China's New Modernization Drive

By Michio Uga

In September last year, Chinese Communist Party Secretary General Hu Yaobang caught the world by surprise when he announced China's ambitious "quadrupling" economic program to the 12th party congress.

"The general objective of China's economic construction for the two decades between 1981 and the end of the century is, while steadily working for more and better economic results, to quadruple the gross annual value of industrial and agricultural production."

The Chinese have yet to release details of the new 20-year plan, but the basics seem to be clear. China, Hu says in his report titled "To Create a New Situation in All Fields of Socialist Modernization," takes agriculture, energy, transport, education and science as "strategic priorities" in economic growth, and, to achieve this goal, the country will make an all-out effort to raise its level of industrial technology and modernize existing production facilities through "technological transformation." Here, the Chinese apparently think, lies the most cost-efficient way to kick off the country's enormous economic plan.

The subject of China's industrial redevelopment projects, in fact, came up for discussion during the third high-level meeting between officials of Japan's Ministry of International Trade and Industry and China's State Economic Commission held in Beijing last October. Among other issues, the Japanese questioned their Chinese counterparts on what role industrial renovation of existing facilities will play in the new economic plan, what assistance does China hope to get from Japan and other countries, and what problems China expects to face when they implement the policy of introducing elements of "market regulation" into a planned economy.

The author, who was with the Japanese delegation, here explores these issues and shares some of his personal views.

Rapid Expansion and Readjustment

Following the death of Chairman Mao Zedong in September 1977 and the subsequent purge of the so-called Gang of Four, China went through a period of rapid changes. Politically, the post-Mao

leaders sought to dispel domestic dissent through the so-called policy of stability and unity; economically, they pushed for the Four Modernizations in industry, agriculture, national defense, and science and technology.

When the Chinese convened a plenary session of the National People's Congress (NPC) in February 1978, they adopted a 10-year strategic plan for the development of the national economy—an ambitious program that called for the construction of a number of large-scale projects as well as other production measures designed to generate high levels of economic growth.

Unfortunately, the program ran into a host of problems almost as soon as it was put into effect. The Chinese economic planners discovered that they had failed to grasp fully the economic realities of their country and had overlooked the structural imbalance that existed among the various sectors. They were obliged to bring in a period of readjustment.

In fact, when China convened another plenary session of the NPC in June 1979, the congress approved an economic retrenchment policy that set the three years between 1979 and 1981 as a period of economic readjustment.

The four-point policy package, featuring what the Chinese called "readjustment, restructuring, consolidation, and improvement," sought to restore equilibrium between agriculture and industry and shift the priorities back from heavy to light industries, as well as putting more efforts into improving production techniques in existing facilities.

To foreign traders, however, this economic retrenchment policy brought painful suprises: the Chinese abruptly informed them in January 1981 that China wanted to cancel construction of some 30 industrial plants which it had ordered from the West. The cancellation notice indeed came so suddenly that many businessmen today still profess shock when reminded of the episode.

Anyway, having tided over the period of readjustment, the Chinese economy appears to be back on the path of steady growth. The efforts spent on promoting agriculture and light industries have not been wasted: farmers' income has risen appreciably and there is a marked increase in the supply of consumer goods. As a result the general living standard has

been improved and the level of savings has

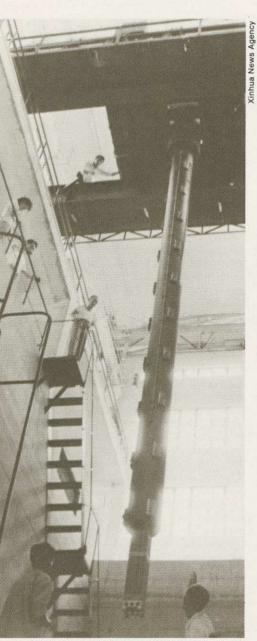
Blessed with such encouraging results, the Chinese leadership, while stressing the necessity to keep up with the readjustment policy, has apparently decided that the time has come to return to the course of development. Hence the call to "quadruple production by the end of the century."

But can this be done? A four-fold increase in 20 years calls for an annual growth rate of up to 7.2% on the average. The Chinese say they are not aiming at such a growth rate in the initial 10 years. Their plan is to devote the first decade to building a solid foundation in agriculture, energy, transport, education and science, during which the annual growth rate would be no more than 5 to 6%. When this is achieved, Chinese planners expect the economy to enter a period of upsurge, spurting ahead at an annual rate of 8 to 9%. During this phase, the focus will be on technological competence and quality control as well as the development of high added-value and precision industries.

Moreover, the Chinese economic planners envisage that half the targeted four-fold increase in output will come from new plants and the rest through technical innovation of existing production facilities. Indeed, they maintain that since the technological level for most existing Chinese factories is still about 30 years behind the times, it is possible to double their output by the simple process of tooling-up and reequipping them at the prevailing world standard.

Stress on Upgrading Existing Plant

Ever since the Chinese unveiled their ambitious long-term economic plan, some economists outside China have remained skeptical about the feasibility of the fourfold increase target. Some experts are particularly concerned about Chinese energy policy, which allows for a mere two-fold increase in coal and oil output during the coming 18-year period. The Chinese say energy supply will be no problem since the economic plan puts emphasis on the development of light industries, and China will push for a vigorous energy conservation campaign. But foreign experts are

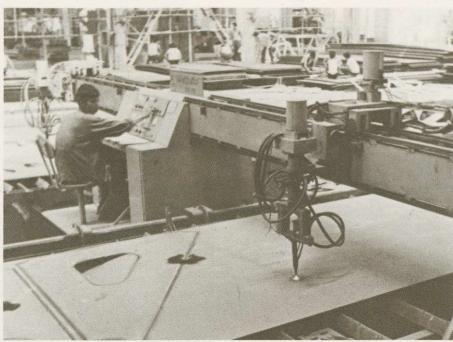


Construction of the first China-designed nuclear power station, with an installed capacity of 300,000 kilowatts.

unconvinced: they point out that given its present economic structure there is no way China could achieve rapid growth without relying strongly on heavy and chemical industries. Under the circumstances, the decision to project a 200% growth in energy output would necessarily demand what economists call a 0.5 energy elasticity. This means that energy consumption per unit of output must grow half as fast as the pace of economic growth, and economists doubt whether such strenuous energy conservation is really feasible.

To others, however, such skepticism underscores a faulty understanding of the professed Chinese strategy to give top priority to revamping and modernizing existing plants and facilities.

For one thing, Chinese economic planners are apparently very concerned about getting the maximum return on their in-



Cutting steel plate with a numerical-control frame-cutter at Guangzhou Shipyard.



The large electronic calculating center at the South China Sea Petroleum Base handles geological and offshore oil-exploration data in real time.

vestments. They know most of China's factories are extremely antiquated, either in terms of equipment or in terms of technology and management know-how.

Under such circumstances, the Chinese argue, it would be much more economical to reassess and undertake necessary conversion and modernization, making full use of existing facilities rather than building brand new ones. Moreover, this would be a fast and practical method to raise productivity within a short time.

Secondly, the Chinese apparently have learned the hard way in their past dealings with large-scale turn-key plant imports. Modern heavy and chemical industry plants built in the West incorporate the most sophisticated technology that is available in the world, and the construction and operation of such plants requires a well-developed industrial infrastructure plus a host of support industries such as parts suppliers and qualified subcontractors

In a country like China where such conditions cannot be fulfilled, it takes a lot of time and costs a lot of money to build large-scale up-to-date industrial plants and then put them into full operation. Hence Chinese economic strategists now judge it wiser to spend their limited financial resources for tooling up, modernizing their existing factories first, and building a more solid foundation for industrial development before embarking on new plant imports.

The third reason behind the Chinese decision to upgrade existing facilities appears to come from a changing consumer attitude in the country. Chinese consumers, perhaps reflecting their greater affluence, are now said to be more

quality conscious.

When told of an increase in the volume of personal savings in China in recent vears, some Japanese delegates questioned whether the increased savings merely reflect the fact that people just can't buy the things they want to buy. The Chinese flatly denied this goods-shortage theory. It is quite the contrary, they say, According to Chinese explanations, consumer goods are now generally available in China. Today, people no longer fear they won't be able to buy things unless they grab them as soon as they show up on the market. So instead of spending all their money on just about anything, consumers now take their time to pick and choose, sometimes putting their money in savings until they can find the things they really want.

The upshot, Chinese officials say, is that some consumer goods are now being left unsold on shop counters, causing big inventories at some factories. In other words, China is a buyer's market in consumer goods now. The trend, it is said, is to shun products of inferior quality or design. Some consumers have even developed a preference for well-known brands.

The argument was in a way borne out during one of the MITI delegation's visits to a radio factory in Shanghai. The products made there are said to be the most prestigious in the country. Factory officials said they have a two-year production backlog and a buyer has to wait for up to two years before he can get delivery of a radio-cassette that carries the factory's brand name.

The same shift in consumer behavior is indirectly reflected in the choice of plants the Chinese planners have targeted for technological renovation. Prominent in the list of plants requesting technological and management assistance from Japan are makers of consumer goods like electrical appliances, sewing machines, optical instruments, glassware and plastic goods, as well as those engaged in closely related processes like flour mills, dyeing works and printing shops. Such requests, no doubt, reflect a strong urge for modernization and better productivity among light industrial goods manufacturers.

China's Enterprise Regeneration Program Today

Sino-Japanese cooperation in China's efforts to tool up its factories dates back to September 1980 when the Chinese first brought up the issue with Toshiwo Doko, president of the Japan-China Association on Economy and Trade, during his visit to China. A series of subsequent talks resulted in an agreement under which Japan undertook management analysis of 16 Chinese factories in 1981. The figure rose to 32 in 1982.

The ground rules for this area of Sino-Japanese cooperation are as follows: The Chinese State Economic Commission first makes up a list of factories for submission to the Japan-China Association on Economy and Trade, which acts as the intermediary for passing on Chinese requests. According to current understanding between Japan and China, the Japanese private sector is the primary source for rendering advisory service, except for those projects which call for government-to-government cooperation.

This arrangement, however, is not entirely satisfactory. There exist a number of problems which must be settled before this newly inaugurated field of Sino-Japanese cooperation can be fully launched.

As might be expected, the greatest concern comes from some hard-nosed businessmen in Japan. Under current arrangements, the advisory service is rendered free as a matter of principle. The Japanese businessmen complain they have no guarantee that they will receive any preferential treatment in getting equipment orders when the Chinese decide to retool a particular factory based on assessment plans submitted by Japanese advisers. Chinese officials explain that it is all a matter of pricing, and they cannot possibly commit themselves to a firm order without receiving an estimate first. What is more, shrewd businessmen as the Chinese are, they naturally reserve their right to choose among the lowest bids.

Such being the circumstances, it is feared that the current formula of plant assessment service cannot last for long. The Japanese businessmen now say they are providing the advisory service to China for the sake of promoting Sino-Japanese friendship even though they have to bear all the costs involved.

But with the new economic program coming into effect, China naturally wants more and more of its existing plants given a productivity assessment. The problem, of course, is that in the world of business, one can hardly expect such gratuitous service to continue indefinitely, however worthy the cause. It is, therefore, not unlikely that Japanese business might decline to participate actively in this kind of economic cooperation in the future.

Another problem concerns the practice of royalty payments. Very often the Japanese business that provides the consultation service is not engaged in the production of equipment required by the Chinese factory it helped to evaluate. But in China, the practice of paying for technological know-how has yet to find roots. Moreover, the Japanese private sector is also concerned that technology transfers to China could boomerang in the form of tougher Chinese competition in the world market.

A further problem lies with the very large number of plants in China that require refitting and upgrading. Chinese officials have put it at what they call a tentative figure of 3,000, a much bigger number than the Japanese side could possibly handle.

One possible solution to this long-term problem will be some sort of indirect technology transfers. For example, instead of dispatching Japanese experts to China, Japan can provide for the training of Chinese consultants in Japanese factories. Or else, indirect technology transfers can be achieved through the building of a number of model plants in China that may serve as models for similar enterprises.

While these are admittedly long-term issues, there is one basic problem that calls for the immediate attention of Chinese economic planners: how Chinese enterprises under a planned economy and controlled pricing can ensure a continued rise in productivity. For Japanese enterprises, which face intense rivalry among themselves, the managers are always under strong pressure to cut production costs through extreme subdivision of labor in the production process, or through holding down inventory as much as possible in order to avoid tying up capital.

Obviously, the Chinese must devise a system for themselves so that managers and workers will be encouraged to improve performance all the time. They have apparently been moving in this direction in the last few years, but the problem remains extremely complicated because of the absence of a market price system there.

Naturally, there is no other way to tackle all these problems except through continued cooperation between the two countries. But one thing is certain. China's economic stability and prosperity is a matter of great importance to Japan, and Japanese business is willing to share its industrial technology if it can be of benefit to China. It is therefore Japan's hope that concerned officials from both countries will keep this basic approach in mind as they work together to overcome the various obstacles facing smooth transfer of technology, to the mutual benefit of both Japan and China.

Michio Uga is chief of the Nagoya Bureau of International Trade and Industry.

Uga, 48, joined the Ministry of International Trade and Industry after graduating from the University of Tokyo in 1956 and served in various MITI posts such as chief of the Budget and Accounts Division of the Minister's Secretariat and chief of the Economic Cooperation Department of the International Trade Policy Bureau before being appointed to his present post in October 1982.