China’s water supply crisis has taken on an international dimension, not only in respect of other countries affected by pollution in China, but also in disputes over water resources. China conducts its diplomacy like a child in kindergarten, friendly one moment and unfriendly the next. When relations are good, it shares its toys, but when relations are bad, you’re subjected to raging tantrums. In 1962, a border war broke out between China and India, and in 2000, troops on either side of the border were put on military alert. The current year has been designated one of China-India friendship, but conflict over water resources remains a difficult issue to resolve despite the so-called strategic partnership that has been established in recent years.

Conflict over hydropower
For a number of years, the Indian government has been planning to build a hydroelectric power plant with a capacity of 11,000 megawatts on the Yarlung Zangbo River in Arunachal Pradesh, known in its upper reaches as the Siang River. This plant, smaller in scale than China’s Three Gorges project and Brazil’s Itaipu plant, is a priority project in the Indian nation’s 25-year construction plan; a feasibility study is being carried out and a report on the environmental impact is being completed. Large reservoir dams will also be constructed on the middle and lower reaches of the Siang River, but on a much smaller scale than on the upper reaches.

According to the Indian press and reports from the International Rivers Network, the first stage of the Arunachal Pradesh dam project, clearing the work site, was launched in December 2003. The water level will be set to avoid inundating the region’s key cultural site, the Tuting Buddhist Monastery and Dehang-Debang Biosphere Reserve. Even so, the project has been delayed in part by opposition from local residents and environmental protection organizations, but also by opposition from China. During the feasibility study phase, China declined to provide India with fundamental hydrological and meteorological data about the upper reaches of the river that fall within the boundaries of Tibet.

Level lakes and inclined lakes
Given that the reservoir formed by this dam project will extend within China’s borders, China has demanded that India reduce the height and water storage level of the dam, reduce hydroelectric output by half and limit the power of the equipment to 50,000 megawatts. Otherwise, it is argued, too much Chinese territory will be submerged, and the threat of flooding would greatly increase.

In rationalizing its resettlement of local residents for the Three Gorges project, the Chinese government used the theory that “water stored in a reservoir is a level surface,” in line with Mao Zedong’s pronouncement that “a high gorge produces a level lake.” If we apply this theory to Arunachal Pradesh, then Tibet will be completely unaffected. But the Chinese side considers the India-produced reservoir to be an “inclined lake” that will inundate a portion of Tibet, entirely different from the “level lake” of the Three Gorges reservoir.

Professor Huang Wanli opposed the construction of the Sanmen Gorge project on the Yellow River as well as the Three Gorges project on the Yangtze. He posited that the Three Gorges project would exacerbate flooding on the upper reaches of the reservoir, but the Chinese government refused to accept his views. Now they are marching out Professor Huang’s opinions in their entirety to support their objections to the dam in Arunachal Pradesh. So much for a strategic partnership.

China and India have no formal agreement regarding the use of international rivers, and the two nations have had a good number of conflicts over water use. The most serious followed a breach in a Tibetan reservoir in 2000, which resulted in border troops on both sides being put on the alert. The breach occurred on June 11, 2000, releasing flood waters into territory under the de facto control of India and raising the water level of the Siang River by more than 30 meters. Serious flood damage aroused the indignation of the Indian public, and anti-China feeling ran high, causing both governments to put their border troops on the alert. Numerous reports appeared in the Indian and international media, but Chinese domestic media did not report the incident, so it is difficult for this writer to determine which dam burst.1

Border conflict affects South-North Water Transfer Project
It is common knowledge that China is in the process of imple-
menting a project to divert water from the south to the north. The project comprises three routes: eastern, central and western, diverting water from the Yangtze to the Yellow River, to the northwest, and to Beijing and Tianjin. For many people, this project is a source of pride.\(^2\)

The author of the water-transfer proposal lacked the most basic geo-political knowledge.

But few people are aware that by 2030 the entire Yangtze River basin will suffer from water shortages—there will be no surplus water to redirect northwards. All of China’s water resource forecasts to date confirm this. If the Yangtze has no water available for rerouting, why does the Chinese government still want to undertake the South-North Water Transfer Project?

The reason is that this “small South-North Water Transfer” is only the first phase of a much larger plan. The second phase of this plan is to transfer the waters of various rivers in the southwest—the Yarlung Zangbo, the Lanchan River and the Nu—to the Yangtze, and then move the water further northward from there. This “large South-North Water Transfer” is sometimes referred to as the Great Western Route or the New Moon Canal Project. The Sino-Indian water conflict directly affects the fate of this major south-north water transfer project, and therefore also the smaller and more imminent South-North Water Transfer Project.

The first people to propose the major south-north water transfer project were Jiang Benxing, a former vice-minister of the Ministry of Water Conservation, and Guo Kai, also an official with that Ministry. As officials of the State Ministry of Water Conservation, they were well aware that the smaller South-North Water Transfer Project did not have a guaranteed source of water, because the Yangtze River did not have the capacity for large-scale water transfer to north China in the mid to long term. Guo and Jiang pointed out in a report, “All south-north water transfer projects are posited on the Yangtze River. The issue is whether, when the year 2020 rolls around, the Yangtze, too, will be short of water.” For that reason, they recommended implementing the major south-north water transfer project.

He Zuoxiu, an academician with the Chinese Academy of Social Sciences (CASS), submitted a formal proposal for the major south-north water transfer scheme to the Chinese People’s Political Consultative Conference (CPPCC), saying it would affect the future destiny of the Chinese people. According to this proposal, 210 billion cubic meters of water (equivalent to the flow of five Yellow Rivers!) would be transferred annually from the Yarlung Zangbo River in Tibet and the Nu and Lanchan Rivers in the southwest through a series of dams, reservoirs and mountain tunnels into three channels:

1) The Yellow River would carry water to the northwest, north China, the northeast and the Central Plain while the upper Yangtze delivered water to the lower Yangtze;
2) Water stored in Lake Qinghai would be transferred to the Tsaidam (Qaidam), Talimu (Xinjiang) and Zhuni ge’er basins, as well as to the Gansu Corridor and Mongolia’s Alashan Plateau;
3) Water stored in Mongolia’s Dai Sea would be sent to the plains of Shanxi, Hebei, Liaoning and Mongolia.

In addition, He Zuoxiu proposed that water could be exported to the Central Asian nations of the former Soviet Union.
In his proposal, He Zuoxiu stated this project would increase China’s arable land mass by an estimated two billion mu,\(^{\text{3}}\) resolving China’s agricultural problems in a single stroke and providing employment for 160 million people. “All in all, implementing this project would end unemployment in China and provide enough food for every Chinese.”

This proposal has gained a high level of attention from Chinese leaders. On May 24, 1998, Jiang Zemin personally issued a memorandum on it. Party and government leaders including Deng Xiaoping, Yang Shangkun, Li Peng, Zou Jiahua, Wang Shoudao, Ye Fei and Cheng Siyuan have all commented on it in writing. Sixty-nine national level research and design institutes and scientific research bodies have participated in the research, and numerous NPC deputies, CPPCC representatives and experts from Hong Kong, Taiwan and overseas have all given their active support. More than a thousand senior-level cadres and hundreds of generals have made repeated appeals on behalf of this major south-north water transfer project, with myriad articles enthusiastically praising the project in hundreds of newspapers and periodicals, both domestic and international.

The unfortunate thing is that the author of the proposal, the academician He Zuoxiu, lacked the most basic geo-political knowledge. He had no idea that the ultimate source of water for this major south-north water transfer project lies in territory that is under de facto Indian control!

The quandary at the heart of the Sino-Indian strategic partnership

He Zuoxiu believed that Tibet lies at the confluence of the Indian Ocean air currents and the Pacific Ocean air currents, making it a land of plentiful rainfall, where the Indian Ocean’s southwesterly monsoon carries abundant water vapor to the high mountains and makes the Tibetan Plateau one big natural reservoir.

In fact, most of Tibet is a semi-arid region of low humidity and semi-moist transitional areas; only a small portion of southern Tibet is a region of high humidity and abundant water. A report assessing water resources in China states: “Annual precipitation at the downriver portion of the Yarlung Zangbo, near the Sino-Indian border, can approach 5,000 millimeters.” By contrast, the hill regions of China’s southeast coast, which are relatively rich in water resources, have an annual precipitation of only 1,600 to 2,000 millimeters, less than half that of the Yarlung Zangbo region.

However the majority of this water-rich region is not under Chinese control, but lies south of the “McMahon Line” under de facto Indian control. The academician He Zuoxiu used a map published in China, which naturally designated this area as part of the sacred territory of China. But on world maps published in other countries, the Chinese border follows the McMahon Line and is located just north of the “Great Bend” of the Yarlung Zangbo River, not far south of the Medog County seat. The stretch of fertile, water-rich land is part of India’s Arunachal Pradesh, an area of over 92,000 square kilometers (equivalent to one percent of China’s territory, or three Taiwans). The area is densely inhabited, with a population triple that of Tibet. And this internationally recognized boundary is the one that currently delineates Chinese and Indian control.

The McMahon Line was proposed as the line of separation between India and China in Simla in March 1914 by British administrator Sir Henry McMahon, but it was only in 1950 that Indian troops began to move northwards, taking de facto control of the entire region south of the McMahon Line by 1953. The government of China, which has never recognized the McMahon Line, launched a counter-attack in 1962 that developed into a Sino-Indian border war. The Chinese army at one point recaptured this territory, but within days withdrew not only to the “McMahon Line,” but a further 20 kilometers behind it, abandoning a great deal of territory. This is the general situation that prevails to this day.

Now the Chinese government’s desire to solve its northern water shortages depends on projects that in the long term will require the use of water resources currently under the de facto control of India. I can only ask our policymakers, what should China do?

Translated by a friend of HRIC

The original Chinese article was posted on the Web site of China Information Center: http://www.observechina.net/info/artshow.asp?ID=37736&ad=1/10/2006

NOTES
2. For a summary of issues surrounding this project, see http://www.usembassy-china.org.cn/sandh/SOUTH-NORTH.html.
3. China’s traditional land measure of ‘mu’ is roughly equivalent to 675 square meters or 800 square yards, with 15 mu equal to one hectare.