

Eurasian Land-Bridge Approach Needed To Develop China's West

by Mary Burdman

Water is the key to the development of the vast interior regions of China, and the surrounding nations in Central Asia and Southeast Asia. While the commitment of the Chinese central government, and the involved provincial governments, to “develop the West,” is very strong, this cannot be achieved without solving the vital problem of ensuring access to sufficient water for this huge region. The challenge is enormous. Currently, most of China north of the Yangtze River is suffering severe drought. In some areas of the great plain along the Huang He (Yellow River), the drought has been of several years’ duration. In some areas, millions of people, and their livestock, do not have enough to drink. The summer harvest, which provides one-quarter of China’s grain, is endangered, and, if the critical situation continues, planting for the autumn harvest will also be affected. The drought extends beyond China. Its neighbor to the north, Mongolia, is facing economic disaster due to a drought which began last summer, followed by an extremely severe winter.

The problem of water management, in the broadest sense, is of even greater strategic importance to China, than the size of its population, as Lyndon LaRouche pointed out to a group of Chinese scholars and scientists at a seminar in New York in 1998. To provide the water necessary for a modern agricultural and industrial economy, for a population already of 1.25 billion, and which will reach 1.6 billion within 30 years, what is required, is not only the Three Gorges Dam, but also such great projects as “Move South Water North” (**Figure 1**). This project, which had been supported already by Mao Zedong in the early days of the People’s Republic, would divert water from the overwatered south, to the dry north. Why it is necessary, is indicated by the fact that, as northern China is dried out, torrential rains are falling in southwestern Guangdong Province. There, the city of Lianjiang received 243.8 millimeters (9.6 inches) of rainfall overnight, the highest recorded since 1959.

Beijing has already announced ten major projects for developing the western region, to be launched this year. These include construction of railroad links, trunk highways, a gas pipeline, two flood-control projects, and reforestation of almost 800,000 hectares of land. These projects are vital, but fall short of the strategic “Eurasian Land-Bridge” approach, as outlined by LaRouche since 1989.

It would also be critical for China’s planners, not to allow

the wild “information technology” hype emanating from the speculative bubble-dominated United States, to impinge upon thinking about developing the west. The ruinous idea, that computers and “information” eliminate the necessity to construct a modern industrial economy, is especially risky for an impoverished region like western China. There, development of the most advanced energy, transport, and industrial technologies, is the only way to overcome the challenges of poverty, geography, and climate.

Lack of Water Will Hamper Growth

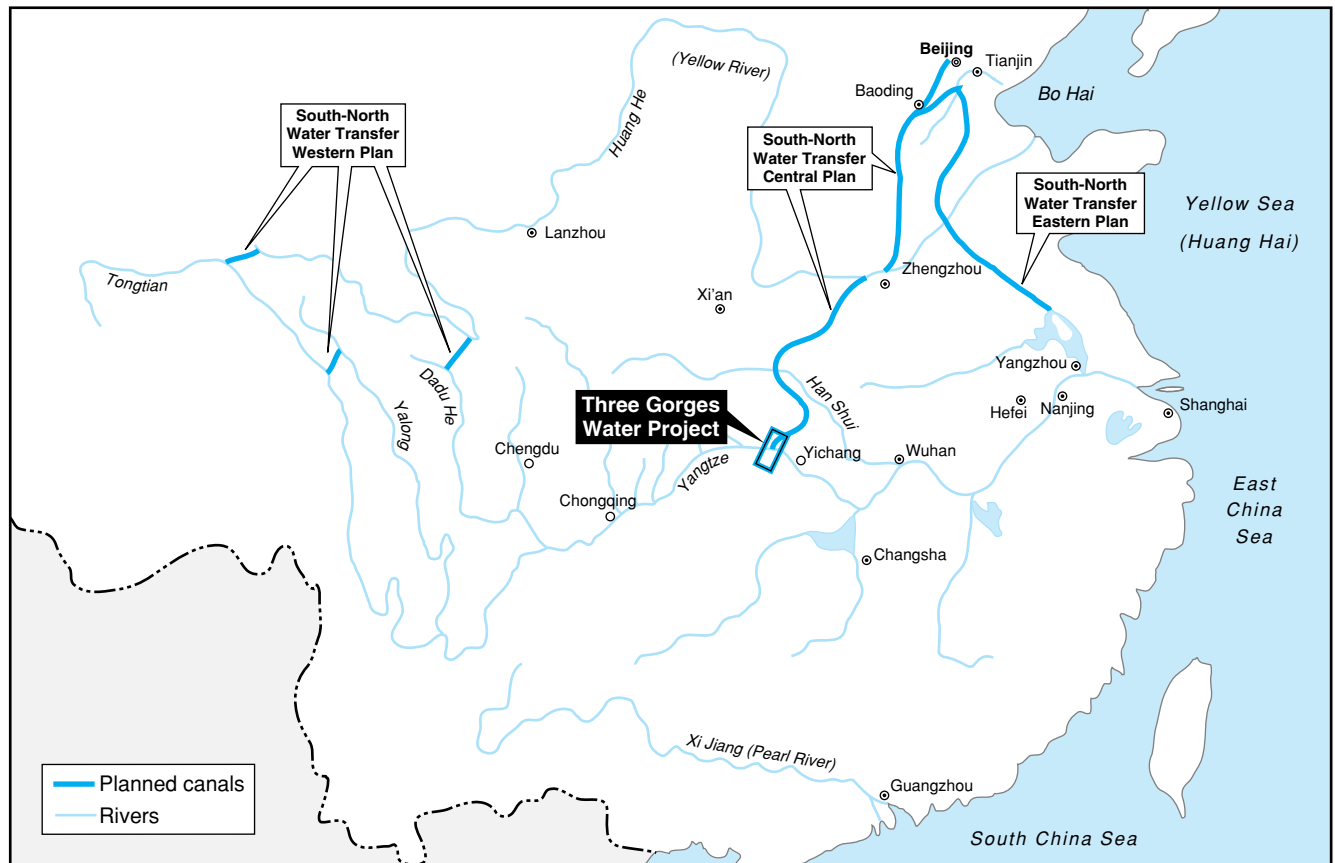
Even as the “develop the west” program is being launched, Chinese officials are warning that the lack of water could limit progress. On April 10, Tian Fengshan, who had been appointed China’s Minister of Land and Resources in March, said, on returning from an inspection tour of western China, that the shortage of water could limit the development of the region. Also on April 10, Minister of Water Resources Wang Shucheng, said at an international seminar in Beijing, that saving water resources is a priority, in order to ensure that China’s sustainable economic growth will continue.

A commentary in the *Economic Daily* on March 23, warned that the threat of a “severe water shortage which could endanger . . . sustained growth” in China. By 2030, China’s population will be 1.6 billion, and this will bring down per-capita water resources, already low, by one-fifth. And on April 18, the *People’s Daily* cautioned that, in the extreme conditions of western China, “If no breakthrough is made in scientific research work, and the problem regarding water-diversion and other infrastructure construction is not solved, it will be difficult to break free of the vicious cycle that ‘trees and grasses die after being planted, new saplings are planted again after the death of old ones.’ ” Water resources are being depleted in the west, *People’s Daily* stated. “To achieve sustainable development of the economy in the western region, it is necessary to get rid of the ‘bottleneck’ restriction imposed by the environmental capacity. However, to ‘increase the capacity’ of the environment cannot be accomplished overnight. . . . Western development is a system project; while taking active action, we must have a sober understanding of the protracted and arduous nature of said development.”

Water management has been a millennial issue in China. The area along the Hexi Corridor—along the Yellow River

FIGURE 1

Planned Water Diversion Projects in China



to the west—was the center of Chinese civilization in earlier millennia. Many events led to its current relative decline, but certainly of great importance, was the increasingly arid climate of Central Asia. As this vast area grew drier, many of the cities built in oases around the Taklamakan Desert, which formed the economic and cultural link between Europe, India, and China, were abandoned and became buried in sand.

Before the Tang Dynasty (618-907), Shaanxi Province had fertile land and abundant forest and grassland, and was the site of the capitals of tens of early Chinese dynasties, as historian Zhou Tianyu, curator of the Shaanxi Museum of History in Xi'an, recently pointed out in an article. Floods, erosion, wars, and too much monumental building by the Han and successor emperors, destroyed the region, turning it into the barren Loess plateau.

This history indicates why the Eurasian Land-Bridge approach is essential. This would combine the development of transport, water, energy, and city-building projects in "development corridors," capable of opening up the interior of China, Russia, and Central Asia, for economic development. While "arduous," the development of nuclear energy, at a

much higher rate than is currently planned, to provide the extra capacity necessary for such "great project" construction, water desalination, and great water-diversion projects, would make it possible to make China's west green again.

In stark contrast, is the approach of the international financial "mainstream," such as the Asian Development Bank. In its just-released 1999 annual report, the ADB has a special section on water. While addressing the real crisis in water supplies throughout Asia, the ADB, which calls agriculture an "old industry," concludes that imposition of "user fees," including on the impoverished population, and the end of government management, are key to water management via "stakeholder participation." For Asia, which has by far the greatest concentration of poverty in the world, the ADB touts the U.S. "model" — where industry has been devastated — for its success in saving water.

Clearly, this will not function in China.

China has per-capita water resources of only 2,400 cubic meters—25% of the world average—and is one of the 13 countries listed by the United Nations as having a serious shortage of water. China has the largest irrigation network

in the world, and uses approximately 70% of its water for irrigation, but shortages still hamper agricultural development. According to Chinese reports, around 27 million hectares of farmland, more than one-fifth of the total, are hit by drought each year. Even when there is rain, China needs an additional 30 billion cubic meters of water for irrigation. At the same time, only 40% of the irrigation water is efficiently used, due to backward technology.

Drought is now the worst disaster threatening China's grain yields; last year, damage amounted to nearly 90 billion yuan (\$10.7 billion). China is certainly taking measures: Water-saving irrigation methods are being applied over 18 million hectares, and a new research center on water-efficient irrigation technology was founded in Beijing on April 26.

Water is also an urban problem. An international forum on water, held in the city of Tianjin May 8-10, reported that more than 400 of China's 668 cities have a water shortage, and of the 400, more than 100 are seriously threatened. High-water-consumption industrial projects have not been built in many cities due to lack of water. The total annual urban water shortage is 6 billion cubic meters, reported Zhou Wenzhi, Vice-Minister of Water Resources.

Severe Drought

Government leaders including Prime Minister Zhu Rongji and National People's Congress leader Li Peng have been inspecting the drought-stricken region north of the Yangtze during May. Zhu, in Hebei and Inner Mongolia, called for immediate efforts to combat serious desertification and to build "green belts"; he stated that abnormal weather is partially to blame, but excessive logging, mining, and use of unsuitable land for farming and over-grazing were the source of the problem.

Huge areas of north and northwest China are affected, especially the vast land along the Yellow River and its tributaries, including Hebei, Gansu, Shanxi, and Shaanxi provinces. The drought is extending beyond these generally drier areas, to the central provinces of Shandong, Jiangsu, Hubei, and Henan. Some 22 million hectares of farmland are dried out, and 13.8 million people and 10 million livestock do not have enough water to drink.

The State Flood-Control and Drought Prevention Headquarters in Beijing reported that there has been less than 10 mm of precipitation in the region since April, and strong winds have further dried out the soil.

Serious desertification of the lands to the west, has caused 12 dust and sandstorms already this year, some of which have struck the capital, Beijing, and as far south as Shangdong and Anhui. In Shanghai, rain has been muddy, due to the dust in the air.

All over northern China, rivers, lakes, and reservoirs are drying up. In the central provinces, among China's biggest grain producers, rain has been 30-85% below normal. Hebei Province, which surrounds Beijing, has had four consecutive

years of severe drought, and has a shortage of 800 million cubic meters of water. Now, 2.8 million hectares of cultivated land are endangered, and 380,000 head of livestock are thirsty.

Methods such as cloud-seeding are having some success in increasing rain, but cannot resolve the crisis.

Desertification

Worse, is the long-term problem of desertification. An article in *Comment Biweekly* news magazine in late April, reported on the spread of desert and sandy wasteland. Around 40% of China's total land mass of 9.6 million square kilometers is inhospitable, including deserts, mountains, and the very high-altitude internal plateaus. In addition, over 15% of the land area is affected by desertification, and this area is spreading by more than 2,000 square kilometers a year, according to the Chinese Academy of Forestry. Forest cover is very sparse in western China: only 0.35% in Qinghai Province, 0.79% in Xinjiang Uygur Autonomous Region, 1.54% in Ningxia, 4.33% in Gansu, and 5.84% in Tibet.

In the 1960s, northern China was hit by about eight sandstorms a year; in the 1990s, it became 20. Sandstorms are causing losses of over 50 billion yuan (\$6.5 billion) a year—three times the revenue of five northwestern provinces and regions in 1996.

China's western region has suffered severe soil erosion because of excessive logging and cultivation over the past decades, a central cause of the "century floods" on the Yangtze and other rivers in 1998. A Qinghai Province official, speaking in Beijing on May 10 at an international forum of Finance Ministry and international officials, stated that in 1988, the central government had ended a program that funded local governments in some western provinces and autonomous regions. This led local governments, in an effort to earn money, to allow uncontrolled cutting of forests. At the same time, most rural households are dependent upon wood and charcoal for cooking and heating. Some 30% of the wood thus used, came from over-logging the endangered forests.

China's central government is now planning to reverse this devastation. The State Forestry Administration will launch two strategic afforestation projects, one to protect natural forests at the upper reaches of the Yangtze and Yellow rivers, and the other to control expanding deserts. The Forestry Administration, supported by the State Development Planning Commission and Ministry of Finance, is also launching a program to "barter grain for trees and grass." Farmers on marginal land will get subsidies of between 1,500 and 2,250 kilograms of grain a year, for every hectare of forest and pasture returned to wood- or grassland. The subsidies are to continue as long as needed to prevent farmers from recultivating the land. The government will provide seedlings, but the farmers will retain all profits from the trees and grass. The project will be carried out on 340,000 hectares of cultivated land and 430,000 hectares of bare hill- and mountain-

side. It is feasible, because China has big grain stockpiles due to consecutive bumper harvests, and the farmers themselves could not get such a yield from these lands.

Over the next decade, according to Land and Resources Minister Tian Fengshan, 50 million hectares of land will be reconverted from farmland to forests and grassland.

Priority will be given to new methods in afforestation. China has planted over 30 billion trees in the past two decades, but now the attempt will be to achieve an 85-95% survival rate of the plants, rather than the current 50-75% rate. Drought-resistant trees, methods to increase water in the soil, weather modification, especially fostering artificial rainfall, and other methods will be applied. China is increasing cooperation with Israel, Australia, the United States, and Japan on such projects, including on upgrading saline soil, using special fertilizers. The Soil and Water Conservation Institute of the Chinese Academy of Sciences, also wants to put into use a new chemical material which can absorb and release large quantities of water, if the production costs can be lowered. An American invention, a water-retaining chemical called "Driwater," would also be of great use in these regions.

These methods produce results. It was recently reported, that large-scale afforestation and desert control over ten years has improved conditions in Tibet. In the western area, the temperature has gone up an average of 1-1.4°C, and annual rainfall increased by 20.1-47.6 mm over previous years.

Near Urumqi, the capital of Xinjiang, a lake, 10×3 km in size, has recently reappeared near the "Mountain of Flames" at Turpan Basin. This is 161 meters below sea-level, and one

of the driest areas in the world. The lake, which had dried up entirely ten years ago, after excessive exploitation of its water and a severe heat-wave, has been re-filled by underground water, whose source is the surrounding mountains. Water experts reported that 100 million cubic meters of underground water has been replenished in recent years, enhanced by the use of water-saving irrigation.

Underground water reserves of at least 1 billion cubic meters, have already been found under the Loess plateau and the Taklamakan Desert. Guidelines are being put forward, to ensure that the water is exploited in the most advanced way. Techniques have been developed to sink wells for karstic water deep under arid land, and current projects are pumping out 660,000 cubic meters of high-quality water daily.

One aspect of China's tree-planting, however, demonstrates just how enormous its development challenges are: Even while the government is putting forward a new energy strategy, at the same time, the country is to plant 12 million more hectares of trees to produce firewood and charcoal, to try to meet energy needs in rural areas. Charcoal forests were first planted in 1981, and after 20 years of intense cultivation, now cover 4.3 million hectares of land. China is launching construction projects for hydropower, thermal power stations, and oil and natural gas exploitation. Nuclear power is included, but at a much too limited rate: Current nuclear reactors provide only 1% of China's electricity supply, and it is projected that total capacity will reach 20 million kilowatts by 2010 and 40 million kilowatts by 2020. Nuclear would then provide 5% of China's power.

Limits to Development?

In the earlier years of the People's Republic, the western part of China was industrialized as rapidly as the coastal regions, due to such projects as Zhou Enlai's and Deng Xiaoping's "Third Line." After 1978, however, the focus became opening up the eastern coastal areas, leaving the interior for later development.

Now, the ever-greater relative backwardness of the interior, is making development there a critical issue. Yet, despite the fact that China now is, overall, in a much better economic situation than it was in 1978, the current international situation is posing extreme difficulties. The Asian financial debacle of 1997-98 wiped out several Asian economies almost overnight; Russia is in horrendous condition; and the vast U.S. speculative bubble is sucking out the financial blood of Europe and Japan. All this has hit China: Commodity prices collapsed, exports to Asia crashed, reform of the state industry stagnates, and plans for international projects, such as further construction of the Eurasian railroad, stopped. China's previously stagnating exports have risen sharply in the first months of this year, but government reports warn of the uncertainties of global markets.

These conditions, coupled with the growing emphasis on "market economy" methods in China, have produced a series

LaRouche: Defeat the Desert

From a speech by Lyndon LaRouche to Chinese scholars at a seminar in New York, in February 1998:

We need to make the Earth habitable for human beings, and for the kinds of production human beings require. . . . This requires a constant drive of improved technology. . . . Look at the condition of China. . . . The inner area, . . . where people live, but they're poorly developed. . . . Not enough land area [is] developed, so that you can have population growth. . . . You must open up the desert. You take the desert area, and you design a Silk Road. . . . Along the transportation route, you move gas pipelines, water pipelines, [nuclear] power stations, everything. Develop the land area on either side, 50, 100 kilometers either side of the rail line, and you conquer that amount of desert. . . . It's like a military flanking operation against the desert. We are now going to defeat the desert. It may take us 50 years, but we will defeat the desert.

of stark warnings from the central government, about the need for “self-reliance” in the impoverished western provinces and regions. An April 5 commentary in the *China Daily*, while likening the “excitement and high hopes” about this opening the west, to those of two decades ago, states that times and circumstances are different. The “possibility for the central authorities to offer the same assistance it did for the east, has been reduced. The western areas’ weak financial capabilities require the central government to invest large amounts to kick-start development projects. But the western regions will have to rely more upon themselves in order to avoid lagging further behind the coastal areas.”

A *People’s Daily* commentary of May 11 warned of regional officials who “would rather wait for the central government’s preferential policies in investment and loans, than take the initiative to develop their local economy. History has proved that a planned economy would not be good for the healthy development of the national economy, nor for the efficient distribution of resources and the enhancement of national strength. To better develop western regions, it is imperative that local governments do away with the planned economy mentality and embrace the idea of a market economy.”

What that means, the commentary continued, is that “western regions should realize that any kind of help from outside the regions, either in the form of policies or capital, will be quite limited. The central government has suffered financial deficits for consecutive years, and is running out of preferential policies.

“Major state banks, haunted by inadequate assets, are no longer capable of injecting enough capital into western regions in credit loans. Furthermore, as China’s accession to the World Trade Organization (WTO) approaches, all enterprises, both Chinese and foreign, will have to compete on an equal footing under the rules set by the WTO. Thus the local governments must abandon their illusions about helping hands and stick to self-reliance in the development of the local economy. . . .

“Since the mid-1980s, the country’s industry investment has come mainly from bank credit loans, whose relatively high interest rates have increased the financial burdens on enterprises, which in return heightens the bad loan risks of financial institutions.” Capital could come from “30-50 billion yuan (US\$3.6-\$6 billion) each year in treasury bonds,” *People’s Daily* noted, but, on the other hand, the “stock market is another place to amass . . . capital”—hardly a reliable source of the essential long-term, low-interest credit China’s interior requires.

While the *Peoples’ Daily* statement, that “the main source of capital will not come from foreign investors, but from within the country,” and the proposed incentives to encourage migration from eastern China, including a favorable land-use system, are both sound policies, still, forcing China’s national financial priorities into the mold of the free-market WTO,

will undermine western development.

Equally problematic, is the growing infection of China by the “new economy” insanity. China had been able to protect itself reasonably well from the dangers of “financial AIDS,” by maintaining strict currency controls and repeated lancing of various internal financial bubbles. Such basic defenses will be lost, if China goes ahead to comply with WTO rules.

On top of this, comes the invasion of the pernicious Internet “information economy” from the United States, into China. Such most-unfortunate statements, as those of President Clinton at the White House Clinton-Gore “Digital Divide Kick-Off” on April 4, are being widely echoed inside China. The U.S. President, yielding to the dangerous illusions of his administration’s “New Market Initiative,” claimed that “the computer and the Internet give us a chance to move more people out of poverty more quickly than at any time in all of human history”—this, at a time when U.S. Energy Secretary Bill Richardson has warned that the U.S. electricity power grid has collapsed to a “Third World” level. What such computer illusions mean for impoverished nations and people, was indicated by what Clinton said about India, whose 1 billion people have a per-capita income equivalent to \$450 a year. Clinton described seeing, in an Indian village, a mother who had just given birth, going to a computer to get a printout of “information just as good as she could get if her baby were born at the Georgetown Medical Center.”

What he failed to note, was that while the woman might be able to read competent instructions, no Internet could give her the clean water, adequate food, medicines, or basic sanitation essential to her baby’s survival. These are also the realities facing western China.

Internet “whiz-kids” are proliferating in China, wildly claiming that the “the new economy is an inevitable revolution, in which the value of information will supersede the value of industry eventually.” Even economists at the State Information Center are echoing this line, that “the world is now changing from an industrial era to an information era,” citing the views of the World Bank, that the gap between developed countries and developing countries is essentially one of *information*.

At the High-Tech Industries Week just concluded in Beijing, for example, deals were worked out for joint development of a “digital port” by Ningxia Autonomous Region and the U.S. state of Utah. Utah representatives boasted of the “booming of its three high-tech pillar industries—software, medical instruments, and biological engineering,” but not mentioning, apparently, that the financial bubbles in software and biotechnology are in imminent danger of bursting.

The Internet will not provide China with the water so essential to its national future. Detaching the “whiz-kids” from their computers, and sending them out to help design and build the “development corridors” of the Eurasian Land-Bridge, would create a genuine economic revolution for China, and its Eurasian neighbors.