

Third Front Policy

Dàsānxiàn 大三线

The Third Front policy, a response to the perceived threat of U.S. and Soviet aggression at the height of the Cold War, refers to an ambitious but ultimately wasteful program for the military-industrial development of China's remote mountainous hinterland.

The large scale of “Third Front” or “Third Line” (*da sanxian*) policy, a reaction to China's vulnerability to U.S. and Soviet aggression during the Cold War, entailed massive investment in developing a military-industrial complex, including mining, metallurgy, machine building, and transportation that could serve as the basis for continued military capability in the event of an invasion of China's capital, coastal cities, and core territories. Although the most intense period of investment and construction was brief, from 1964 to 1971, the effort had a strong negative impact on China's economic development and provided few lasting benefits.

Origins of Third Front Policy

The term “Third Front” was first used by Lin Biao in a speech in January 1962 to refer to a redoubt (fortification, in this case military-industrial) in Anhui Province in the event of the need to retreat from Shanghai. By the time Mao Zedong revived the program and incorporated it into the revised Third Five-Year Plan in 1964, the area defined as the “Big Third Front” included a vast swath of

territory stretching from Beijing in the north to Hainan Island in the south. Much of this area is rugged mountainous terrain 500 meters or more above sea level, including the provinces of Guizhou, Sichuan, and Yunnan in the southwest, Gansu and Qinghai in the northwest, and parts of the provinces of Shaanxi, Hubei, and Hunan. It was hoped that this region, distant from both the coast and the northern plains, might serve as a base for a continued war of resistance in the event of an invasion from the north or the Pacific. As the economist Barry Naughton puts it, through the “Third Front” strategy, “China was preparing to fight a ‘people's war’ . . . in which the ‘people’ were equipped with the products of modern industry” (Naughton 1988).

There was no precedent for the massive effort to build up advanced industrial capacity and the accompanying infrastructure in this mountainous region. During the Japanese invasion from 1937 to 1945, the Nationalist government retreated to southwest China, moving an impressive amount of industrial capacity, including armaments factories, into Sichuan and Yunnan provinces. But this was a temporary emergency measure and not an attempt to build up a permanent industrial base.

From 1963, as China was recovering from the disasters of the Great Leap Forward (begun in 1958), Chairman Mao and Lin Biao, who became Minister of Defense in 1959, actively promoted the Third Front policy. There would seem to have been a strong consensus in favor of the policy among the party's top leadership in the years leading up to the Cultural Revolution (1966–1976). China's nascent nuclear program, which successfully tested its first atomic weapon in 1964, was also located in the western

provinces of Qinghai and Gansu. There were also considerable mineral and hydropower resources available in the southwest and northwest, including steel and aluminum. The Third Front policy was also broadly consistent with the economic policies implemented since 1949. In the 1950s, the government consistently transferred resources, including plant, capital, and personnel, from the industrial centers of the east coast and Manchuria to inland provinces and rural areas in order to distribute the benefits of economic development more evenly throughout the country. Similarly, the emphasis on heavy industry such as mining, metallurgy, and machine building was consistent with the investment policies of the First Five-Year Plan (1953–1957) and the Great Leap Forward. Nonetheless, the attempt to develop a massive military-industrial complex in some of the most remote and mountainous terrain in China was extraordinary, and was motivated primarily by international and strategic concerns.

Policy Implementation

The initial impetus for the first phase of Third Front projects was the intensification of U.S. involvement in the war in Vietnam following the Gulf of Tonkin incident in August 1964. That year, the government of the People's Republic of China initiated a program of railroad construction and development of heavy industry in the southwestern provinces of Guizhou and Yunnan that was intended to facilitate both Chinese defense of the region and support for the Communist forces in Vietnam.

It soon became apparent, however, that while the U.S. was taking great pains to avoid conflict with China, China's relationship with the Soviet Union had reached a crisis. In January 1966, the USSR signed a mutual defense pact with Mongolia and stationed large forces there. By 1969, the two socialist giants had fought several border skirmishes, and Soviet actions in Czechoslovakia and the announcement of the Brezhnev Doctrine (that the Soviet Union had the right to intervene to preserve the socialist system in other countries) made China's leaders apprehensive. By the autumn of 1969, Lin Biao had ordered the evacuation of the party's top leadership from Beijing, and China's leaders were expecting and prepared for an apocalyptic final conflict between socialism, imperialism, and revisionism.

The amount of resources invested in Third Front projects reflects the urgency and importance of this defense-related program. From 1965 to 1970, the "third front" received more than half of all state investment, and an even higher proportion of investment in capital resources. Third Front projects also received the most advanced industrial equipment and some of the most skilled personnel China possessed. Initially, the Third Front was centrally managed, and "general command headquarters" for construction were established at key project sites. These projects also enjoyed direct and priority access to funds and materials through supply offices and branches of the Construction Bank established at various project sites. As the planning system broke down during the Cultural Revolution, however, control over these projects devolved to local authorities.

Changes in the international and strategic context are reflected in shifts in Third Front investment, and the Third Front policy can be divided into three phases. In the first phase, from 1964 to 1969, investment and construction was focused mainly in the southwestern provinces of Guizhou, Yunnan, and Sichuan. The first task was to connect the railroad lines feeding into the region from Shaanxi and Guangxi provinces with the French-built line from Vietnam. The link from Chongqing to Guiyang was completed in October 1965 by mobilizing hundreds of thousands of laborers and shifting funds from the national rail network to this single priority project. The centerpiece of the project was the massive iron and steel combine built at Panzhihua, on the mountainous border between Yunnan and Sichuan. The first phase in the southwest also developed mining operations and hydroelectric power to supply the new heavy-industrial base. Armaments and machine-building factories were established in the area of Chongqing and northern Guizhou, including facilities for aluminum smelting and stamping, rubber, precision instruments, and optics. Hundreds of factories throughout China, including the famous Anshan Iron and Steel Complex in Manchuria, sent skilled personnel and equipment to support Third Front projects in the southwest. In some cases, entire plants were relocated, along with their employees, to remote valleys from coastal cities like Shanghai.

The second phase, from 1969 to 1972, was partly a response to the worsening of Sino-Soviet relations and the threat of invasion from the north. Second phase projects were located mainly in the mountainous region where

the borders of Shaanxi, Henan, Hubei, Sichuan, and Hunan provinces meet. Like the first phase, the second phase included rapid and large-scale development of railways, hydroelectric power, and metallurgical and machine-building industries. An effort to build a steel complex at Wuyang in Henan Province, smaller than but similar to the one at Panzhihua, was ultimately unsuccessful. The second phase continued the high rates of investment and mobilization of hundreds of thousands of workers to build three new railway lines, which were completed in less than four years. Construction of what was then China's largest dam, at Gezhouba, was also initiated in 1970, but the project was not completed until the 1990s.

Machine-building industries, mainly for military uses, dominated the second phase projects, especially the Number Two Automobile Plant at Shiyan in the mountains of Hubei Province, which was built to produce two-and-a-half-ton trucks. More than 140 factories, including the Number One Auto Factory in Changchun, provided assistance in the form of personnel and equipment. This reflected an effort to remove productive capacity from the northeast, which was vulnerable to Soviet attack, into the mountain vastness of northwestern Hubei. Nearly all of the equipment installed in the plant was designed and produced in China, which had only begun producing its own trucks with Soviet equipment in 1957. Like many Third Front projects, however, the plant suffered from flaws in design and inefficiencies born of perceived defense requirements. Subsidiary factories were built in mountain valleys, and even caves, dispersed across 32 kilometers. This naturally created transportation difficulties and dramatically increased production costs.

Throughout the same period, several projects in the northwest provinces of Gansu, Ningxia, and Qinghai were also included in the Third Front. Railways and military industries, including China's nuclear program, were built up in this region from the 1950s. From 1964, these projects were accelerated and supported with massive investment from the central government. Projects designed to supply specialty steel and hydroelectric power to the nuclear program in Gansu Province were given top priority from 1965. As in other Third Front regions, these projects were supported by the transfer of resources from other parts of China, and factories were dispersed and built into sites that were naturally fortified but difficult to access.

The year 1972 marked a sudden and dramatic reversal of

the Third Front policy and the beginning of the third and final phase of the program. Most Third Front projects were discontinued by 1973 and many construction crews were transferred to new projects in eastern China. There were several reasons for the reversal of policy, but with the death of Lin Biao, one of the policy's most ardent advocates, as well as the beginnings of rapprochement with the United States, the sense of military urgency was reduced.

Most importantly, however, the dramatic inefficiencies and tremendous waste inherent in the effort to establish a modern industrial base in China's mountainous hinterland had become apparent to central leaders. The levels of investment required could not be sustained given China's level of economic development. When Premier Zhou Enlai regained control of the organs of government in 1972, following the peak years of chaos and violence during the Cultural Revolution, he quickly ordered a reduction in the rate of investment. Third Front projects were particularly inefficient. The entire program was so massive that it was clearly impossible to complete most of the individual projects in a timely fashion. The push for immediate accomplishments and practices such as simultaneously designing, constructing, and operating new plants produced many design problems. Poor design and siting necessitated wasteful redundancies.

Despite these many obvious problems, however, and the need to reduce the rate of investment, from 1972 to 1978 some Third Front projects continued to receive support from central planners. Continued concern with the Soviet threat was one motivation. But the simple fact that so much manpower and resources had already been invested in these projects inclined the party's leaders to continue to develop certain key projects, such as the Panzhihua iron and steel complex. By 1979, however, it had become clear that even these key projects were unworkable. Following China's brief war with Vietnam in 1978, military preparedness became less of a priority and the Third Front program was finally abandoned.

Implications of Third Front Policy

In the short term, the Third Front probably did enhance China's capacity to withstand a major conventional invasion. But this event was unlikely even at the height of

China's strategic isolation, and the threat passed well before most of these projects came on line. The goal was far more ambitious than previous attempts to remove industry to the interior during a military crisis as the Third Front aimed to establish a comprehensive industrial sector from mining and electric power provision to metallurgy to machine building. Only 20 percent of Third Front investment went to specifically military industries. The rest was for transportation or dual-use industries such as steel making.

The program was too massive and ambitious, however. It would take too long to complete and would require more resources than China possessed at the time. It is furthermore doubtful that these installations were that much more protected than any other part of the country considering the developments in military technologies such as intercontinental ballistic missiles (ICBMs), long-range bombers, and nuclear weapons. In any case, much of this investment in China's defense was wasted and many projects were left uncompleted. Only one of the four large steel plants included in the Third Front was operating near capacity by the 1980s. In some locations, such as Wuyang, advanced equipment and skilled personnel were wasted because insufficient supplies of ore and poor transportation made the plant's efficient functioning impossible.

The total costs of the Third Front projects are still unknown, but it is clear that the central government invested tens of billions of yuan, most of it never recovered and left to rust in the form of disused or inefficient plants located in remote mountain valleys. According to Barry Naughton's estimates, China's industrial output in the 1980s was 10 to 15 percent below what it would have been if China's leaders had not pursued the Third Front policy.

Most economists similarly agree that the Third Front projects, in contrast with other efforts at developing inland industries, provided little or no benefit to the national economy. Not only were many projects abandoned

before completion, they were often located in the most inaccessible areas, which prevented them from fostering the development of industries supplying inputs in the immediate neighborhood. For example, the construction of Number Two Auto in northwestern Hubei could have spawned a whole string of support industries. But the plant's remote location prevented it from serving as an engine for further industrialization. By the mid-1980s, this problem led to the removal of 121 factories (and their personnel) from their rural mountain locations to urban centers such as Chongqing.

Even the construction of a railway network in China's mountainous regions, perhaps the most positive legacy of the Third Front, exhibited many problems. Priority development of Third Front railway lines diverted resources for the maintenance and expansion of the rest of China's national rail network, and the costs per kilometer of track were five or six times higher than average. Nonetheless, the expansion of rail service to remote hinterland areas is one of the few positive legacies of this otherwise wasteful and misguided project.

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Further Reading

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