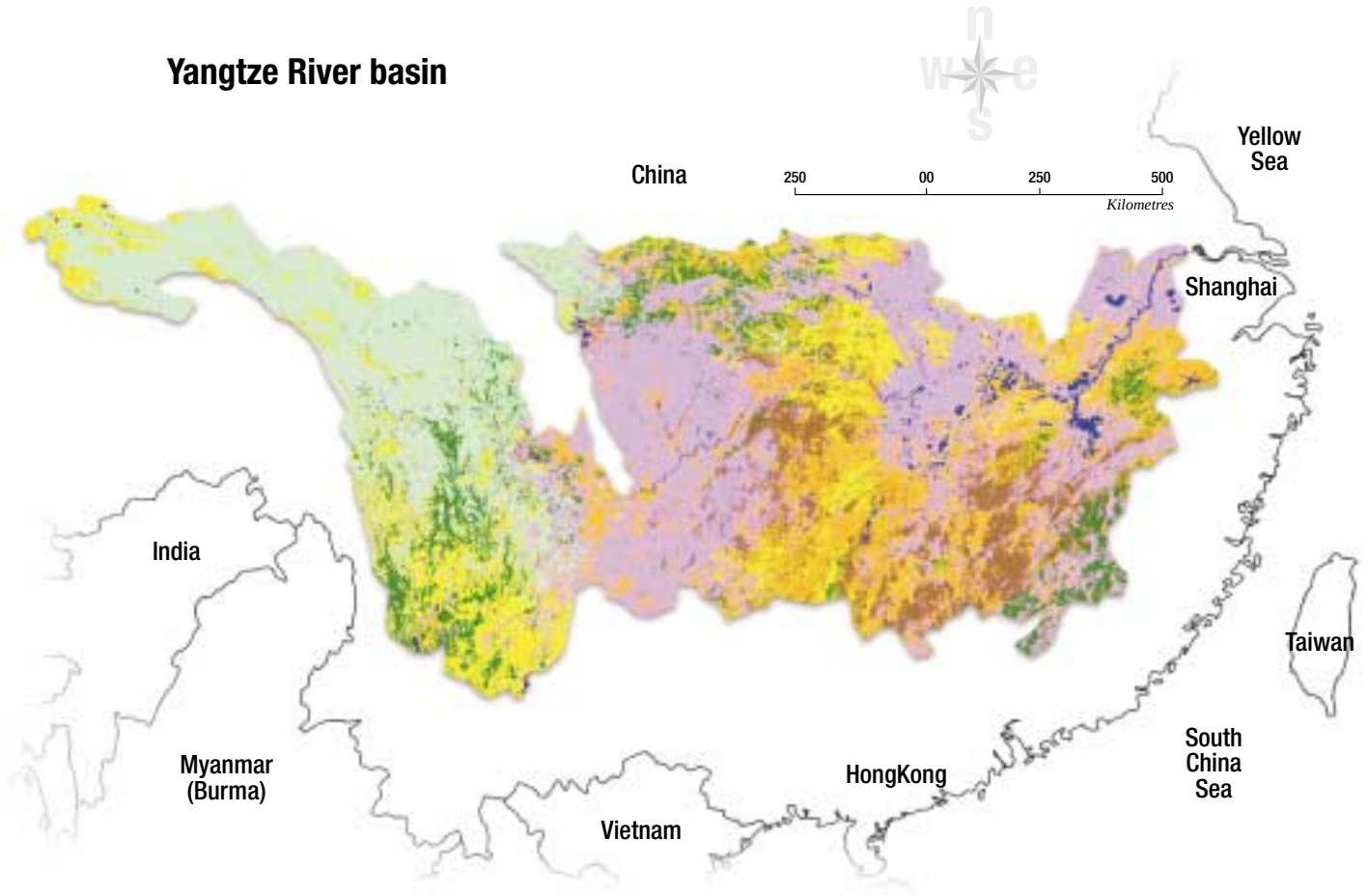


WWF/Fritz Pölking

The highest excellence is like water, it benefits those in the most inaccessible places without striving. It occupies the lowest level, which people avoid. Therefore, it is analogous to Tao.
It has the virtue of gravity,
that finds its own place.
It has the virtue of the heart,
that knows the silent deeps.
It has the virtue of the kind,
that bestows the fullest gifts.
It has the virtue of the words
that speak the greatest truths.
It has the virtue of the service
that uses the highest skill.
It has the virtue of the rhythm
that is unfailing in its timeliness.

From the Tao Tse Ching

Living Waters
Conserving the source of life



The Yangtze River

Taming the dragon

The mighty Yangtze River has been the root of much prosperity and sorrow in China. It provides rich beds for cultivation of food and flat terraces with access to water for dwellings and industry, yet can rise up unexpectedly to reclaim its generous gifts.

IGBP landcover

- Decidious forest
- Shrublands
- Woody savannas
- Grasslands
- Permanent wetlands and waterbodies
- Natural/human vegetation mosaic
- Croplands
- Urban and built-up

Geographic information based on 1-km AVHRR-Satellite data spanning April 1992 through March 1993

The Yangtze River, 6363 km long, is the third longest river in the world but runs through only one country: China.



WWF/Mauri Rautkari



Kojo Tanaka

China's Rice Bowl and More

400 million people-one-third of China's population-live in the Yangtze Basin. The alluvial soil is so fertile that it permits as many as two harvests per year. In the lower reaches of the river, the abundance of flat land and water has facilitated the growth of densely populated and heavily industrialized cities.

While the intensive development of the river valley over many centuries has left few sites unaltered by mankind, the Yangtze River still supports an impressive array of biological wealth. The river and the lakes fed by the river system undergo extreme changes in size and depth with the seasons. The flora and fauna of the lakes and river are adapted to these water cycles, with fish mixing freely between lakes during flooding and terrestrial mammals swimming to high ground.



WWF-Canon/Martin Harvey

The rivers support dwindling populations of such rare creatures as the Chinese river dolphin, Chinese water deer, otters, and Yangtze alligators. The lakes also provide critical habitat for migratory birds, including 95 percent of the wintering Siberian Crane population.

WWF-Canon/Edward Parker



WWF/Kojo Tanaka



WWF-Canon/Mauri Rautkari

Do We Harness the Dragon...

Since 1954 China's population has more than doubled, with most of it concentrated around river beds. It is a challenge to make efficient use of the water resources of two of China's great rivers: the Yangtze and the Yellow River. Farmers with no other place to cultivate crops have converted floodplains into farmland, reducing the Yangtze's ability to buffer flood peaks. The reclamation of the floodplains, combined with reduced forest cover in the watershed, has led to increasingly tragic flood events over the past several decades. Meanwhile, in northern China, rapid population growth, increases in per capita water use, and drought in the Yellow River basin have combined to trigger massive water shortages.

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Large-scale infrastructure has long been viewed as a way to moderate the imbalance between the availability of water in China and the thirst of households and industries. Dams such as the massive Three Gorges Dam under construction on the Yangtze River, are built to regulate river flows in ways that are considered beneficial to the nation's economy. More recently, China has resurrected a plan for the diversion of water from the Yangtze to the Yellow River.

With the aquatic biodiversity of the Yangtze River already weakened by land conversion and pollution, projects of this scale could well constitute a death sentence for much of the Yangtze's remaining biodiversity.



WWF/David E Gaskin

...Or Enlighten the Masters?

China is increasingly recognizing that the decisions it makes about resource use can have enormous implications for the ecological stability of the planet. The country is actively seeking approaches to manage its economic life in ways that better accommodate natural processes, such as the flow of water through a river basin. As it experiments, it often finds that these approaches are less expensive to implement and free of the massive social and environmental problems that accompany schemes that alter nature to suit human whims. Many of these activities could be expanded to reduce damages from both floods and drought in China, including:

Restoring Yangtze River floodplain lakes and wetlands. New land use and floodplain management approaches must be developed to replace the failed polder system in the Yangtze's floodplain. The restoration of wetland habitats will play a crucial role in this effort by reducing floodpeaks while providing opportunities for alternative farming and eco-tourism.

Protect existing forest and reforest barren hills in the upper reaches of both the Yangtze and Yellow Rivers. Forest cover can help a watershed to absorb water when it is abundant and release it to rivers during the dry season, thus moderating both floods and drought. By regenerating forests in degraded watersheds, improving forest productivity, and implementing sustainable harvesting practices, China can maximize these critical watershed functions.

Improving water use efficiency. Per capita water use in China is rapidly rising. Agriculture is the biggest consumer, but domestic and industrial uses are also expanding. Rainwater harvesting and soil and water conservation practices could help farmers produce more food with less water. Reducing growth in demand for water by using efficient technologies for plumbing and irrigation, reusing wastewater, and pricing water appropriately can help to reduce the damages of drought to people and the environment.



WWF/Mauri Rautkari



WWF-Canon/Edward Parker

Living Waters

Conserving the source of life



WWF/Soh Koon Ching

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:
– conserving the world's biological diversity
– ensuring that the use of renewable natural resources is sustainable
– promoting the reduction of pollution and wasteful consumption.

Conserving the source of life

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