

China's 'New Deal' Is The Engine of Asia's Growth

by Mary Burdman

The world's most populous nation has been unique in sustaining real economic growth since the pivotal year of 1998, when the world economy went into its tailspin. In the midst of today's far more tumultuous economic and political situation, China's ability to continue and deepen real economic growth—to bring all of its 1.3 billion people into a “well-off” economy in the next two decades—is a matter of international importance.

China and India, the other Asian giant with 1.02 billion people, and the nations of Southeast Asia, are the largest markets in the world for the advanced technologies which European nations and the United States should be exporting. China's interior regions: the huge areas stretching from northeast India along upper Bangladesh, Myanmar, Thailand, and Vietnam; and the vast, barely populated, but extremely resource-rich area from Siberia to Northeast Asia, all urgently require the most advanced transport and energy technologies, and an educated workforce, to bring them into the modern industrial era.

In November 2002, at the 16th Communist Party congress, now-retired President and party Secretary General Jiang Zemin, said that China will try to quadruple the size of its national economy of 2002, by 2020. This would make China a “well-off society,” he said, and that eventually, by 2050, China should become a modern nation. In March 2003, the National People's Congress elected a new President, Hu Jintao, and new Prime Minister, Wen Jiabao, who both reaffirmed this national policy.

It must be emphasized what an enormous challenge this is. China is still, in many ways, a developing sector economy; its population will rise to 1.6 billion people by 2050, and it must solve critical problems, including crippling shortages of water and energy, in order to develop. At the same time, as leading Chinese economists are well aware, the international financial system is “on fire” and will not survive, and the world economic situation is far “harsher” than it was during the 1997-99 Asian financial crisis.

At the same time, this transformation process is throwing into relief the challenges China faces. Of its 1.3 billion people, some 800 million still live in the rural economy. The long-term “fault line” of the Chinese nation, the division between the more advanced and externally oriented East Coast, and the vast interior, has yet to be overcome. Since 2001, the

problem of how China can bring its 800 million rural population into a modern, industrial, urbanized economy, has become a leading economic and political issue, and the top priority of the new government.

Nothing on this scale has been yet undertaken in world history. This enormous project must be done in cooperation with other nations of Europe and Asia. A similarly urgent and enormous transformation must be carried out in South Asia—where India, Pakistan, and Bangladesh have a combined population of over 1.2 billion people—and for Southeast Asia's 500 million, most of them terribly poor.

This economic transformation, is the main task before the nations of Eurasia. China has clearly taken the lead in it, and has done so, resisting globalization and tremendous pressures to float its currency and open its capital markets, by a policy of national investment in domestic infrastructure which can only be compared to the “New Deal” of President Franklin D. Roosevelt in the United States.

An Investment in Great Public Works

At the beginning of 1998, Beijing began taking extraordinary measures to avoid being destroyed by the disaster which was sweeping the rest of Asia. The government launched a national infrastructure-construction program, using the same basic principles as Roosevelt's famous New Deal, which saved the United States from disaster in the 1930s world Depression.

The measures are equally important for China. By them, it has maintained its “strategic defense”—especially strict controls on the national currency and financial system—and refused, under enormous pressure from the United States, to devalue the exchange rate of its currency, the renminbi. China was hit hard by the 1997-99 crisis. Its largest export markets, in Southeast Asia, collapsed, as the rest of its foreign trade and capital inflow contracted; internally, deflation became severe, and internal investment contracted sharply.

Beijing announced its “New Deal” policy at that capital of globalization, the Davos, Switzerland World Economic Forum, during the last week of January 1998. Vice Premier Li Lanqing laid out two fundamental measures against the collapse hitting Asia: He said that China would invest the equivalent of \$750 billion in infrastructure building over the three years 1998-2000; and he made clear the “impossibility”



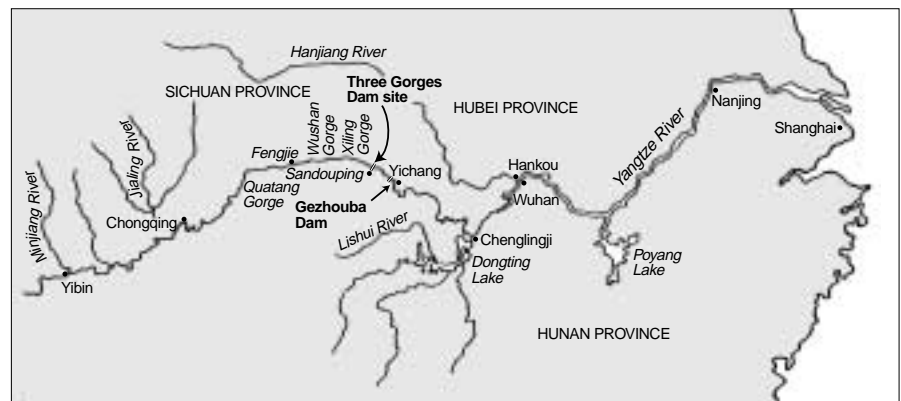
The Three Gorges Dam and surrounding transport infrastructure, shown by a table model a few years ago, is now near to coming on line as the world's largest hydroelectric project—though to be surpassed by another project in China's South within a decade. Three Gorges has been modelled on the Tennessee Valley Authority since TVA engineers did studies for it in the 1940s. It dams the Yangtze River at the site shown in Sichuan Province, creating a reservoir the length of the Grand Canyon of the Western United States.

tion policy had been accelerating since the early 1980s: It centered on building railroads; the world's largest water-management project, the Three Gorges Dam; and city building. But some of the effects of globalization, and—which is a far greater problem—a good deal of the thinking behind it, had penetrated national economic/financial policy.

After much discussion and debate in the last months of 1997, there was a marked change in the opening months of 1998. It should be noted that in September 1997, Schiller Institute Chairwoman Helga Zepp-LaRouche led a delegation to Beijing, where she warned leading institutes and economists, that the "Asia crisis" was rapidly going to become much worse, and that China must take steps to counter this disaster of globalization. Her warnings were fully confirmed soon thereafter.

China elected a new national government in March 1998, led by Prime Minister Zhu Rongji, which moved fast. The historically specific term, New Deal, was soon in use. Franklin D. Roosevelt has been held as a good friend of China since World War II. Kuomintang China and the United States were wartime allies; China's interest in the New Deal policies continued unabated after the 1949 revolution. Mao Zedong and Zhou Enlai, the leaders of the 1949 revolution, tried in early 1945, to get to Washington and meet Roosevelt, but FDR died before they could meet. Many times during the decades of

FIGURE 2



bitter American enmity towards China begun by FDR's unworthy successor Harry Truman, Chinese leaders called on the United States to return to the policies of Roosevelt. The Three Gorges Dam is only one example of a great infrastructure project directly modelled on projects built under the New Deal, or under the "American System" in general.

Last April, leaders of the State Development Planning Commission called the national investment in China's huge western interior, its "frontier development campaign." At this year's crucial meeting of the National People's Congress, officials announced at a March 8 press conference that China "will take the practices of the United States, Canada, Japan, and Italy as a reference" for its own western development program. "We'll draw on their successful experience to formulate policies geared to the actual conditions" of China,



The western Taklimakan Desert (left), the world's worst, is also the reserve base of oil supplies China is exploiting. But the growth of the western desert by "dust-bowl" erosion from low-technology farming, contributed to the devastating "century flood" of 1998. Battling desertification with projects like that at right, is a part of China's "New Deal" investment.

stated Li Zibin, deputy director of the national group for Development of the Western Regions. "To implement such a colossal program in such a colossal area in an orderly way is an incredible challenge."

Consistent 8% Growth Needed

The challenges to developing China's west—its need for railroads, its serious water shortages—are very similar to those which the United States faced in its western regions during the 19th Century. "We want to borrow their successful experiences—but not the unsuccessful ones," Li said.

Beijing began with a policy to increase government spending, to expand economic growth. Their concept was that government spending had to expand at *twice* the rate of the targeted economic growth. In March 1998, the official *China Daily* reported that "Zhu Rongji, the man who stemmed China's inflation without stifling growth, is poised to launch the Chinese version of Roosevelt's New Deal this year. . . . Zhu has made it clear that massive investment will be channeled into infrastructure, echoing Roosevelt's bid to revive the American economy in the 1930s. Dai Xianglong, Governor of the People's Bank of China and a close aide to Zhu, has announced that China could sustain growth in fixed asset investments of 15% this year, up to 3 trillion yuan [\$361 billion], if GDP maintains a growth rate of 8%." Growth of 8% was essential to generate new employment for the millions being laid off in the necessary reform of China's outdated state-owned industries.

Spending priorities were for railways, the steel industry, housing, highways, and water conservancy and management. "It may take a long time to recoup the investment in infrastructure," *China Daily* wrote, "but there is no need to worry about a bubble economy featuring repeated inputs in projects without sustainable profits." Building infrastructure promises huge long-term returns, and would avoid sharp fluctuations.

One key asset consisted of the three new development

banks, set up in January 1994: the State Bank, the Agricultural Bank, and the Export-Import Development Bank. These "state policy" banks are nothing new in China. In the early 20th Century, the Bank of China and Bank of Communications had been established under the Ministry of Finance of the Republic of China, to carry out government economic policy; much transformed, these same banks exist today. The leaders of today's People's Republic had learned another lesson from history: the Republic of China's policy of complete free-trade—dictated by the United States and Britain—along with the ravages of over 15 years of Japanese occupation, had plunged China into a post-World War II hyperinflation that did as much to defeat Chiang Kai-shek's rule, as the determined military campaigns of the Red Army.

In March 1998, Zhu Rongji announced that China would protect and develop itself, "By stimulating domestic demand . . . to increase the construction of infrastructure, such as railroads, highways, water conservancy works, urban facilities, environmental protection facilities, and so on; and to develop high and new technologies, and strengthen technical transformation of existing enterprises, in order to increase the demand of the national economy." Zhu also announced that China would be carrying out key reforms to change the current investment and funding system, to a "socialist market"—with, of course, "Chinese characteristics." This meant streamlining the vast national bureaucracy, which was sucking up funds urgently needed for economic construction, and hindering real progress. Finally, he said, Beijing's most important task will be "to vitalize China through science and technology."

'Century Flood' Marks a Turning Point

Despite the increase in government spending, by September 1998, Beijing was concerned that a slowdown in investment in the non-state sector, which accounts for 40% of total investment, could erode the achievements of the state sector. Therefore, Beijing decided to increase spending by issuing

FIGURE 3
Central Asia, Fulcrum of the 'Paris-Shanghai Railroad'



John Sigerson / EIRNS 2001

The first railroad across China's west was finished in 1999, to Kashi near the Kyrgyzstan border, and will eventually be the first spur of the "Shanghai to Paris railroad" of the Eurasian Land-Bridge, via Kyrgyzstan and Uzbekistan.

special treasury bonds, worth 100 billion yuan (\$12 billion), to prompt banks, local governments, and enterprises to spend another 250 billion yuan in the projects. This would generate another 1% in economic growth, the State Development Planning Commission proposed.

At the same time, controls on currency movements, prices, and foreign exchange were increased. In August 1998, People's Bank of China Deputy Governor Liu Minking announced in Beijing, that China would absolutely not devalue its currency. "I would like to tell speculators," he said, "that China is a big player, and they had best not miscalculate"—a warning which has held true to this day.

At this point, the Chinese government also welcomed the call by U.S. President Bill Clinton, for an emergency international meeting on the world financial crisis, during a speech at the New York Council on Foreign Relations on Sept. 14. Clinton met visiting Chinese Foreign Minister Tang Jiaxuan soon thereafter, and Clinton "pledged to continue to work with China in stabilizing the world economic situation," and expressed support for China's strong stand on protecting its currency. His speech was praised in the Chinese national press. Under massive political/impeachment attack, however, Clinton backed away from his initiative, and nothing was done on the international level to turn the crisis around.

China, however, persevered. The terrible "century floods" which spread devastation in central and north China in Summer 1998, were turned into a rallying point for reconstruction, to renew and expand agriculture, housing, industry, and infrastructure in the affected areas. The state-owned commercial banks were instructed to issue 1 trillion yuan worth of low-

interest loans to flood victims. Longer-term construction of new dikes and other flood-control measures were also undertaken.

As the floods reached the highest levels, the government announced new, large-scale infrastructure projects for the entire country. These included plans to link the national power grids by 2020, and new hydropower projects. (China has so far exploited less than 20% of its potential hydropower.) Nine new railroads were to be constructed over five years, with an investment, at about 350 billion yuan, more than double the spending of the previous five years. Most important by far, was the announcement that construction of a railroad to Tibet, the first in history, would be launched in the coming years.

Develop the West

While the nations of Asia were getting more and more enmeshed in exporting components to the huge, U.S.-centered "New Economy" bubble, China decided upon a second, even greater strategic shift, intended to move China away from reliance on exports to external markets to spur growth, and toward reliance on its "strategic depth"—its vast population and huge hinterland, reaching to Russia, Central Asia, and South and Southeast Asia. This shift could finally resolve the "fault line" economic division of the Chinese nation.

The change was a very rough one. The New Economy bubble began to dissolve internationally in 2000; by 2001, it was imploding—including, on a smaller scale, inside China. Beginning in the early 1980s, until 2000-2001, the external dependence of China's economy grew to over 40%, but the U.S.-Japan-Western Europe "trilateral depression" is chang-

ing this. China, earlier the biggest recipient of foreign investment in the developing sector, had lost out: Its main investment flows, from Hong Kong and Taiwan, were hard hit by the general crisis, and everything else had been flowing into the huge U.S.-centered bubble. Export growth, which had risen over 25% in 2000, dropped sharply in 2001, especially after the Sept. 11 attacks in the United States. By November, the yearly Beijing Economic Work Conference was warning of the worst world economic crisis in 20 years.

The policy shift which emerged, the next important phase for the New Deal, was the “Develop the West” program, launched in 1999 and a pillar of the 10th Five-Year Plan (2001-2005).

Developing the west is a truly “pioneering” effort to open up China’s huge interior, and its borders with Central Asia and India, for the first time. The geographic challenges alone are staggering: the world’s highest and most extensive mountain ranges, its harshest desert—the Taklimakan—enormous distances, and a great need for much more water.

The economy of the western regions was only about 40% of that in the east coast provinces overall. To even begin real development, it was necessary to start with basic infrastructure, and essential reforestation and other measures against desertification. Impoverished farmers trying to grow crops on unsuitable land had created a “dust bowl” in western China, far larger than that in the United States in the 1930s. Stripping of forests and grass cover, led to the disastrous 1998 floods.

The first railroad to Kashi, the western terminus in Xinjiang, was finished in 1999, and will eventually be the first spur of the “Shanghai to Paris railroad,” via Kyrgyzstan and Uzbekistan. Other pioneering projects will follow.

China also boosted its side of initiatives towards its neighbors to the south in 1999. The “Kunming initiative,” a regional forum including southwest China, Southeast Asian nations, and Bangladesh and India, was launched, and construction of a “passage to the sea,” from Yunnan province via the Mekong River, begun in earnest.

In early 2000, Beijing announced it would be directing 70% of its treasury bonds, and government and foreign funds, towards the western regions. The emphasis in railroad construction would be on the interior, in two phases. Until 2010, building would focus on a basic rail network inside China; afterwards, on building international connections. Only one such link, the Euro-Asian Continental Bridge to Kazakstan, yet exists from western China! There is no other rail connection all along the border, until one reaches the antiquated rail links to Vietnam.

By 2001, infrastructure investment in the interior was up by 25%, much higher than the rate in China as a whole. With most of the long-term treasury bonds already being used in the western regions, by late 2002 about 260 billion yuan (\$31.3 billion) had been spent on projects in the region.

Officials of the Chinese People’s Consultative Conference (CPPCC) have called for creation of a state policy “Western Development Bank”: It would make loans to a proposed

Energy Construction Corp., a Water Resources Development Corp., and a Highway Construction Corp.

How Pro-Active Construction Policy Works

The process of issuance of treasury bonds for the New Deal began with 100 billion yuan (\$12.1 billion) worth of these special bonds in 1998; this was increased, to 110 billion yuan in 1999; and has been 150 billion yuan a year since. This March, Beijing announced it would issue an additional 140 billion yuan in special bonds for 2003.

In 2001, Beijing upgraded the “pro-active” policy. The 150 billion yuan in new bonds were combined with 50 billion yuan not utilized during 2000, to create a fund of 200 billion (\$24 billion)—almost twice the previous yearly amount. In addition, there were 50 billion yuan in special bonds for western China.

It was clear to Beijing—and publicly stated—that the “trilateral depression” was going to be much worse than the Asian and Russian crises of 1998. At the beginning of 2001, China declared its “pro-active investment” program to be the foundation for the 10th Five Year Plan, 2001-2005. The national discussion around this Five Year Plan, was on how to move beyond “infrastructure investment” to an effort that would transform the overall economy, using key projects which would “change the economic face” of China.

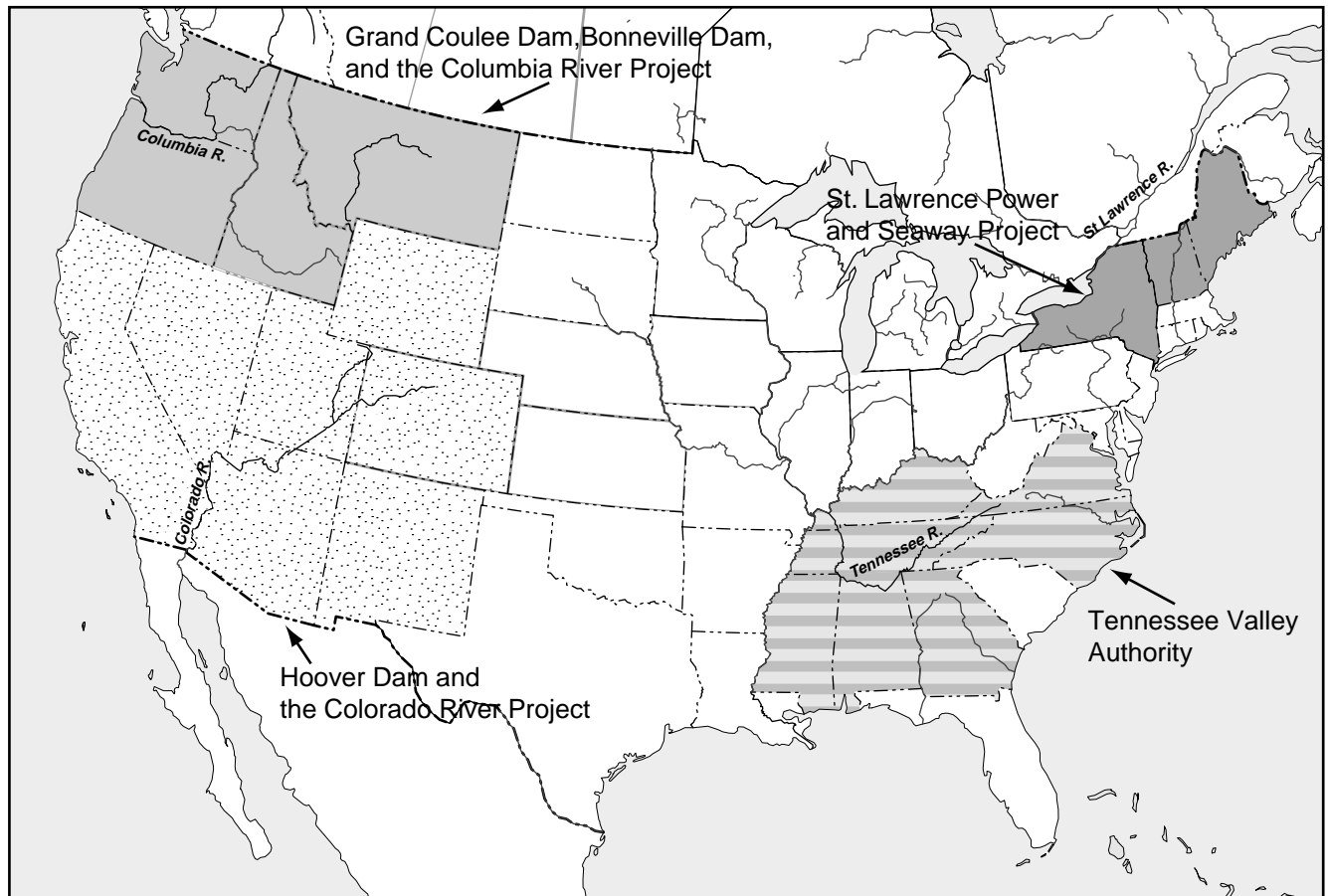
In March 2001, the government issued policy papers for the yearly meeting of the national congresses—the National People’s Congress (NPC) and CPPCC—to outline the 10th Five Year Plan. These papers called for a “new round of strategically important economic restructuring” of industry and agriculture, overcoming the east-west regional and urban-rural divisions. Solving these problems would take 50 years or more.

Expanding domestic demand was designated a “long-term principle” of strategic importance for China, because this would give the country greater freedom to “maneuver” and increase its ability to resist international economic risks. As 2002 began, the Chinese government decided to accelerate national investment, and the flow of funds to the investment market was sped up. The core projects of this new level of economic development, are designed to “re-draw China’s economic map.”

During the five years from 1998-2002, the national government had issued 660 billion yuan (\$80 billion) worth of treasury bonds, used to finance almost 10,000 projects. These projects were critical for stimulating the domestic economy, the core of the Chinese development policy. But, the government funds also played the key role, of encouraging local governments, and other national agencies, as well as private enterprises, to themselves invest in infrastructure projects. Thus, an additional 3.2 trillion yuan (\$385.5 billion) was generated for the New Deal program over those five years. Thus the total public and private *directed investment credit and spending* in national infrastructure projects, approached \$100 billion a year during that five-year period.

FIGURE 4

Roosevelt's 'Four Quarters' Development Projects



Source: EIRNS

The “Four Quarters” of Franklin Roosevelt’s New Deal, so described by him in a September 1932 campaign speech, were four extraordinary great projects by which to reshape American productivity and beat the Depression: the Bonneville Dam, Hoover Dam, Tennessee Valley Authority, and St. Lawrence Seaway project.

This positive fiscal policy has been pulling economic growth forward. Official estimates put the increase in domestic growth, due to the treasury bond investments, at an additional 1.5% in 1998; 2% in 1999; 1.7% in 2000; and an additional 1.8% in 2001.

It is notable that China became, in 2002, the single largest national recipient of foreign investment, for the first time surpassing the United States.

Shift to Domestic Demand

The “trilateral depression” of 2001 exposed the weakness of China’s strategy of relying upon selling low-cost exports to the United States and other markets. The super-fast rate of growth of Chinese exports collapsed. In 2001, net exports went down by about 30%. By 2002, it was projected by the Trade Ministry, that export growth overall would be 0%.

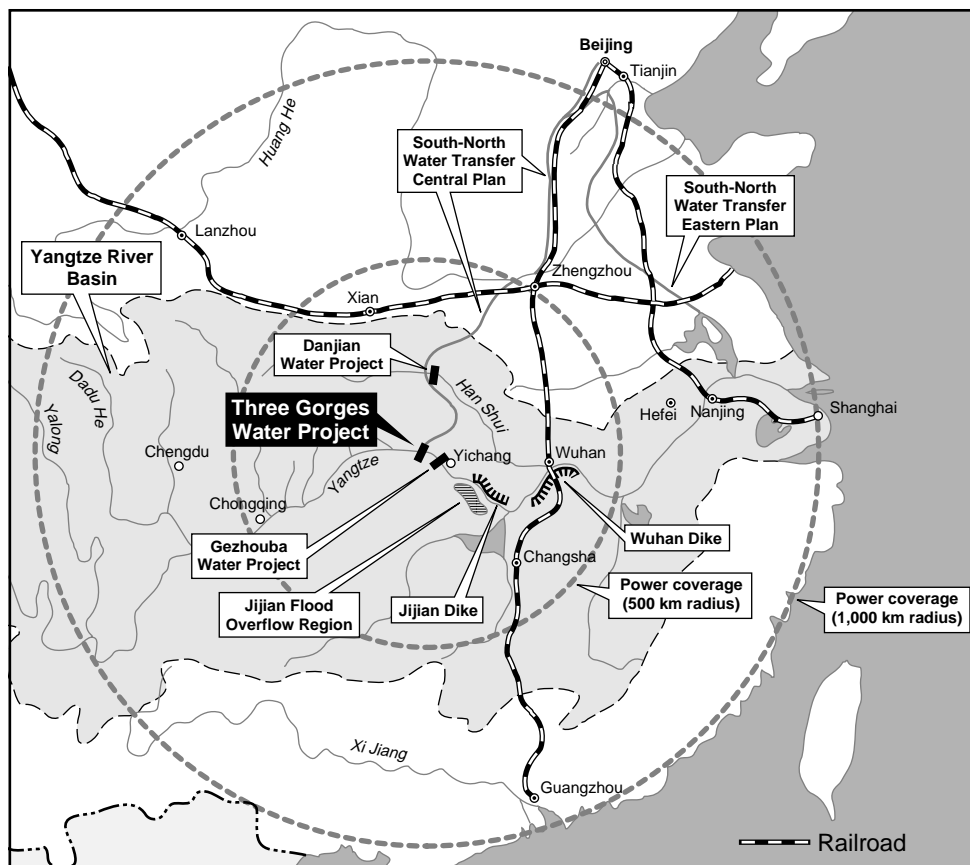
However, a particular shift was developing—the rising integration of Asia and Eurasia. In April 2002, while warning of the “unpredictability” of the world economy, Vice Minister of Trade Zhou Keren noted that Chinese exports to Russia, India, and Central and Eastern Europe could rise fairly rapidly, on a potentially large scale.

The treasury bonds issued from 1998-2001 were relatively short-term, with low interest rates: two- to five-year fixed-rate bonds with annual interest rates of 2.3% to 2.8%. Some bonds with up to ten-year maturities were also issued. These rates were set *lower* than those on savings accounts, for the first time since 1949.

Financial officials made clear at the time that expanding the debt was not a real problem. China’s deficit had for years been extremely low—just 1.5% of GDP in 1998. While the “international standard” for outstanding debt to GDP is

FIGURE 5

How the Three Gorges Dam Works With China's Water and Rail, and Power Infrastructure



China's "New Deal" was also described by its government, in March 2001, in terms of "Four Great Projects" to reshape the nation's productive economy, which are only suggested here. They are moving "South Water North," a new West-to-East natural gas pipeline, the West-to-East power transmission grid, and the ongoing great national railroad construction, featuring the new Tibet Railroad (see Figure 7).

60%, China's bond issues put debt at less than 30% of GDP by 2001; and, since most public debt is domestic, there is little threat to China's huge foreign exchange reserves—now at \$286.4 billion, a 35% increase from the end-2001 level.

China's four large state banks have a very high proportion of bad loans, over 25%, but this domestic debt can be dealt with by rapid, real economic expansion.

In 2002, for the first time, the national government began issuing longer-term (15- to 20-year) treasury bonds. These are for smaller amounts: 12 and 16 billion yuan, but the important difference is, that the Chinese national financial system had achieved enough stability, that it could sustain long-term bonds. Interest rates have been steadily lowered by the People's Bank of China since 1996, and are now at the lowest level since 1978, when the economic reform and opening policy began.

The investment potential is tremendous, since domestic bank deposits, mostly individual savings, are over 10 trillion yuan (\$1.2 trillion)—almost the equivalent of the annual GDP—as of February 2003. The key problem has been, precisely, developing mechanisms for "directing" these funds to

safe, productive investments.

In January 2002, Zeng Peiyan, then Minister of the State Development Planning Commission, announced at a Beijing meeting, "Ten years from now, projects financed by the T-bond issuance will become the country's treasure." He reported that national fiscal revenue in 2001 was more than 20% higher than that of 2000, and the profits of the state-owned enterprises were much better, the result of the national investment policy. Furthermore, China would develop expand the "channels to gather investment," by encouraging non-government investors. The national government would begin to establish a price and taxation system, to "guide" non-governmental investment into these fields. As a supplement, those managing specific projects, are to be allowed to seek "soft loans" from other countries, and private investment will be allowed in urban public facilities.

Beijing Exhibition

The great economic benefits of the New Deal policies was shown in the "Picture Exhibit of Treasury Bond Projects," which opened in Beijing on Dec. 1, 2002. The exhibi-

tion was sponsored by the State Development Planning Commission, State Economic and Trade Commission, and other organizations. Zeng Peiyan opened the exhibit by reporting, "This investment played a vital role in boosting economic growth, improving the economic structure, increasing employment, improving people's living standards and enhancing the quality of bank assets." The projects funded include construction—especially in the western regions—technological transformation of key enterprises, water management and flood control, and national highway construction. By 2002, rural electricity prices have been lowered, thanks to upgrades in the overall system, which increased the market for electric machinery and appliances in the countryside.

Other benefits were even more important. China has heavily invested in water management since 1998, directing fully 20% of the state treasury bonds to this sector. Funds were used for building embankments, improving old dams and irrigation systems, and making drinkable water available to more people. A special investment fund of 30 billion yuan (\$3.5 billion) was used to reinforce the dikes along 3,500 kilometers of the Yangtze River, using new technologies and materials. The benefits were enormous: During the terrible 1998 "century flood," sections of the outdated dikes had broken, with the loss of many lives and some 30 billion yuan in damages. Flooding almost as serious returned during the Summer of 2002, but this time, the embankments held, and damage was minimal.

The huge Three Gorges Dam was also able to withstand the 2002 floods. "Having been severely tested by the floods—the most authoritative quality controller—the completed sections of the dam have made people rest assured," said the Austrian engineer who is the project's general supervisor of engineering, in August 2002. The dam, then about 70% complete, is designed to withstand the heaviest flood in a period of 10,000 years. The cofferdams, built when the main stream of the Yangtze was blocked in November 1997, had been taken down to test the dam's soundness.

Four Great Projects

The physical economic effects of this investment policy, were described in the March 2001 government policy paper, published in the *People's Daily*, calling for using "Four Great Projects" to "Re-Draw China's Economic Division Map." The new infrastructure will make possible, "an unprecedented mammoth transfer of resources, [which] will mean the re-drawing of China's economic division map." The four great projects are: the "Move South Water North" water diversion system, launched in late 2002; the West-to-East pipeline to bring natural gas to the east coast; the West-to-East power transmission grid; and the Qinghai-Tibet Railway "to the roof of the world," which was begun in June 2001.

The "South-to-North" Water Diversion project, will achieve "strategic restructuring" of water resources, perhaps

the single most important problem for the Chinese economy. More than the size of its large population, the lack of sufficient water, especially in the North, is the biggest for economic development in China.

Western China also has relatively good petroleum and natural gas reserves, which are urgently needed on the east coast. China has not been able to build up a strategic oil reserve, and since the 1980s, has become increasingly dependent upon imported oil. It now imports 65-70 million tons a year, one-third of its consumption, and 56% of that is from the Middle East, a very serious vulnerability. The country is now expanding new sources of oil: exploiting offshore petroleum in the South China Sea, which also demands cooperative relationships with the nations of Southeast Asia; and encouraging construction of new pipelines from Russia's Siberia to Northeast Asia, including Korea and Japan, and from Kazakhstan and other Central Asian nations. Internally, China has opened a new oil pipeline, 1,250 km long, from Gansu province in the northwest, to Sichuan province, the gateway to western China. A second pipeline, from Xinjiang to Gansu, is now being built.

Natural gas is also being developed as an energy source. The 4,200 km west-to-east gas pipeline, begun in 2002 and scheduled to be completed in 2005, will connect Xinjiang to energy- and resource-poor Shanghai and the Yangtze Delta. Investment in this project, which is a joint venture with Royal Dutch Shell, ranks second only to the Three Gorges Dam. There are deposits of 22,400 billion cubic meters of natural gas in Xinjiang.

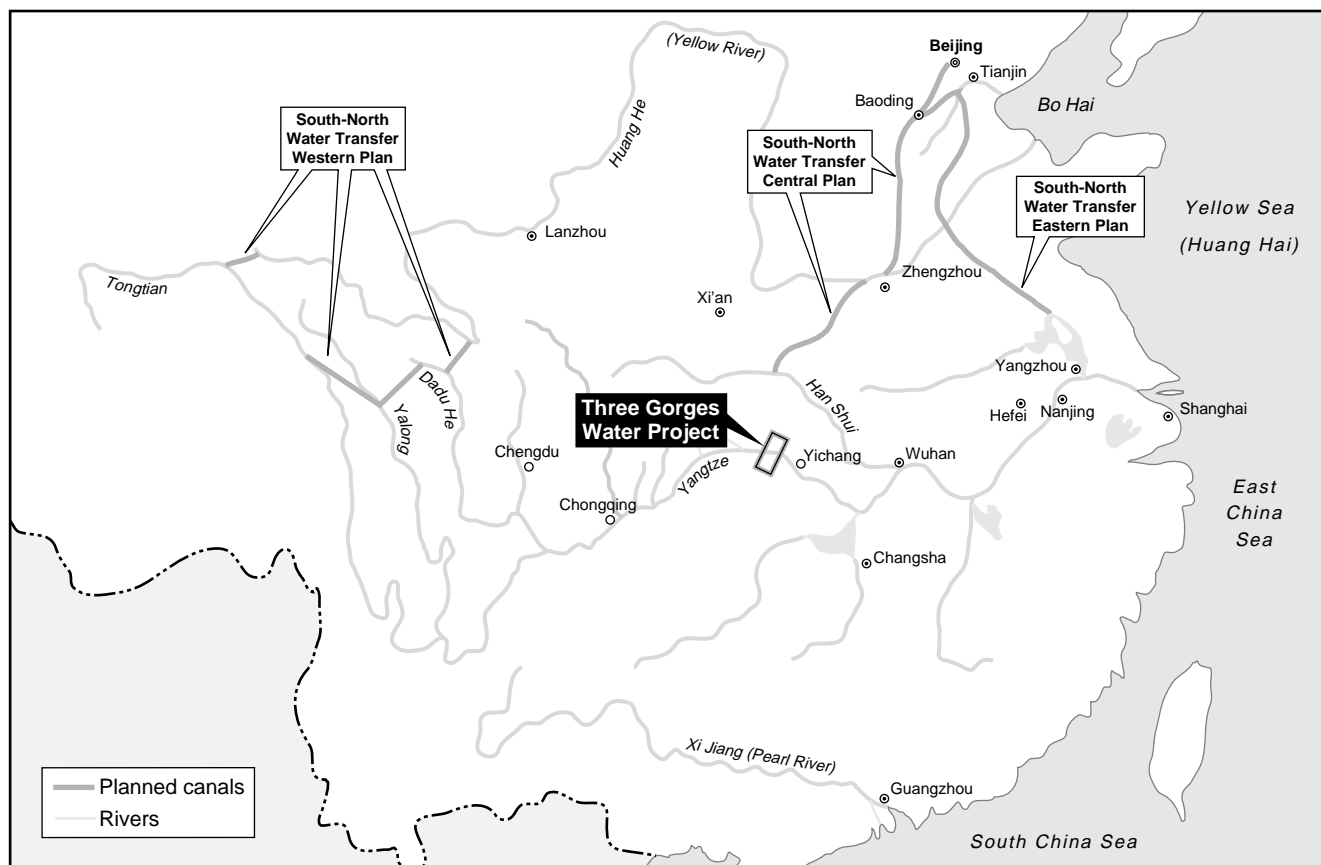
The second part of the project is the west-to-east power transmission grid, called an "indicative project" for the interior regions. The program is to exploit hydropower potential—China has the largest in the world, theoretically 676 million kilowatts!—only 20% of which is currently being utilized. Second, is exploitation of coal, with 60% of China's reserves in its northwestern provinces.

The overall plan includes three main power transmission grids:

- Northern: from the coal resources bases in Shanxi, Shaanxi, and Inner Mongolia, and hydropower sources on the upper Yellow River, to Beijing-Tianjin and Shandong.
- Central: from the Three Gorges Dam, Jinsha River projects, and Sichuan hydropower projects, to the Yangtze Delta and Shanghai. The central China electricity grid was already connected to Shanghai in 1989, but it will become a massive energy transmitter, when hydropower projects on the mighty Yangtze and its tributaries, are finished in the coming years. The first turbines in the Three Gorges project are scheduled will begin generating power in late 2003; the entire project should be completed in 2009, at a cost of at least 73 billion yuan. On Feb. 12, the Three Gorges Project Development Corp. announced that four dams would be built on southwest China's Jinsha River, the biggest tributary of the Yangtze. These hydropower plants combined, will ultimately deliver

FIGURE 6

China's Great Water Management Projects



The full nationwide scope of the water-transfer “Great Project” known as “Move South Water North,” to which the Three Gorges Dam and hydroelectric project contributes. The North and West of the country are dry; the southern half of China has overabundant river flows and flooding. Completion of the grid is intended by 2010. (See EIR, Dec. 20, 2002 for full report.)

38.5 million kilowatts of power, *twice* the installed generating capacity of the Three Gorges project itself! The first of these four new plants, the Xiluodu, will begin operation by 2014, and should be completed by 2017. Eight more hydropower plants are planned on the Yangtze River system.

Obviously, this central section will be by far the largest part of the west-to-east power transmission grid. The four Jinsha River plants will eventually deliver as much power as 35 large European nuclear plants.

- Southern: will build hydropower plants on the Wujian and Lancang (upper Mekong) and other rivers in Yunnan, Guizhou, and Guangxi provinces, to coastal Guangdong province.

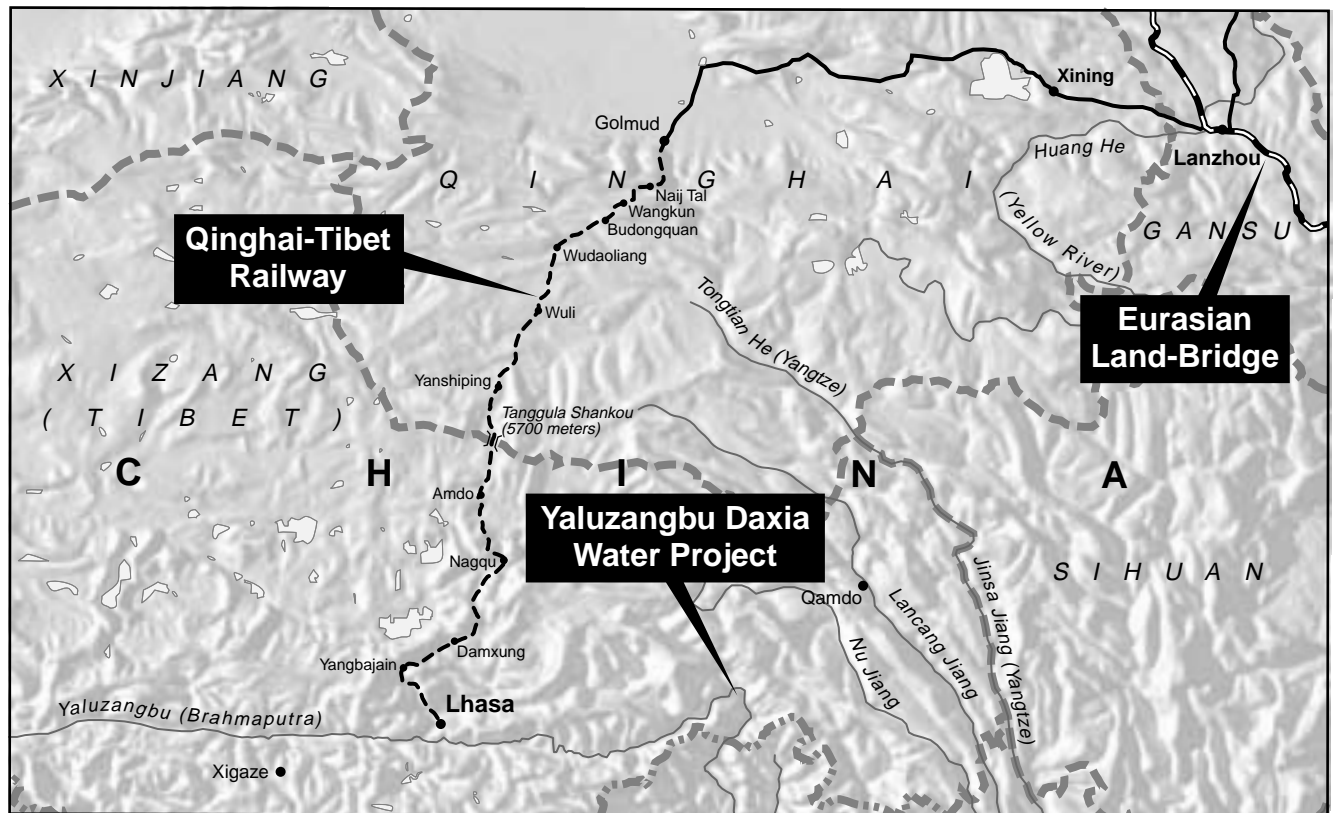
These projects are designed to make the western region “a powerful energy base” for the industrialized east. Transmission of electricity from these interior areas, will be much less expensive than the current costly system of transporting coal or petroleum by rail, from the interior to coastal areas of

China. In addition, air pollution will be greatly reduced in the industrial cities of Shanghai and Guangdong.

Ultimately, however, the only real answer for China, as for the rest of Asia, is development of nuclear energy—the only energy source which makes long-distance international or inter-regional transmission unnecessary. China already has seven nuclear power stations operating, all on the east coast, and another four nuclear generating units are under construction, to go online in 2005. These have pressurized water reactors, needing spare parts produced in cooperation with overseas producers, which makes production costs more expensive than thermal and hydro-electric power. The official goal is to generate 3%-4% of energy from nuclear plants by 2005. An important development was the announcement March 2, that China’s first high-temperature gas-cooled reactor had gone fully online, at the Nuclear Energy Technology Institute of Tsinghua University, outside Beijing. This highly efficient and safe form of nuclear power, which originated in

FIGURE 7

Rail and Water Projects in Tibet



The Tibet Railway, the most challenging to build in the world because of its elevations and severe cold, leaves the Central Eurasian Land-Bridge route at Lanzhou and will be built to Lhasa. India's rail system, up to now, has no connection to the rest of Eurasia! China's Southern hydroelectric projects at Yaluzangbu Daxia and on the Jinsa River are aimed, by 2020, to provide twice the electric power as the Three Gorges Dam itself. Development of the mighty Mekong River, with the ASEAN countries, is also being planned (Figure 8).

Germany, has enormous potential for China, including for desalinization of sea water.

Railroad to the Roof of the World

The fourth great project is the 1,180 km-long Qinghai-Tibet railway. This will be the highest-altitude railroad ever built, and will make the Chinese system the biggest "cross character" rail network in the world (an image from Chinese written characters).

In 1949, there were almost no railroads west of the north-south Beijing-Guangzhou (Canton) Railway. During the Ninth Five Year Plan, (1996-2000) a new, modern rail line was built from Beijing to Kowloon, outside Hong Kong. This "bold vertical north-south stroke" will now be "crossed" by the Qinghai-Tibet Railway, and it will branch south and west from the Lianyungang-Lanzhou Railway, which is the Chinese link to Kazakstan, the "Euro-Asian Continental Bridge."

A rail line already runs from Lanzhou, on the "Continental Bridge," to Golmud, the transport hub of Qinghai province.

From there, the railroad will be built to Wangkun, across the Tanggula Mountain and into Tibet, and via Amdo, Nagqu and Damxung areas, to Lhasa, the Tibetan capital. Eventually, it will be extended west to Shigatze, Tibet's second-largest city on the Yarlung Zangbo-Brahmaputra, and then to Linzhi prefecture, which lies the north of India's Arunachal Pradesh state.

Remarkable engineering has gone into the rail project, taking six years to complete and costing 26.2 billion yuan. More than 960 km, or over 80% of the railway, will be built at an altitude higher than 4,000 meters; its highest point will be 5,072 meters above sea level. Workers need special equipment to work in the low temperatures and low-oxygen climate; even the concrete mixers have to be specially heated. More than 632 km of track will be laid on permanently frozen ground. Cold, oxygen-poor atmosphere, frequent earthquakes and landslides, and extreme and volatile weather, are constant problems.

The Qinghai-Tibet railroad is an experiment in new mate-

FIGURE 8

Proposed 'Mekong Cascade' System of Dams and Reservoirs



rials and technologies. Chinese engineers are consulting with rail experts from Russia and Canada, who have dealt with frozen-soil engineering; advanced and new technologies from both countries, including magnetic materials, are being used in construction. The frozen earth will be protected by special insulation materials laid on the rail bed.

This area is also the most important watershed of all Asia: The Tibetan plateau is the source of the greatest Asian rivers, including the Yangtze and Yellow Rivers in China; the Indus, which flows through Pakistan, the Zangbo-Brahmaputra which flows into India and Bangladesh; the Salween and Irrawaddy, which flow through Myanmar; and the great Mekong, which flows from China through Myanmar, Thailand, Cambodia, Laos, and Vietnam. Preservation of the lakes and wetlands in these rivers' headwaters, is essential.

The rail line is of great international importance. First, it could potentially be linked to India—which still has no international rail connections to the rest of Eurasia! South Asia's rail lines do not extend beyond Pakistan and Bangladesh. Geographically, the approach to Tibet from the Indian side, although formidable, is easier than that across China. Historically, the main access to Tibet went from Darjeeling

in northeast India, to Shigatze and Lhasa. Once the railroad is built to Lhasa and Shigatze, a connection from China into India, could be built relatively rapidly, and would be an enormous achievement in uniting Eurasia.

Secondly, it is planned that the Qinghai-Tibet Railroad will be eventually extended to Yunnan Province in southwest China, the gateway to Southeast Asia. Again, geographically, the route through what is now Myanmar was historically the main route into southwest China from Southeast Asia. The famous "Burma Road" built on this route during World War II, is only one example.

There is enormous potential of the region that could be realized with the great Mekong Valley Project and the Pan-Asian Railroad project.

Industry and Urbanization

China must make great strides, in both industrial capability, and bringing its population into modern cities, if it wants to reach its development goals. Its current production is comparatively *more* expensive than the world average, according to the February 2002 "Report on China's Strategy for Sustainable Development," by the Chinese Academy of Sciences. This is another proof that China is, despite certain propaganda, still a developing sector nation, the report stated. Production costs in China overall are 20% higher than in other nations, due to the economic backwardness. The added "development cost" is what the government must now spend, in capital and infrastructure construction, to bring about the current economic growth.

Such vital sectors as mining have been allowed to become impoverished. Lack of investment, including in prospecting, left China facing the possible depletion of many vital mineral resources. This, despite the fact that mining provides 80% and 93% of raw materials and energy. Lack of investment has also meant that the country's 21 million miners have become a low-income group. Fatal accidents occur regularly.

China will need at least another 20 years to become an industrialized nation, and another 30-40 years, to become a fully modern country, said Xu Kungdi, President of China's Academy of Engineering, in October 2002. While it has achieved the building of an independent national industrial system, it is still "far behind" the advanced sector in most engineering science and technology fields. The country is already a leading industrial producer, and in 1999, was a top world producer of steel, cement, coal, chemical fertilizer, and televisions, but it must focus on developing basic science and engineering.

China also urgently needs machinery and machine tools. In 2000, it was announced that the construction machinery market would become the world's biggest within the next decade. "Tens of billions of yuan" would have to be poured



A nuclear power plant in Guangdong (left). Despite the abundance of hydroelectric potential in Southeast Asia, serious economic development depends on nuclear power. China operates what is currently the world's only Modular High-Temperature Gas-Cooled Reactor, at Tsinghua.

into the building equipment industry, a Trade Commission official said. China was already supplying 60% of its own needs, but it was also importing \$1 billion worth of machinery a year, as of 1995. By early 2003, China had become the world's largest consumer of machine tools, worth some \$5.5 billion—half of that imported—due to its infrastructure investment, as the China Machine Tools Association announced in March. In two years, machine tools purchases were projected to be worth \$7 billion—again, half of that imported.

The urgency of making China into a modern urban nation was brought out in the “China Urban Development Report 2001-2002,” a strategy for the next 50 years, commissioned by the Association of Chinese Mayors. Only by urbanizing, can China sustain its industrial and overall economic growth. The report foresees accomplishing this by the planned and workable creation of “super-cities”: clusters of large, medium-sized, and small cities forming “a virtuous circle for the exchange of goods, information, capital, personnel, and technology.” The process would start with better management of the three “super-cities” along the east coast: the Beijing-Tianjin corridor, the Changjiang (Yangtze River) Delta, and the Pearl River Delta. The report also discusses the creation of “economic belts” in the interior, and development of key cities in the central and western regions.

Eventually, these areas will be inhabited by more than 50% of the population, which will peak at 1.6 billion by 2050. The urban areas will produce 90% of China's industrial out-

put, account for 95% of total trade, and produce 80% of overall GDP.

Prof. Niu Wenyuan of the Academy of Sciences, chief author of the report, said that China needs a new strategy for urbanization. Urbanization has been much too slow so far; it is now around 37%, compared with 75% or higher in the wealthier countries. China will need to transform 500-600 million peasants into economically active city-dwellers, Niu wrote. However, at the same time, it must not repeat the mistakes of other developing countries, where overly huge, but impoverished “mega-cities”—such as Mexico City, Manila, and Jakarta—have grown up. Populations of poor rural areas must be moved into urbanization in a rational way, so that eventually only 20% of the population remains in agriculture. To achieve 75% urbanization by 2050, China will need to relocate 10-12 million peasants each year, at the cost of 350 billion yuan a year, 4% of the 2000 GDP.

Another Academician, He Zuoxiu, emphasized that China should *not* continue to promote automobile use, as has been done in Beijing. A crucial component of these rational great city-systems, must be efficient transportation. Shanghai wants to become the first city in the world to have such a system, and has already started using the world's first magnetic levitation train technology, between downtown and the airport. The Shanghai plan is to create a super-city, by linking 15 cities in its 300 km radius, via a high-speed rail system.

Prof. Zhu Dajian of the Urban Development and Management Institute at Shanghai's Tongji University, has called a

“super-city” around Shanghai “the common aspiration of the people. But, if there is no ideal mode of high-speed transport to support it, then one-hour commutes within the mega-city cannot be realized.”

The first proposed line would connect Shanghai to Hangzhou, capital of Zhejiang province, 201 km away. Nanjing is 303 km away, and a maglev train could reach it in one hour. Prof. Yan Luguang of the Chinese Academy of Science, called the maglev simply the best option for China, because it is the fastest, and would only cost 20%-30% more than current high-speed trains.

Biggest Challenge: Developing the Population

China’s most urgent problem, is bridging the economic gulf between city and countryside, and between those increasingly well-off, and those who are becoming poorer. Despite China’s enormous, perhaps unprecedented, achievement of bringing 220 million people out of dire poverty in the past 25 years, the fundamental problem remains.

China was, during the first half of the last century, terribly poor: Famines were frequent; in most of China, there were no roads, and towns and villages were connected only by footpaths. Despite some real efforts at industrialization in the first decades since 1949, severe poverty was rampant, until the “reform and opening up” policy was initiated by national leader Deng Xiaoping, in 1978. In that year, there were 250 million extremely poor people in China. For these millions, per-capita income was below the 200 yuan a year (\$80) necessary for basic subsistence, and people lacked even sufficient food and clothing. Deng Xiaoping’s rural reform, abolishing the communes and re-establishing family farming, was the most important step in reducing mass poverty. Productivity shot up, and China can now more than feed and clothe itself.

From the mid-1980s, severe poverty has been cut by half. Organized efforts, focussed on the most backward areas, were begun. By late 1993, the number of rural poor—with an income less than 625 yuan (\$80) a year, the equivalent of 200 yuan in the 1980s—was reduced to 80 million, and in 2001, to 30 million, or 3% of the population. Yet the problem remains huge. In addition to those still living below the poverty line, China has another 60 million people whose annual income is less than 865 yuan (\$104). This is 10% of the rural population. In the cities, where the poverty line is an annual household income of 3,000 yuan, there are still over 45 million households, 10% of the population, living at this level or below.

At the beginning of the 1990s, over 22% of the adult population was illiterate; now, it is less than 9%. But, of the world’s 800 million illiterates, China has the second-highest number, after India. The vast majority live in the countryside, and 70% are women. The worst problem is, according to government reports, that illiteracy is *increasing* with the growing population, by about 500,000 people a year. In 200 counties in China, there is still no universal primary education, and the sharp rise in the “migrant” population, from

countryside to cities, is giving rise to more and more children who are not getting any education.

There has been a real rise in living standards. By official figures, by early 2003, disposable per-capita income for the urban population was 8,000 yuan (\$964), up from 5,160 yuan in 1997. For the rural population, it was 2,400 yuan (\$290) in 2002, up from 2,090 yuan in 1997. The Chinese Academy of Social Sciences (CASS), early this year, however, put average incomes considerably lower: urban income at 5,700 yuan and rural income at just 1,720 yuan.

Personal bank deposits are worth about 10 trillion yuan, the equivalent of \$1.2 trillion, which is double the amount in 1997, and a 20% increase just in 2002. Almost 8 trillion yuan of this is in savings accounts in renminbi.

Living conditions and diet, especially protein consumption, have improved greatly: Consumption of meat, fish, eggs and vegetables per capita is higher than the world average. However, as Lu Zhiqiang, deputy director of the Development Research Center of the State Council, told the Asian Development Bank in May 2002, income levels are “very unequal” in China, and the problem has rapidly worsened since 1978. The extent of the income polarization between urban and rural areas, and among different industries, enterprises, and institutions, is unusual among nations—worse than in some Eastern European or other Asian countries, according to well-known Chinese Academy of Sciences economist Hu Angang and his colleagues. The Chinese are greatly discontented with these disparities, as they are also with widespread corruption and dominating power of some economic groups, Lu warned: Seventy percent think that “the great disparity between the rich and the poor” has adversely affected social stability.

Most economists argue for fostering labor-intensive jobs for the underemployed and unemployed. The real question is: what jobs? China must solve its many “contradictions”: While it is building a national highway network, most rural roads are primitive; while funds are pouring into universities, rural schools are lacking, and teachers too few and underpaid, even in prosperous areas like coastal Jiangsu province. Reforestation is urgently needed in large areas of the country. Today, the United States is surviving on much of the infrastructure built by unemployed youths in New Deal programs in the 1930s; such service programs would be of real use in China—*if* the unemployed, and especially their children, also have access to education and health programs.

Economist Fan Gang emphasized this point in a commentary published in the *People’s Daily* in January 2003, in anticipation of the important March national congresses, which brought in China’s new leadership. Fan wrote that it is crucial for China to ensure that its agriculture and basic industry are developed, so that the economy does not get “dragged into a mire” of too much “high-tech” and service “industrialization.” Party policy is to foster a “new type of industrialization,” but this is being interpreted by some local governments

as license to dive into service and high-tech industries, while leaving primary and secondary industries, such as agriculture, mining, and manufacturing inadequately capitalized.

The real policy of the government is to use advanced technologies to expand industry, but also to maintain a high employment rate. Localist policies have led to severe problems before, such as during the runaway inflation of 1988-89. Now, two-thirds of China's technical professionals are working in the service sector, rather than in manufacturing, and total social investment in manufacturing has declined during the past five years. "It's ridiculous for all cities to spearhead the hi-tech industries," stated Zhu Gaofeng of the Chinese Academy of Engineering. "Without development in the manufacturing sector, all the other industries cannot grow healthily, which will further worsen the unemployment problem, impede the general improvement of people's living condition and even jeopardize the nation's stability and security."

The Farm Sector

In March 2002, Prime Minister Zhu Rongji told the National People's Congress, that in comparison to the cities, "China's rural population, numbering about 800 million, are not seeing any rapid increase in their income. In certain areas, they have even seen a drop in their income." China already has an "excess" supply of grain, soybeans, and other produce, so that prices were already depressed, even before China joined the World Trade Organization at the end of 2001.

Under the "contract responsibility system" adopted at the beginning of the 1980s, peasants were given contracts to use and manage land—still, ultimately, government controlled. The initial contracts with rural authorities were extended for another 30 years in 1993. Now, during the March 2003 National Party Congress, new laws were passed to deal with rampant corruption in rural areas, and eliminate the heavy "fees" which farmers have been subject to, for every service from education to medical care. Now, for the first time, farmers have 30-year guaranteed rights to use their contracted land, and women, married or not, will get equal rights. Farmers will also be able to legally transfer, re-contract, and exchange the land use rights. This law should offer some redress to farmers, who have been resorting to violence.

Press commentaries are calling on the government to go much further. Effective national mechanisms for agricultural investment are needed, as is a network of financial institutions specialized in providing capital for farmers—something which was created in both Germany and the United States during the 19th Century. Such institutions should be backed by the government, which should work out preferential policies in tax, services and pricing, the commentaries demand.

But the most urgent problem, is the vast scale of rural unemployment. Even official figures say that China has already 150 million "surplus" rural workers, 20% of the population, and it is openly discussed that the real figure could be more than 200 million. The daunting size of the population,

the very small farm holdings, and the backwardness of the rural economy, have led to the surplus. An estimated 100 million rural unemployed have joined the flow of migrants to the cities, where they work in construction and other labor, but many more jobs are urgently needed.

Urban Unemployment, and 'WTO Problem'

Wang Dongjin, vice minister of Labor and Social Security, announced in Beijing in April 2002, that in the coming four years, China will face the most serious unemployment problem it has ever had. Urban unemployment could rise to more than 20 million, he warned. If the high number of "surplus" rural workers is included, according to a report released by the Ministry of Labor and Social Security in Spring 2002, the total unemployed workforce in China is approaching 170 million people.

Chinese official unemployment figures do not include many of those laid off due to the restructuring of the state industries, because they still receive living allowances and some benefits from their former workplaces. Between 1998-2001, some 26 million have been laid off, most from the lowest-skill sectors such as coal mining and textiles. Unofficial figures report the total at twice that by the end of 2002. Finding new work has become increasingly difficult. In 1998, according to official figures, over 50% of laid-off workers found new jobs, but in 2002, only 9% were re-employed.

Another 12-13 million new workers will come into the labor market every year for the coming four years. Wang Dongjin said, "It is estimated that only 8 million jobs can be generated annually over this period, even with the country's current economic growth rate. The pressure will be around for years." Younger workers, under 35, now account for more than 60% of the total, up from less than 50% two years ago.

In June 2002, the CASS was warning that urban unemployment was much closer to 7% than 4%, a figure confirmed by Labor Minister Zhang Zuoji at a Beijing press conference five months later, when he said, "China is facing great employment pressure now." China will have 14 million jobless people this year, including almost 8 million registered as looking for work, and another 6 million laid off from state-owned enterprises, Zhang said—about 7% of the urban workforce. The problem had been the focus of a national conference, involving its highest-level leadership, in September.

The vast majority of the unemployed are barely educated, with few or no skills at all. Industrial technology has changed, but they have not been re-trained. The lack of skilled labor is critical. Prof. Zeng Xiangquan of Beijing's People's University, said in September 2002, that just 3.5% of China's 70 million technical workers are "advanced-skills" workers, compared to about 40% in most developed countries. China urgently needs to have 600,000 operators of computer-controlled machine tools. Production suffers: Only 70% of Chinese products are up to standard, and substandard products cause losses of 200 million yuan each year.

At the same time, some 700,000 college graduates cannot find work.

The government has pledged to keep the registered unemployment rate below 4.5%, and create 9.5 million jobs; the task is enormous.

China's entry into the World Trade Organization, taken at very unequal terms under heavy U.S. pressure, is rapidly worsening the situation. It was openly acknowledged by President Bill Clinton that China had made *all* the concessions in joining the WTO; indeed, Washington put Prime Minister Zhu Rongji in a difficult position, when he was already on his way to the United States in April 1999, demanding he make the concessions which China had adamantly refused, or face an embarrassing diplomatic situation. It took almost two more years of U.S. and European arm-twisting, to get China into the WTO.

The results are taking effect. The CASS warned already last Spring, that urban unemployment in China would rise 2% a year during the first four years of WTO membership, costing 4 million people a year their jobs.

Predictions of "eventual" increases in "job opportunities," 10 years after joining the WTO, are most unreliable. These are based on projections of improvements in international trade, highly unlikely in the current world economic disaster. Already by 2005, China will have to carry out all the tariff and other concessions agreed to—if the current international financial system is still around by then.

Unfortunately, the rural population will be even harder hit: Up to 10 million farmers are expected to be out of work, as much cheaper foreign grain and other agricultural products enter China. Grain imports were already 40 million tons in 2002, some 9% of domestic production. Some 25 million grain farmers will lose 100-130 yuan, a significant part of their income, and those who work poor-quality land will be especially hard-hit. Southern China is now importing more and more grain and soybeans, leaving farmers in the northeast without markets. Domestic production costs are high, making prices 60% higher than on the international market.

The New Generation

This Spring, amidst an extremely volatile world situation, China carried out a successful transition to a new government, the "fourth generation." Last year, as the world grew wilder, the critical 16th National Congress of the Chinese Communist Party was delayed for at least two months, but by November, the shift to the new leadership went ahead. General Secretary Jiang Zemin retired, and his deputy, Hu Jintao, succeeded him. Four months later, at the National People's Congress on March 15, Hu Jintao was elected President of China. Jiang Zemin, who has served two five-year terms, was re-elected as chairman of the Central Military Commission of the People's



A city government official of the major port of Lianyungang shows the Eurasian Land-Bridge route linking his city to Europe and the Atlantic, at a December 1998 conference. Eurasian-wide development is crucial to China's hope of quadrupling its economy and employing its unemployed.

Republic, the post also held by Deng Xiaoping after his retirement from the political front line. Vice Prime Minister Wen Jiabao was elected to succeed Zhu Rongji.

Both Hu Jintao and Wen Jiabao made clear, early on, that they are fully aware of the urgent problems of China's large cohort of peasants. Wen Jiabao himself comes from a very poor background, and has focussed most of his work on China's rural sector.

Already by the end of March, Beijing had announced that it will start another 14 key infrastructure projects in the western regions, and that the total new investment involved will be more than 130 billion yuan (\$15.7 billion). Projects include construction of roads, railways, power stations, water and land management, forestry, anti-desertification projects, and urban infrastructure. As the State Council's (cabinet's) Leading Group for Western Regional Development announced, "We aim to make a breakthrough with regard to the infrastructure situation in the region by 2010."

In his final speech to the NPC on March 5, which was greeted with warm and prolonged applause from the 3,000 delegates, Zhu Rongji again emphasized, what a national treasure China has been creating with its pro-active New Deal policy. "Based on the issuance of 660 billion yuan of long-term construction treasury bonds, 3.28 trillion yuan of bank loans, and funds from other sources, were generated for investment, allowing us to accomplish many large undertakings we had been wanting but [were] unable to undertake for years for lack of resources," Zhu told the Congress. At the same time, he emphasized, his government is leaving China with 17.2 trillion yuan worth of assets, to develop growth in the next decades.