

# Coming *Beware the future.* Water Wars

BY BRAHMA CHELLANEY

**A**s China and India gain economic heft, they are drawing ever more international attention at the time of an ongoing global shift of power to Asia. Their underlying strategic dissonance and rivalry, however, usually attracts less notice.

As its power grows, China seems determined to choke off Asian competitors, a tendency reflected in its hardening stance toward India. This includes aggressive patrolling of the disputed Himalayan frontier by the People's Liberation Army, many violations of the line of control separating the two giants, new assertiveness concerning India's northeastern Arunachal Pradesh state—which China claims as its own—and vituperative attacks on India in the state-controlled Chinese media.

The issues that divide India and China, however, extend beyond territorial disputes. Water is becoming a key security issue in Sino-Indian relations and a potential source of enduring discord.

China and India already are water-stressed economies. The spread of irrigated farming and water-intensive industries, together with the demands of a rising middle class, have led to a severe struggle for more water. Indeed, both countries have entered an era of perennial water scarcity, which before long is likely to equal, in terms of per capita availability, the water shortages found in the Middle East.

Rapid economic growth could slow in the face of acute scarcity if demand for water continues to grow at

its current frantic pace, turning China and India—both food-exporting countries—into major importers, a development that would accentuate the global food crisis.

Even though India has more arable land than China—160.5 million hectares compared to 137.1 million hectares—Tibet is the source of most major Indian rivers. The Tibetan plateau's vast glaciers, huge underground springs, and high altitude make Tibet the world's largest freshwater repository after the polar icecaps. Indeed, all of Asia's major rivers, except the Ganges, originate in the Tibetan plateau. Even the Ganges' two main tributaries flow in from Tibet.

But China is now pursuing major inter-basin and inter-river water transfer projects on the Tibetan plateau, which threatens to diminish international river flows into India and other co-riparian states. Before such hydro-engineering projects sow the seeds of water conflict, China ought to build institutionalized cooperative river-basin arrangements with downstream states.

Upstream dams, barrages, canals, and irrigation systems can help fashion water into a political weapon that can be wielded overtly in a war, or subtly in peacetime to signal dissatisfaction with a co-riparian state. Even denial of hydrological data in a critically important season can amount to the use of water as a political tool. Flash floods in recent years in two Indian frontier states—Himachal Pradesh and Arunachal Pradesh—served as an ugly

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*The Yarlung Tsangpo courses through the Tibetan Autonomous Region of China. Further downstream, the river widens and becomes the Brahmaputra. China already has identified the bend where the Brahmaputra forms the world's longest and deepest canyon—just before entering India—as the diversion point.*

reminder of China's lack of information sharing on its upstream projects. Such leverage could in turn prompt a downstream state to build up its military capacity to help counterbalance this disadvantage.

In fact, China has been damming most international rivers flowing out of Tibet, whose fragile ecosystem is already threatened by global warming. The only rivers on which no hydro-engineering works have been undertaken so far are the Indus, whose basin falls mostly in India and Pakistan, and the Salween, which flows into Burma and Thailand. Local authorities in Yunnan province, however, are considering damming the Salween in the quake-prone upstream region.

India's government has been pressing China for transparency, greater hydrological data sharing, and a commitment not to redirect the natural flow of any river or diminish cross-border water flows. But even a joint expert-level mechanism—set up in 2007 merely for “interaction and cooperation” on hydrological data—has proven of little value.

The most dangerous idea China is contemplating is the northward rerouting of the Brahmaputra river, known as Yarlung Tsangpo to Tibetans, but which China has renamed Yaluzangbu. It is the world's highest river, and also one of the fastest-flowing. Diversion of the Brahmaputra's water to the parched Yellow river is an idea that China does not discuss in public, because the project implies environmental devastation of India's northeastern plains and eastern

Bangladesh, and would thus be akin to a declaration of water war on India and Bangladesh.

Nevertheless, an officially blessed book published in 2005, *Tibet's Waters Will Save China* (2005), openly championed the northward rerouting of the Brahmaputra. Moreover, the Chinese desire to divert the Brahmaputra by employing “peaceful nuclear explosions” to build an underground tunnel through the Himalayas found expression in the international negotiations in Geneva in the mid-1990s on the Comprehensive Test Ban Treaty. China sought unsuccessfully to exempt “peaceful nuclear explosions” from the CTBT, a pact still not in force.

The issue now is not whether China will reroute the Brahmaputra, but when. Once authorities complete their feasibility studies and the diversion scheme begins, the project will be presented as a *fait accompli*. China already has identified the bend where the Brahmaputra forms the world's longest and deepest canyon—just before entering India—as the diversion point.

China's ambitions to channel Tibetan waters northward have been whetted by two factors: the completion of the Three Gorges Dam, which, despite the project's glaring environmental pitfalls, China trumpets as the greatest engineering feat since the construction of the Great Wall; and the power of President Hu Jintao, whose background fuses two key ele-

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ments—water and Tibet. Hu, a hydrologist by training, owes his swift rise in the Communist Party hierarchy to the brutal martial-law crackdown he carried out in Tibet in 1989.

China's hydro-engineering projects and plans are a reminder that Tibet is at the heart of the India-China divide. Tibet ceased to be a political buffer when China annexed it nearly six decades ago. But Tibet can still become a political bridge between China and India. For that to happen, water has to become a source of cooperation, not conflict. ♦