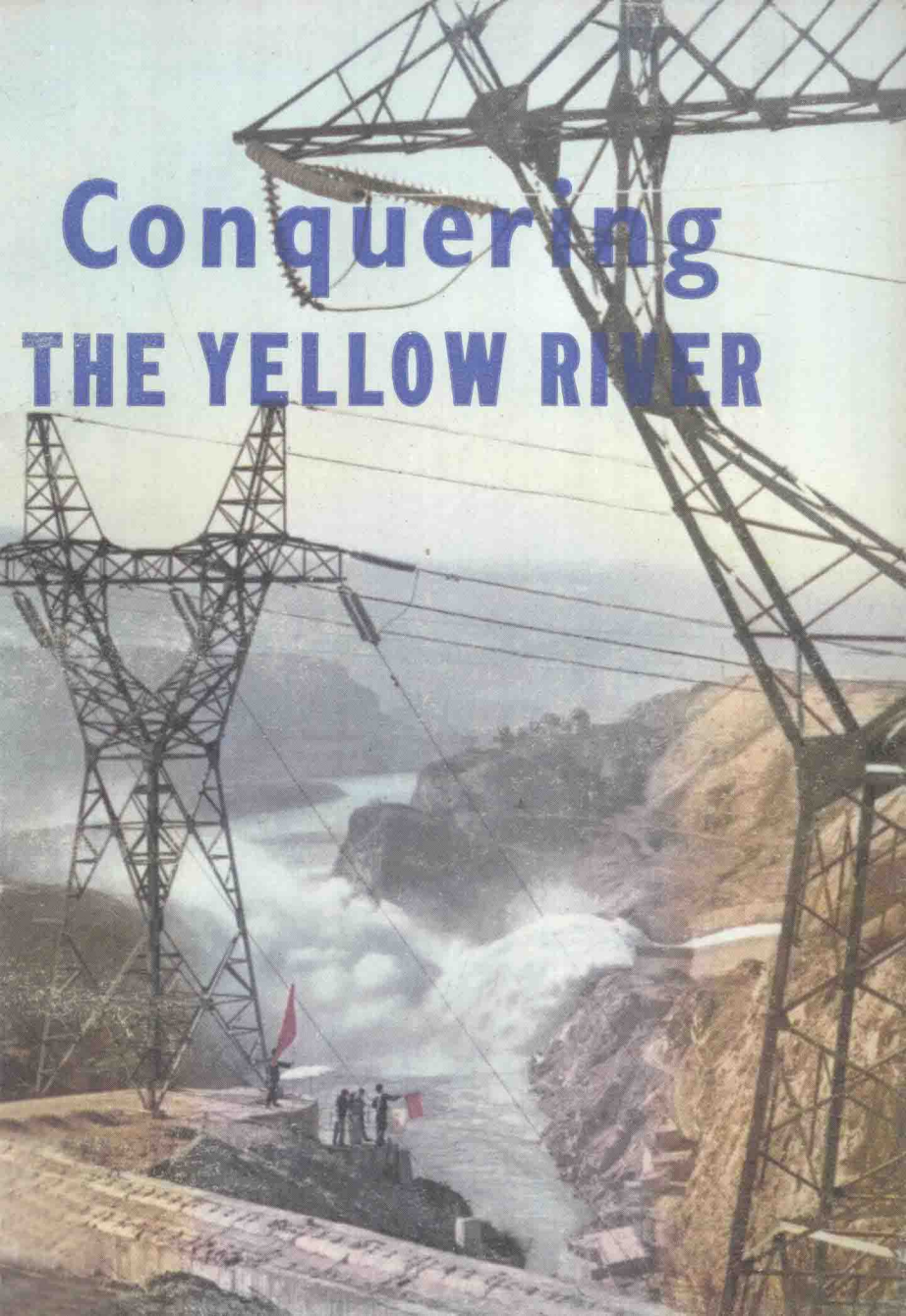


# Conquering THE YELLOW RIVER



# Conquering the Yellow River

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## A Turbulent River

The Yellow River (Huang Ho) is the second longest water-course in China, running across its vast northern territory. Rising as the Yokutsunglieh Stream in the northern foothills of the Bayan Kara Mountains on the Chinghai-Tibet Plateau, it rushes eastwards through Chinghai, Szechuan, Kansu, the Ningsia Hui Autonomous Region, the Inner Mongolia Autonomous Region, Shensi, Shansi, Honan and Shantung, before emptying into the Pohai Sea at Kenli County, Shantung Province. Its entire course is 5,464 kilometres in length.

The Yellow River has been so named because of the heavy load of silt it carries in suspension, which gives it its characteristic yellow colour. Its annual volume of flow is 48,000 million cubic metres. From source to mouth it drops over 4,800 metres. It has 40-odd larger tributaries, each with a drainage area of over 3,000 square kilometres. The Yellow River valley covers 752,443 square kilometres, and has 300 million mu\* of arable land and a population of 110 million. It is rich in water resources and mineral

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\* One mu equals 1/15 hectare.

deposits. Long, long ago, the people of China's various nationalities began to live and work in the basin, transforming nature and creating wealth. Through class struggle and production, they contributed towards creating China's magnificent ancient culture.

Opening up the map of Chinghai Province, one sees the well-known Kunlun Mountains lying across its south-western part. Many peaks here stand above the snowline, capped in white all the year round. The Bayan Kara range, a branch of the Kunlun, has Mt. Yaholatahotse (elevation 5,201 metres) from the vicinity of which radiate Chinghai's river systems. Yokutsunglieh in the east of the mountain is the headstream of the Yellow River. The rivers northwest of it flow into the Tsaidam Basin while those in the southwest find their way into the Tungtien (Di Chu) River, which is part of the headwaters of China's longest river, the Yangtze. Because the sources of the Yellow and Yangtze rivers are so near, they are usually referred to as "Sister Rivers."

From the headstream, the Yellow River trickles eastwards through an extensive, mountain-flanked marshy trough studded with many springs which, at sunset, sparkle like a galaxy of stars, and so the local Tibetans have named this stretch the "Sea of Stars."

Further on, the river crosses Oring Nor and Tsaring Nor which, at an elevation of over 4,000 metres, have a combined area of 1,400 square kilometres. Ringed by mountain peaks, these two lakes are very picturesque. As they are separated only by a strip of land over a dozen kilometres wide, they are known as the "Twin Lakes."

Leaving Tsaring Nor, the Yellow River flows southeast. Barred by the Minshan Mountains at Suotzungsze, it turns northwest around the Chishih Mountains and then switches

to the east at Lungyang Gorge, describing a wide S-shaped curve.

In the 900-kilometre stretch between Lungyang Gorge, from where the river rushes down the Chinghai-Tibet Plateau, and Chingtung Gorge, the flow plunges into a succession of 20 deep gorges, some longer, some shorter. In the narrowest parts, the sky, seen from the river below, is a thin, distant ribbon of blue, while the current viewed from the mountain peaks gives the impression of a herd of horses galloping forwards. This section of the river provides many excellent sites for reservoirs and hydro-electric stations. The fertile, level lands between the gorges are important agricultural areas.

Beyond the Chingtung, deep gorges give way to open valley and the river, now broadened, flows over Ningsia's Yinchuan Plain and Inner Mongolia's Hotao Plain, all around the Great Bend of the Yellow River. Irrigated from ancient times by water from the river, these plains have long been known as the "Affluent Land Beyond the Great Wall."

The section from its source to Togtoh County in Inner Mongolia forms the river's upper reaches. In this 3,472-kilometre stretch, it drops 3,840 metres and so has tremendous hydraulic potentials.

From Togtoh, the river turns sharply south and rushes through the gorges bordering Shansi and Shensi provinces. With a drop of over a dozen metres, the famous Hukou Waterfalls in this section send up a spray that hovers over the river like a mist, and their roar can be heard several kilometres away. Further down, the river reaches Yumenkou, or Lungmen (Dragon Gate). The high peaks flanking it grip the outlet of the funnel-shaped course like pincers.

Further south, the river suddenly opens up to receive its tributaries, the Chingho, Loho, Weiho and Fenho.

At Tungkuan, with the Chinling Mountains blocking its way, the river turns eastwards. When it reaches Sanmen (Three-Gate) Gorge, its channel is separated by two stone islands into three "gates": the "Gate of Man," the "Gate of Ghosts" and the "Gate of Gods," which the ancients called the "Three-Gate Natural Barrier." A little way down, an islet stands firm against the tempestuous rapids. This is the well-known "Pillar in Midstream," now the site of the gigantic multi-purpose Sanmen Gorge project for water conservancy.

The 1,122-kilometre stretch from Togtoh in Inner Mongolia to Mengchin in Honan forms the middle reaches of the Yellow River. Here it sweeps through the Loess Plateau, the world's biggest, where erosion is serious and many silt-laden tributaries enter the river, making it the water-course with the highest silt content on earth. At Shanhsien County, Honan Province, average silt content over the years is a staggering 37 kilogrammes per cubic metre. Every year 1,600 million tons of silt are brought down to the lower reaches.

Beyond Mengchin, the river leaves the gorges behind and enters the great alluvial plain in the lower reaches. The gradient along this 870-kilometre-long section across Honan and Shantung provinces is so gentle that the current slackens, and excessive sedimentation takes place. Thus the riverbed is steadily raised. Three-fourths of all the silt brought annually from upriver, about 1,200 million tons, are carried to the river mouth at the Pohai Sea. Over the past century and more, this process has created a delta there, some 2,000 square kilometres in area. There can be no doubt about the might of the Yellow River when

one considers this mass of land built up by the silt it carries down. The remaining quarter of the silt settles in the river, with the result that its bed rises from year to year, turning the lower course into a world-famous "elevated river." Its bed is generally 3-5 metres, and in some places more than 10 metres, higher than the surrounding terrain, preventing groundwater from flowing in. With this suspended river serving as a "watershed," the rivers south of it flow into the Huai, and those to the north into the Haiho. In the past, whenever the Yellow River breached its dykes, it could inundate the land as far north as Tientsin where the Haiho finds its way into the sea, and affect the Huai down in the south. Thus, the control of the Yellow River is closely connected with the harnessing of the other two rivers.

## **Cradle of the Chinese Nation**

For thousands upon thousands of years, the Yellow River has been flowing across the land of China. It fertilizes the land in its basin and nurtures the people of the various nationalities living along its course, and has played a considerable part in the historical development of the Chinese nation.

Human activity in the Yellow River basin dates back to remote times. Fossils of Ape Man unearthed in Lantien County, Shensi Province, show that primitive men had made their home in this area some 500,000-600,000 years ago. Tingsun Man, discovered at Tingsun Village, Hsiangfen County, Shansi Province, has a history of over 100,000 years. The temperate climate in this basin and the friable, fertile soil on the vast loessland made possible its reclamation with simple tools. These factors provided favourable conditions for the emergence and development of primitive agriculture. The sites of the 2,000 and more primitive villages discovered indicate that forefathers of the Chinese people began a settled life as farmers in this region in the Neolithic Period. The site of Panpo Village in Sian, now the capital of Shensi Province, is typical of the villages

in the period of Yangshao Culture and shows that people farmed here with crude wooden and stone implements 5,000-6,000 years ago. They already knew how to weave and to breed livestock. Wooden huts, grouped together in clusters, had come into use, and cellars had been dug to store grain. Some of the villages at the time were surrounded by defensive ditches, and there were even clan graveyards and kilns in their neighbourhood. Pottery was fairly developed, as shown by the uncovered pots of red clay and beautiful painted earthenware whose lifelike animal designs testify to the artistic talent of prehistoric man.

About 3,500 years ago, China's Shang Dynasty (c. 16th-11th centuries B.C.) whose territory was located in the Yellow River basin had become one of the three famous cultural centres and ancient kingdoms of the world at that time, together with Egypt and Babylonia. The Yin ruins in Anyang, Honan Province, were the site of a capital of the later Shang Dynasty. (In the 14th century B.C., King Pan Keng of Shang moved his capital to Yin, so the Shang Dynasty is known alternately as the Yin Dynasty.) Here were found not only the ruins of the palaces of 3,000 years ago and the workshops for stone and jade carving and for making bronze articles, but also large amounts of fine and elegant bronze and jade wares. In addition, over 100,000 tortoise shells and bones bearing terse sentences in forceful, beautiful scripts were excavated. They all point to the high standards of agriculture and handicrafts of that time. But the entire means of production and all the slaves who laboured belonged to the slave-owners. During their lives, these nobles cruelly oppressed and exploited their slaves, and when they died they had large numbers of slaves buried alive in their tombs. In some of the ancient

tombs which have been excavated, there were found in each as many as 300-400 skeletons of these immolated slaves.

In the 11th century B.C., the Chou Dynasty (c. 11th century-221 B.C.) came to power in the valley of the Weiho River, a tributary of the Yellow River, to replace the Shang Dynasty. The inscriptions on the bronze articles of the Chou Dynasty are important for research into its social system. An unearthed bronze tripod was inscribed with characters showing the price of slaves: five slaves cost one horse plus a hank of silk. These, and other data, all prove the barbarity of the slave system and the sharp class antagonism prevalent at the time.

During the Spring and Autumn Period (770-476 B.C.) and the Warring States Period (475-221 B.C.), iron smelting was known in the Yellow River valley. The wide use of iron tools promoted the development of agriculture and handicrafts, leading to a prosperous urban economy. Hsienyang, Hantan, Hsincheng, Taliang (present-day Kaifeng) and Lintzu in the Warring States Period were all famous cities in the river basin. Changan (now Sian), the capital of several dynasties, was the centre of east-west communications and the starting point of the historically famous Silk Road. It led to Pa and Shu (roughly speaking, both in modern Szechuan) in the south, the "western regions" in the west, and the "central Chinese plains" in the east. During the Tang Dynasty (618-907), the city of Changan stretched 9.5 kilometres from east to west and 8.5 kilometres from north to south, and had a circumference of some 35 kilometres. The scale of the city and the ordered disposition of the streets and markets were rare sights in the world of those days.

From the Spring and Autumn and Warring States periods to the Northern Sung Dynasty (960-1127), the Yellow River valley had been China's political, economic and cultural centre. The working people there not only developed production with their own labour, but also created a magnificent culture, leaving behind a rich legacy. The Tayen Pagoda in Sian, the Iron Pagoda in Kaifeng and the grottoes at Lungmen of Loyang (Honan Province) and Maichishan of Tienshui (Kansu Province) were all fine expressions of their wisdom and skills. The Lungmen Grottoes are situated on the bank of the Yiho River, a tributary of the Yellow River. Their construction began in the reign of the Hsiao Wen Emperor of the Northern Wei Dynasty (386-534), and continued over several dynasties for a period of more than 400 years. The grottoes, built into cliffs that stretch north-south over a distance of 800 metres, contain more than 100,000 lifelike Buddhist statues.

Over a long historical period, the working people in the Yellow River basin were severely oppressed by the ruling slave-owning or feudal class. **"Where there is oppression there is resistance."** Like the river itself, the popular revolutionary struggle surged tempestuously ahead, sweeping away one reactionary dynasty after another, and pushing China's history forwards. The immortal deeds of the people's heroes were witnessed everywhere on the vast territory of the Yellow River basin.

There were already records of slave revolts early in the Eastern Chou Dynasty (770-221 B.C.). Towards the late Spring and Autumn Period, the fire of slave uprisings spread throughout the country.

Towards the end of the Chin Dynasty (221-207 B.C.), the peasant leaders Chen Sheng and Wu Kuang launched a large-scale peasant revolutionary war. The "Red Eye-

brows," "Bronze Horses" and "Yellow Turbans" in the Western Han Dynasty (206 B.C.-A.D. 8) and the Eastern Han Dynasty (25-220), and the "Wakang Army" in the Sui Dynasty (581-618) raised the flag of revolt against the feudal rule along the lower reaches of the Yellow River, in Hopei through which the river flowed before the Sung Dynasty (960-1279), and in Shantung. The uprising led by Huang Chao in the last years of the Tang Dynasty was a great historical landmark and was instrumental in speeding its downfall. Towards the end of the Ming Dynasty (1368-1644), a peasant army led by Li Tzu-cheng rose in northern Shensi. They fought in and out of Shensi, Szechuan, Honan and Hupeh provinces and received a warm welcome from the peasants wherever they went. Under the slogan, "Support King Chuang [the Dare-All King, referring to Li Tzu-cheng], and pay no grain taxes," as many as 500,000-600,000 people joined his army. In 1644, the rebels finally captured Peking, bringing the Ming empire to an end.

Under the wise leadership of Chairman Mao Tsetung and the Chinese Communist Party, the people in the Yellow River basin carried forwards their glorious revolutionary tradition and made an invaluable contribution in the War of Resistance Against Japan (1937-45) and the War of Liberation (1946-49).

In October 1935, the Chinese Workers' and Peasants' Red Army led by Chairman Mao concluded the world-famous 25,000-li\* Long March and arrived victoriously in northern Shensi. From then on, the Shensi-Kansu-Ningsia Border Region became the general base of the Chinese people's revolution, with Yen-an serving as the site of the

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\* One li equals  $\frac{1}{2}$  kilometre.

headquarters of Chairman Mao and the Party Central Committee.

Yenan, situated on the Yenho River, a tributary of the Yellow River, was where our great leader Chairman Mao wrote many immortal works to guide the Chinese revolution and led the people throughout the country to fight the great anti-Japanese war and the liberation war. It shone like a radiant beacon, pointing out China's road to liberation.

In the anti-Japanese war, the army and people under the leadership of the Party set up many revolutionary base areas in the Yellow River basin in order to resist the aggressors and liberate the whole country. Here they fought many hard battles and made an outstanding contribution to the cause of liberation. On October 1, 1949, the first five-star red flag was hoisted over Tien An Men Square, marking the birth of the People's Republic of China. The Chinese people have stood up. Together with their compatriots in other parts of the country, the people of the various nationalities living in the Yellow River valley have embarked on a new and ever better life.



## **A River That Wrought Havoc**

Although the Yellow River has contributed greatly to the development and well-being of the Chinese nation, it was notorious before liberation for inflicting frequent disasters on the people. The reason for this was that throughout history the reactionary ruling classes paid no attention to harnessing the river or using it properly.

Historical records mention many floods in the lower reaches of the Yellow River. Incomplete statistics have it that during the 2,000 and more years from the Spring and Autumn Period to liberation, there were 1,500 dyke breaches, including 26 which caused major shifts in the river's course. This averages out at two breaches every three years and a major shift of course every century. At such times, the Yellow River ran amuck, devastating villages and swallowing up millions of people as it swept over the great plain of 250,000 square kilometres which covers Tientsin in the north and reaches the Yangtze and Huai rivers in the south. According to records, the year 726 in the reign of the Hsuan Tsung Emperor of the Tang Dynasty was marked by the river over-topping its banks in present-day Chih sien County, Honan Province, and inundating over 50 neighbouring districts. In 1117, during

the reign of the Hui Tsung Emperor of the Sung Dynasty, the river flooded in the Tsanghsien-Hochien area of Hopei Province, taking a toll of over one million lives. The big flood in Chungmou County of Honan Province caused by dyke breaches in 1843, during the reign of the Tao Kuang Emperor of the Ching Dynasty, submerged 28 districts in Honan and Anhwei provinces.

The situation became even worse in the days of the reactionary Kuomintang rule. The short span from 1927 to 1938 witnessed eight floods. The one in 1933 was caused by 54 breaches along the lower Yellow River that brought disaster to 3.6 million people in 67 counties in Honan, Hopei, Shantung and Kiangsu provinces. In Changyuan County of Honan Province alone, there were 31 breaches. The county seat was surrounded by water and 773 of the 823 villages in the county were submerged. About 268,000 people suffered badly, of whom over 10,000 lost their lives. In addition, more than 40,000 farm animals were drowned, and there was no counting the loss of property.

As it was, the lower Yellow River was bad enough with its recurrent floods. Yet the reactionary ruling classes at different periods often used the river as an instrument of war to shore up their cruel rule and purposely opened the dykes to cause catastrophe.

In 1642, the 15th year of the Chung Chen Emperor's reign during the Ming Dynasty, Li Tzu-cheng led his peasant army to besiege and attack Kaifeng. Kao Ming-heng, governor of Honan Province, actually breached the river dykes west of the city to drown the insurgent army. The deluge rushed into the city, destroying it entirely and causing 340,000 of its 378,000 inhabitants to perish.

The biggest catastrophe was wrought in 1938. The Japanese aggressors were then pushing forwards into