

Major Rivers

China's two **major rivers**, the Huang He (Yellow River) and the Chang Jiang (Yangzi or Yangtze River), as well as the Pearl River (Zhu Jiang) delta system marked by the Xi Jiang (West River) in southeastern China, have provided the framework for agricultural development and population growth throughout China's history. Another river, the Heilong Jiang (known also as the Amur River, its Russian name) marks the border between China and Russia; at times in the past, this area was one of confrontation between the neighbors. The drainage basins of China's rivers differ in terms of extent and topography, offering varying opportunities for agricultural development. Because some of China's largest rivers have their source regions on the high Qinghai-Tibetan Plateau and drop great distances over their middle and lower courses, China is rich in hydroelectric resources.

Each of these rivers has special characteristics and associated problems at different locations along their courses. (Note that "he" and "jiang" are both translated into English as "river." In English, there are of course many words that differentiate flowing water according to size and character — stream, brook, creek, river, just for a couple of examples. In the Chinese language, similar differences are expressed but the common words usually translated into English as "river" can be further clarified somewhat. "Jiang" 江 is the most common descriptor for "river" in Chinese, signifying a stream that is often geologically young which cuts through a narrow valley. "He" 河, on the other hand, is generally used for a river that is broad and geologically old. In this regard, much of the lower course of the Huang He is reminiscent of the sluggish Mississippi River while the middle and upper sections of the Chang Jiang resemble the unruly Colorado River. It is thus redundant to say Huang He River or Chang Jiang River.)

- **Huang He (Yellow River).** China's second longest river, the **Huang He** rises in Qinghai province and flows some 5464 km to the Yellow Sea. Crystal clear lakes and sluggish meandering are characteristic in its upper reaches. Along the Great Bend of the Huang He in its middle course, the unruly river carves its way through the loessial plateau with substantial erosion taking place. As the river erodes the loess, it becomes a "river of mud" (Loessial soil is called *huang tu* or "yellow earth" in Chinese and it is the color of this suspended loess in the river that has given the Huang He its name "Yellow River.") Carrying 40% sediment by weight in summer (for other rivers in the world 3% would be considered a heavy sediment load), the river deposits vast amounts of alluvium as it courses across the North China Plain. Over the centuries, deposition has raised the bed of the Huang He so that it is in some ways "suspended" precariously above the lower surrounding agricultural areas, contained by levees and embankments built to control what historically was "China's Sorrow"— the bringer of flood and famine.
 - **Chang Jiang (Yangzi River).** As China's "main street," this artery courses over 6300 km through several of China's most economically developed regions. Excellent river ports — Shanghai, Zhenjiang, Nanjing, Wuhan, Yichang, and Chongqing — are located near or along the Chang Jiang, making it one of the world's busiest inland waterways. As much of 40% of the country's total grain production, 70% of the rice output, and more than 40% of China's population are associated with its vast basin that includes more than 3,000 tributaries. The flow of the Chang Jiang is some 20 times greater than that of the Huang He. With its numerous tributaries, the Chang Jiang drains nearly 20% of China's total area. Its upper reaches

tap the uplands of the Tibetan Plateau before sweeping across the enormous and agriculturally productive Sichuan Basin that supports nearly 10% of China's total population. It is in the middle course of the Chang Jiang that the controversial [Three Gorges Dam project](#) is being constructed.

Mountains and Deserts

The west of China is comprised of [mountains and deserts](#) as well as plateaus that do not provide much arable land for agriculture. Throughout most of history, the civilization that grew up to the east in what is today China was not surrounded by other nearby major civilizations. To this extent the Chinese were "isolated" from competing civilizations although there was a broad and fluid frontier zone on the western margins. This geographical fact is important to remember when discussing the Western encroachment on China from the sea during the late imperial period.

Although the mountains and deserts of the west limited contact between early imperial dynasties and other centers of civilization in the Inner Asia, Middle East, South Asia, and Europe, there were some important and notable exchanges of culture. The legendary Silk Road facilitated the exchange of goods and ideas between China and each of these areas.

Historical Borders

Like many other countries, the [historical borders of china](#) have varied over time. Under the Han dynasty (202 BC-202 AD), China's great historical empire, these early boundaries were significantly expanded, as the series of [historical maps of China](#) shows. The extent of China's territory was greatest under the last dynasty, called the Qing (Ch'ing) or Manchu dynasty between 1644-1912. China's territory was more extensive under the Qing empire than it is today.

Bordering Nations

China is at the core of a cultural sphere or region known as East Asia. Looking at the map of [bordering nations](#), it is possible to identify China's neighbors, some of which received substantial cultural influence from China. China, Korea, Japan, and Vietnam historically form the East Asian or Sinitic cultural sphere.

The large number of countries with which China shares borders makes Chinese foreign policy especially complex (unlike the U.S., for example which shares borders only with Canada and Mexico).

Supplementing Geography: Great Wall, Grand Canal, Terracing and Irrigation

The Chinese attempted to correct perceived "deficiencies" in their physical geography by building massive civil engineering projects that would help bring about unity and provide defense as well as by countless smaller scale efforts at modifying their physical landscapes.

- **Great Wall.** What is known today as the Great Wall ([see map of the Great Wall and the Grand Canal](#)) was reputedly first completed during the Qin (Ch'in) dynasty (221-206 BC) when segments of the wall existing from earlier periods were connected. Early walled ramparts were constructed of rammed or tamped earth. The brick-

faced walls seen today were built much later during the Ming dynasty (1368-1644). Although not a single continuous wall, the Great Wall and its associated military encampments and guard posts figured in attempts by many dynasties to manage the nomadic peoples, sometime referred to as "barbarians," who lived north of it on the grasslands or steppes. For the most part, the Great Wall should be viewed as a zone of transition — rather than a fixed border — between farming areas with sedentary villages and pasture lands with nomadic lifestyles.

- **Grand Canal.** Since China's major rivers — the Huang He and Chang Jiang — flow from west to east and there is no natural communication north to south except by way of a coastal route, the Chinese dug the Grand Canal as a safe, inland water route between the two major rivers, in the process connecting a number of minor regional rivers. Constructed around 605 AD to serve commercial as well as military considerations, the canal was extended several times, most notably to the Hangzhou in 610 and eventually in 1279 to Dadu, the great Mongol (Yuan dynasty) capital. During the Ming and Qing dynasties which followed the Mongol dynasty, the Grand Canal ensured that Beijing, the great successor imperial capitals to Dadu, had sufficient grain from the southern rice bowl areas. The Grand Canal is the longest artificial waterway in the world and has a long history of barge traffic along its course. Although many parts of it fell into disrepair over the years, today it is still possible to traverse the man-made Grand Canal from Hangzhou, Zhejiang Province northward 1801 km to Beijing.
- **Terracing and Irrigation.** At least as significant as major engineering works like the Grand Canal and the Great Wall are the countless alterations of China's physical landscapes by centuries of human effort. These human modifications traditionally focused on terracing hill slopes and controlling water via irrigation as well as reclaiming marginal land. In managing natural resources and expanding opportunities for the production of food, the Chinese have reclaimed, even created, land that in many areas of the world would have been considered impossible to farm.