

北京周報

A CHINESE WEEKLY OF NEWS AND VIEWS

# Beijing Review

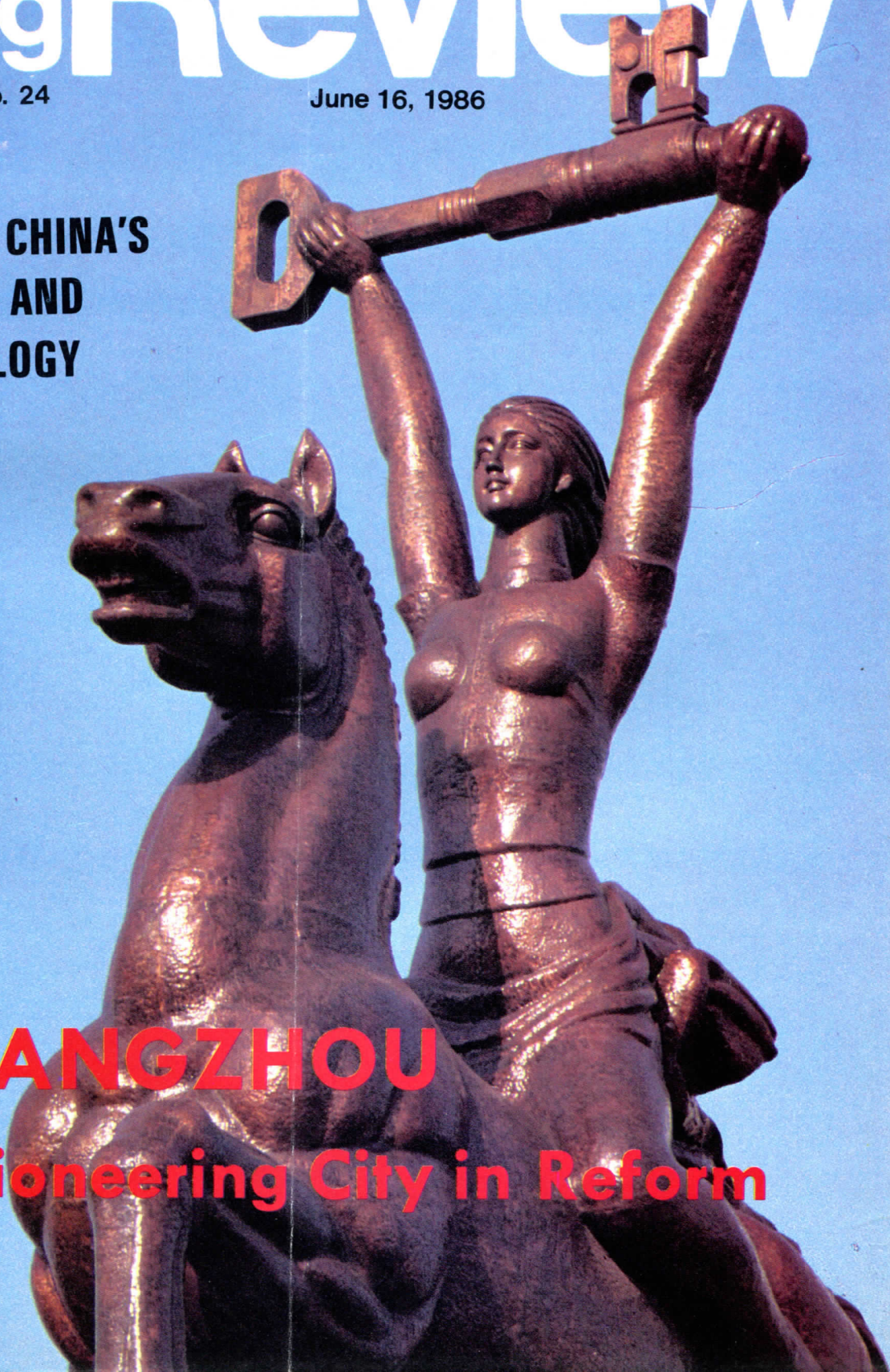
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**REVAMPING CHINA'S  
SCIENCE AND  
TECHNOLOGY**

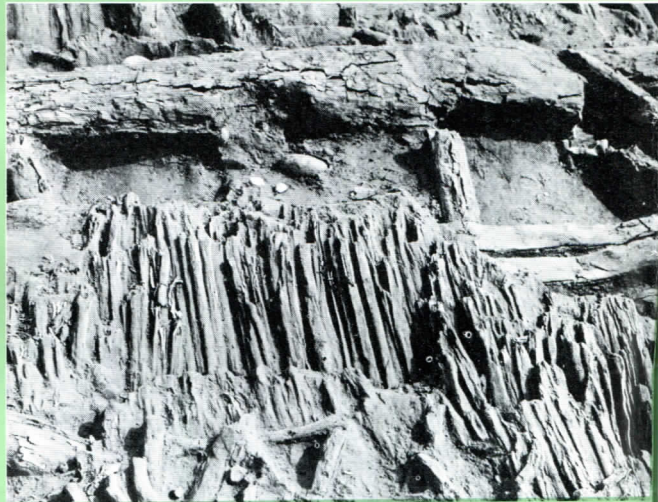
**CHANGZHOU**

**A Pioneering City in Reform**





The ruins of the ancient wooden houses discovered in Chengdu, Sichuan Province.



The remains of a house's bamboo wall.

## Ancient Houses Found in Sichuan

Ruins of wooden houses believed to be 3,000 years old have been discovered in Chengdu, capital of southwest China's Sichuan Province. The ancient dwellings cover 1,000 square metres and were found four metres underground by workers digging foundations for new homes. The wooden structures resemble the bamboo houses of minorities in southern China. The wooden columns and beams, bamboo walls and bamboo roofs covered with bark are still intact.

*photos by Jin Xuqi*



Unearthed stone tools.



Archaeologists studying excavated pottery.



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**COVER: "The Future Belongs to Me."  
(A statue symbolizing Changzhou,  
Jiangsu Province)**

**by Chen Zonglie**

## HIGHLIGHTS OF THE WEEK

### Progress Hinges on Sound Party Conduct

■ Some Communists have taken advantage of the open policy to seek personal gain and some have even degenerated into criminals. These transgressions must be eliminated before China's economic goals can be crowned with final success (p. 4).

### An Economic Star Rises Through Reforms

■ Beginning this issue, *Beijing Review* will publish a series of articles on changes in Changzhou, Jiangsu Province. The first of three reports details the city's unique features and its initial achievements under the reform. Also in this issue is an interview given by Changzhou Mayor Chen Hongchang to *Beijing Review* (p. 14).

### Satellite Launch: Competition Not the Aim

■ Officials of the China Great Wall Industry Corp. recently negotiated with representatives from US and British companies on matters concerning China's launching of satellites. Several other foreign companies have also contacted the Chinese company. Such high hope on China's satellite-launching service can be attributed to its open policy and the development of its astronautical technology (p. 31).

### Enterprises Demand Greater Autonomy

■ Despite the fact that the State Council issued a series of regulations expanding the decision-making powers of enterprises, many Chinese factory directors complain the power of management is still held by their superiors. (p. 6).

### Reforming Science, Technology System

■ An official of the Science and Technology Policy and Management Research Institute describes the background, measures, results and problems concerning the reform of China's science and technology system (p. 21).

### UN Special Session on African Aid

■ The UN special session on Africa involves national and international efforts to revitalize the African economy (p. 10).

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# Progress Relies on Sound Party Conduct

by An Zhiguo

China's economic reforms, which began at the end of 1978 in the rural areas, have since been extended to the cities and have boosted China's economy considerably. As a result of the reforms, the country's Sixth Five-Year Plan (1980-85) was fulfilled ahead of schedule, and the gap between China and the economically developed countries is narrowing.

Though their successes are noteworthy, the reforms have been accompanied by problems. Certain state functionaries, particularly some leading Party cadres, have abused the power given to them by the Party and the people to seek personal gains instead of rendering wholehearted service to the people. Some have secured advantages through pull or influence, while others have violated the law and discipline by resorting to theft and bribery. In international exchanges, some have worshipped things foreign and sought petty advantages. In order to satisfy their personal desires, they have even betrayed the state and their personal dignity. These transgressions have roused the indignation of the public and the concern of people both inside and outside the Party.

Some have attributed these problems within the Party to the reforms, saying the two go hand in hand. Others maintain that the reforms and unworthy Party behaviour have nothing to do with each other. Both views seem too sweeping and arbitrary.

The reforms have not only brought China's economy up to the unprecedented level, but have also meant an end to its closed-doorism and the dismantling of the parochial, backward concepts of traditional small producers. To put it figuratively, however, when we open the window, we let in not only fresh air but also flies and

mosquitos. Although developing the commodity economy and opening China to the world is a very good thing, they will involve some problems. For instance, decadent bourgeois thought and lifestyles will take this opportunity to squeeze their way into China. It is true that if we kept our door shut tight and did nothing to invigorate our economy, we would not have so many problems. But in that case, it would be hard to realize our socialist modernization.

The emergence of certain unhealthy tendencies within the Party should not be attributed only to outside capitalist influences. Some remnant feudal influences have also seized this chance to rise like floating dregs. Although the Party has always required its members to be armed with progressive ideology, the feudal thoughts that dominated our minds for so long are still quite influential today.

For instance, the problem of cadres engaging in business is actually a result of the bureaucrat-capitalism of the semi-feudal, semi-colonial system, and is particular to undeveloped commodity economies. After this problem appeared, the Party Central Committee immediately forbade cadres to operate businesses. Instead of limiting the commodity economy, however, the Party continues to encourage its development.

Nepotism detested by the public is also rooted in the autarkic small-production economy typical of China in which feudal influence is rife. It is not the reform and the open policy that have woven this intricate web of personal relations and clout, however. On the contrary, the progress of the reform and China's further opening to the world will eventually lead to the web's destruction.

The style of work of the Communist Party of China is, on the whole, sound. Moving back on to the Marxist track, the Party has revived and carried forward its traditional fine style of work based on seeking truth from facts, the mass line and self-criticism. Meanwhile, it has also become more democratic. On the other hand, the seriousness of some problems within the Party should not be overlooked.

The ultimate aim of the Communist Party of China is the realization of communism, with socialism as its primary stage. Our present endeavour to achieve the "four modernizations" and build up our country is aimed at realizing our lofty ideals. We have made much headway in economic construction. But if the unhealthy side of the Party's work style and social conduct are allowed to go unchecked, our economic success will lose its political value. The degeneration of a ruling Communist Party will certainly backfire to rot the national economy. If this were to occur, the cause for which the Chinese Communists and people have made such great sacrifices would be irrevocably lost.

China puts equal emphasis on material construction and the development of socialist culture and ethics, as well as on the reform and open policy and the improvement of the Party's work style. At present, China has focused its efforts on economic construction, the success of which is to be guaranteed by ideological and political work. The unhealthy trends and malfeasances are corrosive and counterproductive to material construction. Therefore, they must be eliminated in order that the reform and the open policy may succeed. ■

## Higher Learning Gets More Autonomy

Institutions of higher learning will be given more decision-making powers, according to the Provisional Regulations Concerning the Management of Institutions of Higher Learning recently promulgated by the State Council.

The aim is to enable the state to improve its guidance and management of the country's universities and colleges to allow them to better gear their work towards the needs of the nation's economic and social development.

While making clear the responsibilities of the State Education Commission in providing overall guidance to the country's universities and colleges, the provisional regulations also include clear-cut stipulations concerning the responsibilities and powers of the various state departments and local governments over the management of the institutions of higher learning.

The provisional regulations named eight areas in which the universities and colleges will be granted more autonomy. They are school running, finance, capital construction, personnel affairs, the hiring and job assignment of teachers, teaching, scientific research and academic exchanges with other countries.

According to the regulations, the institutions of higher learning will have more say in running inter-departmental and inter-regional schools. They will have the responsibility of accepting and training students as entrusted by the work places, as well as students who wish to pay their own tuition and recommending graduates for jobs for which they are qualified.

Within the budgets approved by the state, the universities and colleges will have more freedom to allocate their funds as they see fit. At the same time, they also may use the income from tuition fees

turned in by students and from technical and advisory services for their own development and as funds for collective welfare and individual bonuses.

The document also includes a provision to enlarge the power of the university and college presidents. It maintains that the presidents have the right to recommend appointments and dismissals of deputy presidents and leaders at various levels, and the right to hire or fire teachers and other staff members.

The universities and colleges will now have the right to readjust their curricula, draw up new teaching programmes and select their own teaching materials as to meet the social needs, the provisional regulations remarked. Without asking for more investment from the departments in charge of education, the universities and colleges may set up, either independently or jointly with

other units, scientific research institutions or organizations incorporating teaching, scientific research and production, and accept financial aid from production units and decide how the money should be used.

The regulations also encourages universities and colleges to expand academic exchanges with other countries through granting them more power in accepting contributions from abroad and deciding who will be sent for the academic exchanges.

A *People's Daily* commentary said universities and colleges, as the training centres for professionals, should be relatively independent entities for teaching and scientific research. Their management should conform to the laws of education, but rigid government administration in the past robbed the institutions of higher learning of liveliness, the commentary said. ■

Students in Nanjing University are active in providing advisory services to township enterprises.



## Enterprises Demand More Power

As Beijing and other parts of northern China are experiencing the worst heat wave in 60 years, the directors of some large and medium-sized enterprises in China are burning up with anger and anxiety. They want back their decision-making powers delegated to them since the beginning of China's current economic reform.

"It is two years now since the State Council issued 10 regulations on expanding the decision-making powers of enterprises in May 1984," said one factory director. "But the powers still have not reached us. Some powers were withdrawn as soon as they were given out." These are common complaints from many factory directors and enterprise managers today.

Chinese enterprises had few decision-making powers before major economic reform was introduced in 1978. Before then, all decisions were made by the state, resulting in low efficiency. Realizing the disadvantage of over-centralization of power, the State Council has issued a series of regulations on expanding the decision-making powers of the state-owned enterprises over the last two years. But many factories have reported that those regulations have not actually been carried out and the so-called expanded powers did not reach the enterprises but were intercepted and retained by their superiors and companies, the "companies" (administrative bureaus) that are in charge of the factories. Even worse, some companies have recently withdrawn the powers granted to the enterprises under the pretence of "correcting unhealthy tendencies," which has in turn seriously curbed the enthusiasm of the employees. Many enterprises that seemed on the verge of new life once again slacked off.

The powers that are most critical to enterprises, but are controlled by companies range from the freedom to arrange personnel to that of marketing. Some factory directors can appoint or remove only some of the intermediate executives and some have been totally deprived of this power. Most factory directors have no power to employ technicians or workers. The use of retained profits and wage increases have to be determined by companies, too. In terms of supply, the quotas of raw materials allotted to enterprises by the state often fall into the hands of these companies.

Although high officials have stressed time and again that co-operation between enterprises must base on the principle of volunteerism, many factories cannot choose their own partners without interference of the companies above them. Some departments have even forced the breakup of partnerships formed by their subordinate enterprises on their own accord; other companies have coerced some enterprises into co-operation with other enterprises not necessarily suitable for partnership.

One factory director told how his company superiors pushed his factory into co-operation with another factory, despite the fact that it had already entered into co-operation with yet another one. The director could do nothing but hand in his own resignation.

"Now the powers available to us really amount to nothing compared with the obligations we undertake," said Mao Yinghai, Party committee secretary of the No. 2 Print and Dye Factory in Jinan. "According to the regulations, enterprises have the right to employ workers and set up institutions, but we can't do so at all. It's difficult to expel a few workers by ourselves, let alone recruit workers in large numbers," he said.

"The regulations of the State Council do give enterprises the

power to do many things," said Zou Ruqing, director of the Jinan Chemical Factory in Shandong Province. "But when it comes to reality, all the mothers-in-law (the authorities) come along, leaving enterprises with little power in the end." Zou said, for example, that to fully reflect the principle of distribution according to one's work and encourage initiative among workers, his factory intended to enlarge the differences between working condition subsidies. But the company authorities insisted that the matter must first have their approval. They have considered it for two years but until now the matter remains unresolved.

It has been two years since the question of conflict between companies and enterprises was put forward, but it remains and appears to be getting worse in some places. With heavy responsibilities but little power, many directors have expressed feeling of constant pressure, and some are considering handing in their resignation.

A director in the electronics industry in Beijing said, "To break the current deadlock in urban economic reform, there must be a breakthrough in giving enterprises more powers."

Experience has shown that the more power the companies give to their subordinate factories, the better the factories run their business. The Baiyun Joint Co. of Agriculture, Industry and Commerce in Guangzhou, for example, has in recent years handed over control of the management of finance, personnel, materials, production and marketing to its subordinate enterprises. As a result, many enterprises subordinate to it have been doing roaring businesses. Over the past six years, the output value of the whole company has been growing by 52 percent each year, and profits by 49 percent. Last year its gross revenue of industry and agriculture stood at 350 million yuan,

and its profits surpassed 30 million yuan.

Many factory directors believe the key to carrying out the policy of allowing more decision-making powers for enterprises lies in comprehensive and corresponding reforms in other departments. They insist the power and obligation owed to enterprises be defined by law, and that the state must authorize an agency to look into the matter as soon as possible. ■

## Moral Education High on Agenda

**A** Chinese official called on all primary and secondary schools and kindergartens to place education of ethics on the same footing as intellectual and physical training, and criticized those who went single-mindedly after raising the percentage of students entering higher schools.

In his speech at a forum of childcare workers on May 26 to mark International Children's Day on June 1, Li Peng, vice-premier and minister in charge of the State Education Commission, stressed that in the education of children attention should be paid to communist ideology and issues of ethics, as well as intellectual development. "This is the fundamental task of the socialist education," he added.

The issue over education of children, particularly at a time when the population of only-children is rapidly growing, has come sharply into focus today. Selfishness, dependence, wilfulness and laziness, common traits among the only-children generation, have aroused anxiety and widespread attention.

The vice-premier pointed out that as China's only-children grow up, the chances are that many of them will have been spoiled, which in turn may have disastrous effects on society. Therefore the task of training this generation has

become urgent and more important today, he said.

He explained that education of ethics and morals for children should be conducted in a way to encourage them to gain respect for their nation and be proud of their own country, and also to train them to acquire the sense of collectivism and a positive attitude towards labour. They should also be taught to be hardworking, thrifty, self-confident and willing to help others. "Work must begin at childhood and undertaken by families, schools and society," he said.

Today's Chinese children are healthier and more lively and eager to learn. For this educators and parents pay great attention to the intellectual development of the little ones while failing to take as much care over their moral standards and social behaviour.

Meanwhile, the *Guangming Daily*, a national newspaper focusing on cultural, scientific and educational development, called on each and every Chinese citizen to set an example for the children in fostering good manners and observing discipline.

"Education of children is not only the responsibility of teachers and parents, but of all Chinese citizens at large," the paper said. "Your work and actions will have a great influence on the young minds." And this requires everyone to strengthen their sense of social responsibility, which concerns the nurturing of a new generation with the lofty ideals of communism.

The paper calls on all government departments, organizations and army units to create a better social environment for the healthy upbringing of children, including welfare facilities and recreational centres.

To help promote moral education among children, the State Education Commission has required that all primary schools offer a course on communist ideology and morality—a major

## News in Brief

**C**hina should rely mainly on its own products to push ahead with its modernization drive instead of importing large amounts of foreign equipment, Vice-Premier Li Peng said recently. It was essential for industry to be supplied with as much Chinese-made equipment as possible, Li said. He pointed out that the import of advanced technology and equipment was still needed to raise the technological standards and speed up the modernization programme. ■ ■ ■

**A** comprehensive plan to improve China's environmental protection was announced on June 6 at a meeting marking the 14th International Environmental Day in Beijing. The new programme, which includes schemes for the prevention and reduction of pollution, the technological transformation of industrial firms, more state supervision, the exploration of new resources and formulation of new regulations, will be implemented throughout the country over the next five years. ■ ■ ■

**E**xperts have urged society as a whole to take notice of the country's serious problems of soil erosion, land infertility and deteriorating ecology. According to statistics, more than 1.5 million square km of land—about one-sixth of the whole country—suffered soil erosion in the early 1950s, of which two-thirds still needs serious attention.



## Private School Succeeds

Wang Jiaxiu (middle), a young woman of Dingyuan County, Anhui Province, set up a primary school for girls in her own house in 1985 and recruited more than 60 students. Last May 27 students of the school took part in a township examination and brought in some excellent results.

mark of education in a socialist country.

Recently it is not uncommon to see discussions, meetings and various other activities sponsored throughout the country for the purpose. A cornerstone laying ceremony for a monument dedicated to young Chinese heroes was held on May 31 at the Soong Ching Ling Scientific Children's Park in Beijing.

"The purpose of building the monument is to let all the Chinese children remember young heroes who laid down their lives for the Chinese revolution, such as Liu Hulan, a girl who died a heroic death in 1947, and Han Yujian, who saved a drowning child with her life," said Hao Jianxiu, member of the Secretariat of the CPC Central Committee. "The revolutionary spirit of the young heroes must be carried forward by all children the country's builders of tomorrow," she added. ■

## Alumni Societies Link Old Classmates

On a recent Sunday morning in a crowded hall at Beijing University, more than 400 elderly people gathered to reminisce about their college days. The classmates were celebrating the 40th anniversary of the return to Beijing and Tianjin of Beijing, Qinghua and Nankai Universities. During the War of Resistance Against Japan (1937-45), the three universities had banded together in Kunming, Southwest China, to create the Southwest Joint University.

The reunion of the former classmates brought back to them memories from 40 years ago, and apparently gave them back their youth again. They talked and laughed away, totally oblivious of the lapse of time. Since the founding of the Beijing Alumni

Association of the Southwest Joint University in 1983, they have had several of such meetings. Through the association, the alumni also have restored contacts with former classmates working and living abroad.

Many alumni associations have sprung up throughout China over the last few years. In Shanghai there are now about 40 alumni associations of colleges and universities. Such well-known universities as St. John's, Hangchow and Nankai, have set up alumni associations in many parts of the country, and in Hong Kong, Thailand and the United States.

These alumni associations organize various activities for their members and help to put old classmates in touch with each other. They also compile materials about the history of their alma mater, and publish journals and magazines through which the alumni are told what is going on in their universities and how their old friends are getting on with their jobs and lives. The associations also make special efforts to get in touch with those alumni now living outside China, inviting them to come back to visit their homeland, give lectures and help with the academic work at their old universities.

Since its founding in December 1984, the Shanghai Alumni Association of St. John's University has received many alumni from the United States, held dances, shown movies and has arranged for all types of get-togethers. It is also preparing to set up a teaching centre of Chinese for the children of overseas alumni as well as foreigners who are interested in learning Chinese.

The alumni associations also provide social services, such as offering consultation, lectures and classes. The Alumni Association of Nankai in Chengdu, for example, has established a science and technology service centre to offer classes on courses ranging from English to fashion design.



and to help factories train technicians.

As self-organized and self-supported organizations, alumni associations are very much welcomed by the people. Because

the alumni studied at the same school, some held the same majors or were taught by the same professors, and therefore have a lot in common and feel a sense of intimacy.

## Zhao Greets Brazilians Guests

**P**remier Zhao Ziyang said in Beijing on June 2 that there were broad prospects for the growth of Sino-Brazilian relations and co-operation both in political and economic fields.

He made these remarks at a meeting with a delegation from the State of Parana of Brazil, led by its former state governor Hose Richa. The delegation will go to Hangzhou to sign an agreement on the establishment of friendly ties between Zhejiang Province and the State of Parana.

Richa handed a letter from Brazilian President Hose Sarney to Premier Zhao. In his letter President Sarney expressed his wishes for further strengthening Brazil-China friendship and co-operation.

Zhao said he shared the same desire with President Sarney. He praised the Brazilian people's achievements in their economic construction and for their efforts to overcome difficulties. Zhao said the two countries have much in common and should learn from each other's experiences. He cited Brazil's experience in combining the use of foreign funds with the development of its natural resources.

The Chinese premier briefed the visitors on China's economic situation, and expressed his confidence in its future development. "We have found the way of building China in the light of its concrete conditions," he said.

Richa said many Brazilians wanted to know more about China despite the distance separating the two countries. The two countries should develop their cultural exchanges and strengthen economic contacts for their countries' prosperity.

Chinese Premier Zhao Ziyang talking with the former Brazilian state governor of Parana, Hose Richa and his party.



## China & the World

### ■ China Condemns Japanese Textbook Distortion.

A number of entries in a new Japanese history textbook are "contradictory to historical facts," a Chinese Foreign Ministry spokesman said on June 4. "The Chinese government has solemnly stated its position on several occasions, and the Japanese side has also promised to see to it that the errors in the textbooks be corrected," he said. "Regrettably, the Ministry of Education of Japan has once again done something that hurts the feeling of the Chinese people and the people of other Asian countries."

### ■ Huang Hua Meets Indian Senior Editors.

Huang Hua, vice-chairman of the National People's Congress Standing Committee, on June 4 told a group of senior editors from India that there existed conditions for China and India to expand bilateral trade and economic, technological co-operation. The two countries could expand exchanges in culture, education, science and technology as well as family planning, he said.

### ■ China, Kuwait to Build Garden Villas.

China and Kuwait will jointly build and run residences for foreigners known as "Garden Villas" in Beijing, according to a contract signed in the capital on June 2. This is the largest investment in China by a Gulf country in a residential project. The total investment for the project, to be completed by the end of next year, will be US\$70 million.

UN SPECIAL SESSION

## Programme Cautiously Received

*The resulting document of the six-day United Nations special session on Africa has been welcomed by African states with both skepticism and relief.*

**A**frican countries have cautiously welcomed the final document adopted unanimously by the Special Session of the United Nations General Assembly on the critical Economic Situation in Africa that ended on June 1.

The 13th special session of the United Nations, the first ever devoted to Africa's economic problems since the establishment of the United Nations in 1945, was attended by ministers from more than 80 countries and addressed by representatives from nearly 100 countries and organizations in which they expressed their sympathy and support for the difficult situation in Africa.

The final document, entitled 'UN Programme of Action for African Economic Recovery and Development 1986-1990,' was drawn up on the basis of a five-year economic recovery plan submitted by the Organization of African Unity (OAU).

The 200-page programme addressed medium- and long-term development goals for the region. It analyzed the root causes of the prolonged underdevelopment of Africa and pointed out that, aside from prolonged colonial exploitation of natural resources and a consequent lopsided growth of the African economy, lack of necessary economic reforms and low productivity are responsible for the impoverishment of the continent. The weakness and failure in the African economy include insufficient investment in agriculture, lack of incentives for farmers, inadequate attention to scientific research, unreasonable

price policies and dependence on import and single-item patterned export, the document says.

But the UN resolution did not contain any firm financial commitment by some of the developed countries to the programme which requires US\$4.6 billion if it is to be fully carried out. And other issues such as debt relief, guaranteeing of commodity prices and improving world trade remained vague at the session.

However, Senegalese President and current OAU Chairman Abdou Diouf still regarded the

session as "a turning point in African history." Diouf said the session had served a vital purpose by focussing attention on the need for broad international action to solve one of the burning problems of the day. The programme presented by Africa involved a total sum of US\$128 billion, the greater part of which is to be raised by African states themselves. This shows that the African people are determined to make all necessary sacrifices to lift the continent's ailing economy from the doldrums.

Africa, an ancient continent with abundant natural resources, has now fallen on hard times. Farmland south of the Sahara is slowly being swallowed up by rolling sand and many African countries are plagued with serious drought, overpopulation and starvation.

In recent years Africa's annual population growth of 3 percent has outstripped its 1.5 percent annual increase in grain production. The population of the

## Four-Point Proposal For Aiding Africa

**T**he four-point proposal for aid to Africa issued by chief Chinese delegate He Kang at the Special Session of the UN General Assembly on the Critical Economic Situation in Africa is as follows:

(1) To seek an increase in aid to African development, particularly for agricultural and food production to help them attain self-sufficiency.

(2) The creditor countries will share the burden of the African debtor countries and help them to promote their economies. At the same time the two sides should rearrange the debt through consultations. The developed

countries should ease the debt burden of the debtor countries by extending repayment schedules, reducing or liquidating debts, in accordance with varying conditions.

(3) To eliminate protectionism, open up more markets to African countries particularly by removing non-tariff barriers, raise and stabilize the export prices of African primary products and provide assistance for the African countries to enhance their capability in processing, marketing and transporting their export products.

(4) To expand the inflow of capital to African countries by softening credit terms, providing preferential treatment in loans, lowering interest rates and increasing their quotas in the International Monetary Fund (IMF).

continent is expected to grow to 2 billion in 50 years. The total African external debt climbed to US\$170 billion in 1985, almost half its total Gross National Product, according to the latest statistics released by the International Monetary Fund.

In an opening speech at the six-day session Diouf said that the African states had singled out farming as the most important element of the programme. Diouf said these countries plan to allocate up to 25 percent of future resources to agriculture, compared with around 8 percent at present. The current session would yield promises of about US\$45.6 billion from developed and other wealthy countries to a five-year US\$128 billion economic recovery programme.

The African programme has won wide support in the United Nations. Most countries share the African countries' view on giving priority to agriculture and support their decision to reform the agricultural policy to stimulate agricultural productivity.

With regard to the issues of debt and foreign investment, many developing countries have argued that Western countries that plundered the African economy during the colonial period have a special responsibility because they have played an undeniable role in the impoverishment of the continent. Non-African developing countries have asked the developed countries to increase their aid but not to divert aid from other regions to Africa.

Speaking on behalf of the Group of 77, a group of developing countries, Raif Dizdarevic, federal secretary for foreign affairs of Yugoslavia, said that the group viewed the African programme "with full understanding and support." He urged the developed countries to "fulfil their special responsibility" in rendering their contributions to a faster development of Africa. K.R. Narayanan, the Indian minister of state for external

affairs, speaking on behalf of the non-aligned countries, stressed that structural reforms in the global economic system were essential for tackling the critical economic situation in Africa. The collapse of commodity prices, rising and expanding protectionism, adverse terms of trade, high interest rates, the heavy burden of debt and debt-servicing obligations and other factors had imposed unbearable burdens on Africa, he added.

Speaking for the European Economic Community (EEC), representative of the Netherlands Eegie M. Schoo said the EEC fully supported the attention the African programme paid to food and agricultural sectors. On the African debt problem, she said her country had already converted into grants official development assistance loans to the least developed countries. The Netherlands was prepared to cancel all debt service on ODA loans to the African low-income countries in the coming five years, she said.

French Minister of Co-operation Michel Aurillac said that his country would devote more than 25 billion francs (about US\$2.5 billion) to ODA this year and had also decided to increase the share of grants in its ODA.

Addressing the closing meeting, UN Secretary-General Javier Perez de Cuellar expressed his "satisfaction" at the results achieved by this session. The realization of the African economic recovery, he said, "will not only fulfil the hopes and aspirations of the people of Africa, but also contribute immeasurably to the economic and social well-being of all the world." Chief Chinese delegate and Minister of Agriculture, Animal Husbandry and Fishery, He Kang noted that the achievements of the special session would open up new prospects for the African countries and the international community to join their efforts to revitalize African economy. ■

by Chang Qing

## PHILIPPINES

### First 100 Days Bring in Results

*During the first 100 days of President Corazon Aquino's government, some substantial groundwork has been laid. But the entire nation needs to pitch in to achieve economic recovery.*

Since President Corazon Aquino took power in the Philippines on February 25, her administration has adopted a series of measures for the political and economic recovery of the country.

On the political front, true to its election promises, the Aquino government has released more than 520 political prisoners jailed under the rule of ousted President Ferdinand Marcos, and has restored the right of habeas corpus and other basic freedoms. It has

scuttled the political machinery of the Marcos regime by abandoning the Marcos-controlled parliament and dismissing central and local officials loyal to him. It has also begun to draft a new constitution in a move to ensure long-term stability.

In an effort to restructure the armed forces, the new government has retired more than 30 generals who had close connections with Marcos. The national intelligence and security authorities, the presidential guards and some

other units controlled by former Chief of Staff Fabian Ver have been disbanded.

These measures have put President Aquino, the Philippines' first woman president, in command. Results of a recent public opinion poll showed that the majority of Filipinos have regained their confidence in the government, despite repeated demonstrations against Aquino by Marcos followers.

Diplomatically, the new government has tried to enhance its relations with the United States, Japan and other developed countries, and also with its fellow ASEAN nations—Malaysia, Thailand, Brunei, Singapore and

Indonesia—as well as China and other developing countries. The Philippines has thus regained good standing around the world.

Foreign aid is forthcoming. Altogether a total of US\$1.2 billion in loans and grants have been committed. US Secretary of State George Shultz recently said that it was the "critical time" for the United States to support the Filipino people in achieving "a revitalization of their democracy" and a "rejuvenation of their economy." Shultz disclosed that the US government was seeking about US\$500 million in economic assistance and more than US\$100 million in military assistance for the new government.

The government has also taken determined steps to rescue the nation's troubled economy. The ill-gotten assets of Marcos have been frozen, the monopolies in the sugar and coconut trade broken up, and oil prices reduced twice. Aquino's government has launched a US\$500 million emergency programme to provide employment for the jobless. The government is also putting together a comprehensive economic recovery programme that will reform the structure of the economy and lay emphasis on agriculture, stimulate the private sector, particularly small and medium-sized businesses, and increase exports and tourism.

These economic measures have yielded some initial results. The peso exchange rate has been stabilized, interest rates have dropped from more than 30 percent to 15 percent and the treasury bill rates have also dropped from 28 percent to 14 percent. The inflation rate has dropped to a record low of 2.1 percent from 50 percent in 1984 and 23 percent in 1985. The reserves have risen by 85 percent, from US\$911 million in February to US\$1.7 billion now.

Of course, not everything looks clear and bright on the horizon. The mess left over from 20 years of Marcos rule requires a cleanup programme that will take some time to carry out.

The economy is burdened with a huge foreign debt of US\$26 billion, coupled with high unemployment and massive poverty, which is more severe than the Aquino forces had estimated during their campaign. Aware that it's an uphill battle, the government has embarked on what it calls the "second revolution" to improve the economy and rebuild the nation. It is considering further policy adjustments in the interests of both labour and capital and to enhance the climate of confidence for domestic and foreign investors.

**About 200,000 Filipinos celebrating on May 25, marking one hundred days since the Marcos regime was overthrown.**



Besides economic restraints, political troubles also linger in Manila. About 4,000 Filipinos, mainly supporters of Marcos, staged a rally in the capital on June 1 opposing the drafting of a new constitution. Sporadic clashes were reported, injuring six persons. Furthermore, conflicts are mounting among the cabinet

members and between the government and the military. Anxiety over political upheaval is in the air. On June 4 President Aquino urged the Filipino people to bury their differences and commit to the common task of national economic recovery. ■

by Zhai Shuyao

US-USSR

## SALT II Becomes Focus of Dispute

*The latest quarrel between the United States and the Soviet Union over the SALT II treaty is casting doubts over the second Gorbachev-Reagan summit.*

**H**aggling over nuclear disarmament for years, the two superpowers have recently fallen into a new quarrel about the Strategic Arms Limitation Treaty (SALT II), thus raising doubts about the prospect of a Soviet-US summit later this year.

SALT II was signed by the late Soviet leader Leonid Brezhnev and former US President Jimmy Carter in 1979 after eight years of negotiations. It limits the number of missiles capable of carrying multiple warheads in each country's arsenal to 1,200, and sets a ceiling of 1,320 on the number of air-launched cruise missiles for each side.

After the Soviets invaded Afghanistan in late 1979, the US Senate refused to ratify the SALT II agreement.

The current dispute was set off on May 27 when US President Ronald Reagan announced that since the Soviets frequently had violated the treaty, the United States would take the "nature and magnitude" of the Soviet threat as the starting point in its development of nuclear forces instead of following the restrictions set up by

SALT II. But, he said, the policy would not be put into effect for the time being and whether the United States would adhere to the treaty depended on Soviet behaviour in the following months.

Reagan has been a vocal opponent to the treaty, calling it "fatally flawed" and an agreement that does nothing for the United States.

However, because of domestic pressure and that of US allies and differences within his administration, Reagan had declared that the United States would not undercut this treaty as long as the Soviet Union abided by it.

In a May 28 commentary, the Soviet official news agency TASS charged the United States with harbouring a scheme to "ensure unilateral military advantage." Some Kremlin officials declared that the Soviet Union would take necessary countermeasures to defend itself and its allies if the White House abandoned SALT II. They warned that the upcoming Soviet-American summit would be jeopardized as long as Washington maintained its hard stand against the SALT II treaty.

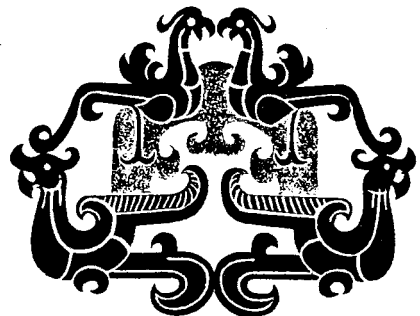
Moscow warned in a sharply worded statement that the Soviet Union no longer would be bound by the two SALT treaties and would take necessary measures to prevent the strategic equilibrium from being damaged once Reagan put his May 27 decision into effect.

There are reservations both in the United States and among its West European allies about the shift in US policy. Robert McNamara, former US defence secretary, pointed out that to undermine SALT II would mean abandoning the arms control structure established by four US presidents in the last 20 years, and as some experts have said, would spark a surge in the arms race. During a meeting of NATO foreign ministers that closed May 30, almost all the West European representatives demanded Washington reconsider its SALT stand.

Meanwhile, many US congressmen have sounded warnings of harmful consequences due to the abandonment of the treaty. Some of them are busy with introducing new amendments to prohibit the use of funds for nuclear weapons.

Kenneth Adelman, director of the US Arms Control and Disarmament Agency, however, said there was still room to change the current situation if the Soviet Union took constructive steps on arms control during the next few months. ■

by Shi Lujia





CHANGZHOU'S URBAN REFORM (1)

## An 'Economic Star' Rises Through Reforms

*The following is one of a series of four articles on changes in Changzhou, Jiangsu Province. As one of the cities chosen to pioneer economic structural reforms by the State Council in 1982, Changzhou has followed the state policies faithfully and worked hard to build itself up. Changes that have taken place there in the last four years demonstrate the profound influence of the ongoing "second Chinese revolution."*

by Our Correspondents Xia Zhen and Yue Haitao

Arriving in Changzhou, one finds an airport with distinct local features (see photo spread of this issue). Its runways and parking lots are encircled by a moat near which towers a pavilion-like building topped with glazed tiles and upturned eaves. This scenery reminds you that Changzhou is already 2,500 year old.

Though not one of China's largest, Changzhou's airport, built with local and state funds, was completed in less than six months between October 1985 and March 1986 in order to cope with the city's increasing foreign contacts. The construction speed, nearly 67 percent faster than planned, is a record in the history of Chinese airport construction. The project is indicative of Changzhou leaders' foresight and efficiency, which has in the last few years elevated the city to the status of one of China's 10 "economic stars."

(In 1983 three counties were put under its jurisdiction, bringing the total population to 3.06 million). Because it is virtually devoid of mineral and energy resources, the city has never enjoyed any priority in state financial allocations. Changzhou's prosperity, therefore, has been achieved under difficult conditions. Its achievements since the 1950s, and particularly since 1979 when the Chinese government implemented the open policy and launched its economic reform plan, have been impressive. Changzhou logged an average annual increase of 10.8 percent for its industrial and agricultural output value from 1953 to 1985. During the Sixth Five-Year Plan period (1981-85), the rate was 15.7 percent. Although the rate is not the

nation's highest, Changzhou's productivity is noteworthy.

In 1985, for example, each person in Changzhou proper produced an average of 11,300 yuan worth of industrial output, contributing 3,100 yuan to municipal revenues (exclusive of income from tertiary industries) and 1,366 yuan to local financial income. The per-capita productivity of state-owned industrial enterprises amounted to 27,000 yuan. These figures combined to bring Changzhou to the forefront of the nation's medium-sized cities for four straight years. In 1985, Changzhou delivered 1 billion yuan to the state treasury, more than the input of Guangdong, a fairly large province in south China.

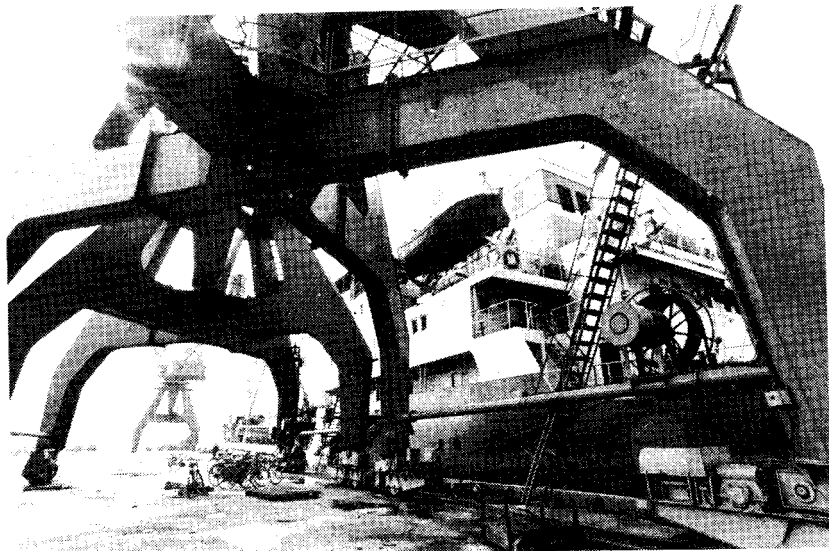
Changzhou's success has been a

Zhangjia Harbour north of Changzhou.

### Quality Means Success

Many people regard Changzhou Airport as a symbol of "Changzhou speed." Considering the quantity and quality of the work, however, it may be more appropriate as a reflection of "Changzhou efficiency."

Half way between Shanghai and Nanjing on a sweep of alluvial plain on the lower reaches of the Changjing (Yangtze) River, Changzhou has a population of 530,000.

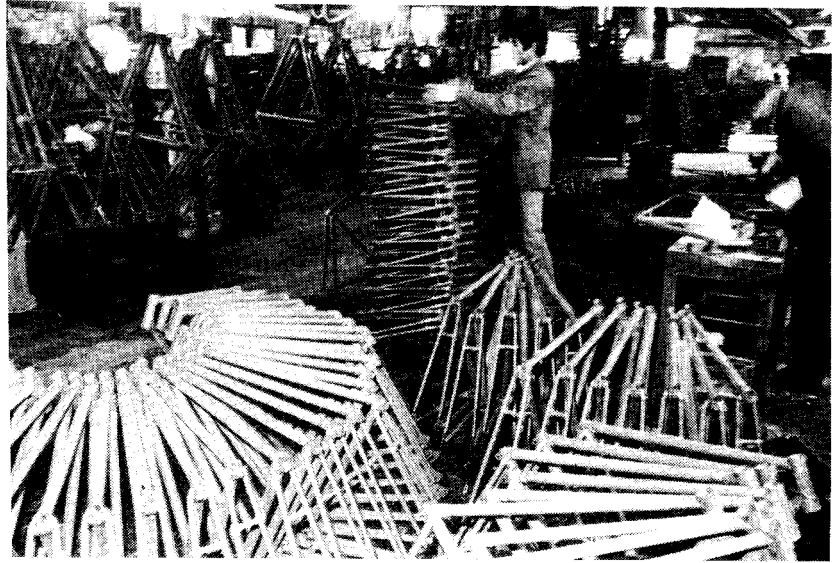


magnetic draw for economists wanting to explore the reasons behind the improvements. After much investigation, economists concluded that entrepreneurs in Changzhou began to improve product quality and increase varieties more than 20 years ago, earlier than their colleagues in other cities across the nation.

The corduroy manufactured in Changzhou, for example, has been awarded a state gold medal for its high quality. First marketed in the 1960s, Changzhou's corduroy has always sold well in China and abroad. In 1985 when there was a recession on the world market, corduroy makers round the world suffered as world sales dropped by 40 percent. During this period, however, Changzhou secured orders for 28.49 million metres from foreign businesses, making up 60 percent of Chinese corduroy exports that year. In addition, their 1985 sales equalled the total corduroy output of the United States and Japan for the same year. Experts predict that Changzhou's corduroy exports will increase by another 20 percent in 1986.

Changzhou also manufactures more than 200 varieties of quality products, including walking tractors, diesel engines, the new Golden Lion bicycles, Hongmei cameras and Globe radio cassette recorders. Forty of these products have won state gold or silver medals, and 173 others have been awarded quality product titles at the provincial or ministerial level. These brand-name products have become the city's ready source of income, foreign exchange earnings included.

In 1981, Premier Zhao Ziyang said China's industrial producers tended to pursue quantity at the expense of quality and they paid more attention to the construction of new factories than to updating the existing factories. Zhao, therefore, appealed to cities and towns to tap the potentials of their own enterprises, increase varieties and improve product quality,



A workshop of the Changzhou Bicycle Factory.

achieve better economic results at steady speed, all for the benefit of the people. Changzhou followed Zhao's directive to the letter and has set an example for others to follow.

### Quality of Life

Changzhou exudes harmony, forges co-ordinated work relationships among government institutions, factories, neighbourhood committees and rural areas, and strictly enforces orders and prohibitions. Leading a fast-paced life, Changzhou residents pay much attention to work efficiency. Social order is also good, and red-tapism and irresponsible practices are rarely seen in Changzhou. These good points can be attributed to the public's efforts to create a favourable social environment for the ongoing economic structural reform and the people's well-being.

In the last few years, Changzhou has improved its infrastructure by constructing new transportation, telecommunications, retail, banking, cultural, educational, medical and tourist facilities. Changzhou's recent massive housing construction has fundamentally changed the city's

skyline. Since 1979, Changzhou has been pressing ahead with construction of apartment buildings at an annual rate of 300,000 square metres. Many families have now moved into new residential areas. One such area is Qingtan Village (see photo spread), where there are 123 six-storey buildings and a club in the village centre. Equipped with various recreational facilities and a canteen, the club draws visitors of all ages. The construction boom has also spread to the rural areas, where most of the tiled houses have made way to three-storey buildings.

In recent years, Changzhou has been trying to improve its environment, social order and service. As a result, Changzhou has the best social order and the lowest rate of newborns and traffic accidents among 13 cities in Jiangsu province. In 1985, the city's crime rate dropped to 0.05 percent, while the percentage of families with only one child went up to 98.6 percent. Changzhou has also successfully solved the unemployment problem. At present, each working person in Changzhou supports an average of only 0.3 people.

Changzhou, however, is not trouble-free. In the old city area traffic bottlenecks and jaywalkers



often make getting around difficult, and its noise and industrial pollution remain unsolved.

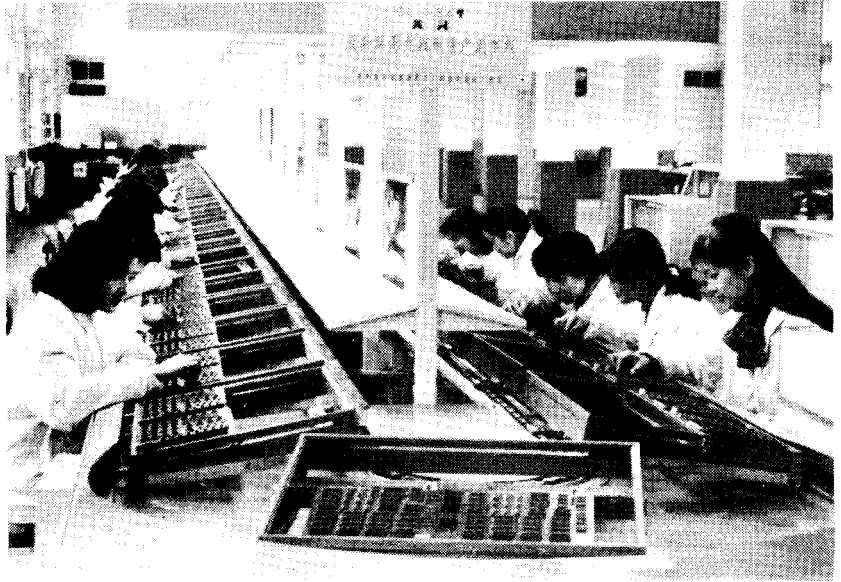
## Promising Tourist City

Because Changzhou lacks the beauty of two of its sister cities — Wuxi which is known for its Taihu Lake and Suzhou which is famous for its city gardens, many people thought Changzhou would never become a tourist attraction. But they were wrong.

Archaeological findings unearthed in Changzhou date back to the Neolithic Age and indicate that the city was first built 2,500 years ago. Because of its ancient relics Premier Zhao Ziyang suggested that Changzhou be included in the 12 cities to be developed into tourist areas during the Seventh Five-Year Plan period (1986-90). Changzhou is now working towards this end and has begun renovating its historical ruins.

Changzhou's scenic spots include the Tianning Temple, built 1,300 years ago during the Tang Dynasty, and which is known as the "No. 1 Buddhist Temple in southeast China" for its magnificent and exquisitely carved Buddhas; the 50-metre-high Writing Brush Pagoda built during the Northern Song Dynasty (976-984 AD); and Hongmei Park whose 37 hectares include beautiful gardens and a scenic lake.

Changzhou has also announced plans to develop Yancheng city in a suburb (see photo spread). Built during the Western Zhou Dynasty (about 3,500 years ago) for King Yan, Yancheng is the oldest and most complete ancient city. It had three layers of city walls each surrounded by a moat, which are still faintly visible, and the interior, which is replete with peach and willow trees, is quiet and peaceful. Dugout canoes and earthenware found here bear patterns different from those unearthed in the Huanghe (Yellow) River valley, further proving



CHEN ZONGLIE/BEIJING REVIEW

Workers on a production line at the Changzhou Radio Factory.

that the Changjiang (Yangtze) River valley is the other cradle of Chinese culture. The ruins have attracted a number of Japanese tourists to Yancheng. Some have predicted that further excavation at Yancheng will leave the area as attractive as Emperor Qin Shi Huang's tomb in Xian, where terra-cotta horses and warriors are now on display. The excavation at Yancheng has been listed as part of the Seventh Five-Year Plan.

With a culture of several thousand years, Changzhou residents today have inherited an understanding of the value of knowledge and talent. In 1977 and afterwards, when well-educated people were still discriminated against in many parts of China due to the lingering "leftist ideology" of the "cultural revolution," Changzhou boldly adopted a preferential policy towards intellectuals. It recruited 4,700 scientists and technicians from the other cities, or 16.7 percent of its present population of scientists and technicians. The move was pivotal to the city's economic development. To meet new challenges posed by higher levels of economic construction, Changzhou has four institutions of

higher learning, which have enrolled 8,700 students. In addition, the city runs 39 secondary technical and vocational schools in which the student body grows annually.

## Practical and Realistic

In addition to tourism, Changzhou also attracts visitors interested in learning from Changzhou's experience and others who come for business talks or meetings.

On a recent visit to Changzhou, a deputy mayor of Xingtai, Hebei Province, said "Though Changzhou's progress has been remarkable, some of its methods are not applicable to Xingtai. Changzhou is flexible in getting small state enterprises managed by the collectives, and its various departments operate so well together that some seemingly impossible things have been done. However, if these things were tried in Xingtai, they would get stuck at the financial or taxation levels. Officials there would use documents transmitted from superior departments to bolster their



argument that these things could not be done in Xingtai.”

Changzhou has been not only flexible, but realistic as well. Even before the reforms were announced for the nation, Changzhou had already adopted some unique measures for the development of its industry. As early as the 1950s, Changzhou began to diversify the varieties of its products and to improve product quality. In the meantime, it also organized specialized and co-ordinated production and readjusted its in-

dustrial structure and enterprise organization. Changzhou, however, was not free from the influences of “leftist” policies. In 1958 when the “great leap forward” swept the country, Changzhou was involved in the campaign of building small, indigenous furnaces to make steel. Changzhou also suffered a lot during the “cultural revolution”. In 1970 it even romantically tried to make airplanes, but failed.

“Changzhou people are sagacious,” said a Beijing journalist.

“Furthermore, they are quick to correct their mistakes.” This is why Changzhou was able to minimize its losses, he said. For 30 years before 1978, he said, economic development in Changzhou was generally smooth.

The flexible policies of the central government adopted in the last few years have given Changzhou much room to manoeuvre. In carrying out these policies, however, Changzhou has never forgotten to integrate the basic policies with its local conditions by either complementing what is inadequate in the policies or changing what is unsuitable for its specific circumstances. This practice has proved successful.

While explaining this, the Mayor of Changzhou, Chen Hongchang, said, “We are no more intelligent than others. We have followed such a tradition based on years of experience: Whenever a mayor or a municipal Party secretary fails to study economics and understand business, he won’t be able to hold his ground.” He said Changzhou cadres persisted in boosting production during the “cultural revolution” even when their houses were ransacked for doing so.

Marx once said production is basic to human beings and cannot be suspended for a single day. Changzhou, it seems, has not forgotten this.

In the last few years, the Changzhou leadership, including nine standing committee members of the municipal Party committee and one mayor and five deputy mayors, has gotten younger, from an average of 55 years old in 1980 to 45 years old. Most of the young leaders are better educated and were promoted from enterprise leadership. They understand, therefore, not only economics but also state policies, and they have been known to delve into local enterprises in search of problems and solutions. In the urban

A new residential area.

CHEN ZONGLIE/BEIJING REVIEW



# Changzhou Profits From Reforms

**O**n April 2, in an interview with *Beijing Review*, Chen Hongchang, mayor of Changzhou, Jiangsu Province, discussed his city's reform progress and its plans for the future. Chen said the essence of China's economic reform involves reducing excessive public ownership and changing overcentralized management, so as to make them suitable to China's present productive forces. This reform, he said, however, will not lead to capitalism, or mixed socialist-capitalist economy.

**Beijing Review: How do you evaluate Changzhou's economic reforms?**

**Chen:** Changzhou is one of the cities designated by the State Council in March 1982 to experiment with economic reforms. Prior to this, guided by the

central government's open policy and reform measures, we had tried some reforms in individual

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*China's economic reform envisages, in essence, reducing excessive public ownership of the means of production, changing overcentralized management and adapting them to the present level of the productive forces.*

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departments. In the past four years, we have carried out comprehensive, systematic

economic reforms, and our actions have received the earnest support of many government leaders. We are still, however, involved in replacing the old system with the new. Previous experience proved the reform to be successful and its direction correct. Thanks to the reform, our achievements during the Sixth Five-Year Plan period (1981-85) surpassed those of the 30 years before 1978.

In 1985, the city's gross industrial and agricultural output value reached 11.59 billion yuan, double that of 1980. Its average annual growth rate was 15.7 percent between 1981 and 1985, well above the 10-percent level sustained between 1949 and 1978. Now Changzhou is one of the 15 cities in China with an annual industrial output value exceeding 10 billion yuan. The city's revenue between 1981 and 1985 amounted to 3.968 billion yuan, which also topped the total of the previous 30 years. This meant an average annual increase of 8.4 percent. During the same period, the city's retail sales rose an average of 18.3 percent a year, and its urban and rural living standards rose 10 percent annually (with price hikes factored in). A total of 1.92 million square metres of new housing was completed in the five years, 1.8 times as much as the housing completed in the previous 30 years. Scientific research, education, culture, public health and other undertakings have also developed apace.

Furthermore, as Changzhou

**Changzhou Mayor Chen Hongchang (left) talking with our correspondent.**

CHEN ZONGLIE/BEIJING REVIEW



economic reforms, these younger leaders are more open-minded and often show much foresight in breaking with the old practices and embarking on new roads. In working out plans and appro-

aches, they have also been prudent enough to try to avoid major twists and turns. Because of such attributes, Changzhou's new generation of leaders are valued by the nation's top leadership, which

decided in 1982 to make Changzhou a pilot city of economic reforms. Details of the progress made in Changzhou will be covered in the rest of this series. ■

# CHANGZHOU

Though 2,500 years old, Changzhou is now one of China's rising urban stars, and in 1985 was one of the nation's 15 cities each with a combined industrial and agricultural output value of 10 billion yuan.

All the unsigned photos were taken by our photographer Chen Zonglie

Changzhou's Writing Brush Pagoda (c. 1st century), which is 48 metres high.

Chang Xin

Qingtian Village, a new residential district. One-third of Changzhou's residents live in buildings like these built in the last 30 or more years.





Changzhou now produces more than 2,000 varieties of brand name corduroy, sold in 75 countries and regions.

**Chang Xin**



Model S-195 diesel engines produced by the Changzhou Diesel Engine Plant, which have won two state gold medals, are exported to 63 countries and regions.

**Chang Xin**



The Jet Looming Workshop of the Changzhou No. 1 Cotton Mill.

**Chang Xin**



Changzhou Airport recently opened to air traffic.

Students of the Changzhou Industrial Technology College working in a lab.

**Chang Xin**





Golden Lion bicycles of Changzhou making are favourites of local residents and have been rated as a brand name product. Chang Xin



The China Changli Enterprise Co. Ltd. is a Sino-foreign joint venture that makes electronics components.



Comb-making dates back 1,000 years in Changzhou. A comb maker at work (top photo). Reproductions of hand-crafted wooden combs.



Zhangjia Harbour by the Changjiang River, north of Changzhou.



A market operated mainly by private traders.



Xue Huanxing, a farmer, specializes in clam breeding and harvested 100,000 yuan worth of pearls in 1985.



Xue Huanxing and his family planting pearls in clams.

A distant view of the inner moat of Yancheng, an ancient city that awaits excavation.



mainly develops processing industries, many of its raw materials have to be shipped in from other places. In recent years, the city's industry has been threatened by inadequate supplies of electricity and by increasing prices for raw materials. Had it not been for the reform, our achievements would not have been possible.

**BR: What is the essential problem of the reform, and what major breakthroughs have you made?**

**Chen:** The aim of the reform is to build socialism with Chinese characteristics, or socialism conforming to China's conditions. In the past we held that in building socialism, the larger the scale of socialization the better. We pursued a high level of public ownership of the means of

production. In contrast, we now institute the reform with a better understanding of socialist theories. In my opinion, the reform essentially envisages reducing the excessive amount of public ownership and changing the over-centralized management methods, so as to make them suitable to our present productive forces. Reform does not mean regression to capitalism, but rather developing production in accordance with the requirements of a planned socialist commodity economy.

To do so, we should solve the problem of how to achieve a rational distribution of power and interests. From both political and economic points of view, businesses are the basic units in China. Therefore, invigorating businesses should be the starting point, as well as the end-result of the reform. With this in mind, we should delegate management authority to enterprises and ensure that they gain the interests commensurate with their economic performance. Only in this way can the employee's enthusiasm be sparked and can enterprises assume their responsibilities as both producers and managers.

In recent years, Changzhou has made some breakthroughs in invigorating its enterprises.

First, while maintaining the supremacy of the role of state-run enterprises, we have boosted the small collectively owned businesses and revived private businesses. In general, urban collective enterprises are managed flexibly; their tax rate is comparatively low, and they assume sole responsibility for their own profits and losses. This explains why collective enterprises have developed rapidly and their economic performance has improved markedly. Currently, collectively owned enterprises make up more than 60 percent of Changzhou's enterprises, and their industrial output value, more than 30 percent of the city's total.

The private economy is a useful supplement to the publicly owned

economy. Changzhou's private businesses thrived in 1956 and dwindled gradually until they were completely wiped out during the "cultural revolution." Only in recent years have private businesses been revived. Now, the number of individual labourers in Changzhou proper has topped 30,000, with 40,000 in the suburbs and Changzhou's three suburban counties. The growth of the private economy has made up for the shortage of commercial and service establishments in both urban and rural areas and has, therefore, made the daily lives of the local people much more convenient. As long as we strengthen management, private businesses will not pose any threat to the socialist economy.

Second, we have separated management power from proprietary rights. This is a major break from traditional economic theories and practices. This practice has left large and medium-sized state-owned enterprises with more decision-making power and has breathed new life into these enterprises. While still maintaining their ownership by the people, we contracted or leased many small state-run industrial and commercial enterprises to collectives or individuals. Currently 97 percent of the city's catering businesses and 91 percent of its commercial enterprises have introduced this method with good results. Our practice has proved that during the socialist period, with state ownership playing the leading role, the coexistence of multiple systems of ownership may bring out the best in each.

Third, we have reformed the leadership systems and distribution methods of our enterprises. In the past, our enterprises practised the collective leadership of the Party committee, which resulted in many-pronged guidance, slow decision-making and ill-defined responsibilities. In recent years we have introduced a system under which the director of an enterprise assumes full responsi-

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***Reform does not mean sliding back to capitalism, but rather developing production in accordance with the requirements of a planned socialist commodity economy.***

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production. This practice did not conform with China's reality, however, for the general level of its productive forces is still low and their developments are uneven in different regions. Under this impractical guideline, we rushed to establish communes in the rural areas and hastened the transition to public ownership in the urban areas. In compliance with such "leftist" guidelines, economic power was overcentralized, and as a result, businesses were de-vitalized and the practice of absolute egalitarianism, metaphorically termed as letting "everybody eat from the same pot," was rife. This fact indicates that our understanding of socialist theories at that time was very limited.



bility for administration and management. The change has improved efficiency.

In distribution, we have replaced the profit delivery system with tax payments so that the enterprises can retain all of their after-tax profits. Thus, no longer do all enterprises live off state subsidies. Inside the enterprises, remuneration has been linked to workers' contributions, a break with absolute egalitarianism and a move towards the principle of "from each according to his ability and to each according to his work."

**BR: As one of the cities that has experimented with comprehensive economic reforms, what contribution has Changzhou made?**

**Chen:** Our major contribution has been the creation of enterprise groups, which has also been the most significant and rewarding result achieved in Changzhou's economic reforms. Enterprise groups evolved from specialized enterprises practising co-ordination among themselves. Now, Changzhou has 56 such groups, which have been organized not according to administration but to economic measures. Enterprise groups are associations founded by large, medium-sized and small enterprises on the basis of voluntary participation and mutual benefit. They have been beneficial in the following three aspects: first, the production- and circulation-oriented association of enterprises has broken down barriers between different departments and regions constructed by the old system. Second, profits from these associations have been particularly high. Without additional investment, the profit of an associated enterprise has been known to rise 50 percent or even 100 percent. Third, these associations have promoted economic exchanges between the city and the countryside. Consisting mainly of large urban enterprises, these associations have helped boost

rural industry, which is the only way to achieve agricultural modernization and provide jobs for rural surplus labour.

**BR: Are there any obstructions to the reform? If so, what are they, and where do they come from?**

**Chen:** The resistance mainly comes from conventional forces of the former economic systems. In struggling to replace the old

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*While maintaining the dominant role of state enterprises, we have boosted collective enterprises and revived private businesses.... As long as management is strengthened, private businesses will not rock the boat of socialist economy.*

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system with the new, the reform will invariably confront conscious and unconscious resistance from the old system. However such conflicts are entirely different from the class struggle of the past. Indeed, they are not conflicts in the political sphere, but are merely economic contradictions that have resulted from the gap in understanding and, sometimes, the frictions ignited by power readjustment and interest distribution. Some cadres who, for example, are used to managing their enterprises through administrative means, are unconvinced of the merits of the new system and are reluctant to delegate power to the enterprises. Others are afraid the reform will lead to chaos and so hold fast to their power. Many workers are used to "eating from the same big pot." In the past, instead of using a worker's performance as a basis for bonuses, some enterprises would draw lots or simply have the workers take turns. Given this, persuasion and demonstration are needed to help both our cadres

and workers understand the new system.

Although these contradictions are inevitable in the course of replacing the old system with the new, the change represents the general trend of development. The focus of our work will be laid on expediting the completion of the reform.

**BR: Some foreign observers predict that China's economic reforms will eventually lead to an economy in which socialism and capitalism coexist. Is this possible?**

**Chen:** No. I don't think such a mixed economy is possible. It is true that before 1956 the socialist economy did coexist with capitalism in China. But that was only when we were conducting our socialist transformation of the ownership of the means of production. Ever since then a consolidated economic foundation for public ownership has existed in China. Although our current reform has included adopting some effective management methods of other countries, including those of the capitalist countries, the economic foundation is still solid, and its socialist nature will remain unchanged.

Having watched as we developed the collective economy and revived the private sector in recent years, some people said our state-owned economy would collapse. They were wrong. In fact, the state-owned enterprises have played the leading role in all sectors of the national economy; the lion's share of state revenues comes from state-owned enterprises. The reason why collective and individual businesses can be enlivened first is that they have the powerful backing of state-owned enterprises. In the past, however, state-owned enterprises were laden with too many restrictions that had stifled their growth. One of the major objectives of our current reform is to solve this problem. Changzhou is among the first to begin the reform and has already made noted progress. ■



## Revamping Science and Technology System

by Zhou Chengkui

**A** major overhaul of China's science and technology system is necessary if the country is to achieve its long-range modernization goals. A decision issued early last year by the Central Committee of the Chinese Communist Party outlined the major steps to be taken to initiate such a reform. This article describes the situation prior to the reform and the measures adopted to change it, as well as the results achieved and problems encountered in the year that has passed since their implementation.

### Pre-reform Conditions

The reform of China's science and technology system was not

arbitrarily imposed. Rather, it is being closely interwoven with the recent development trends of

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*China's science and technology system is being overhauled in line with the trend of development in the present-day world; it is also closely linked with the large-scale economic development at home.*

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science and technology abroad and the current large-scale

economic construction at home. It is also closely related to the urgent need to overcome defects in the original system.

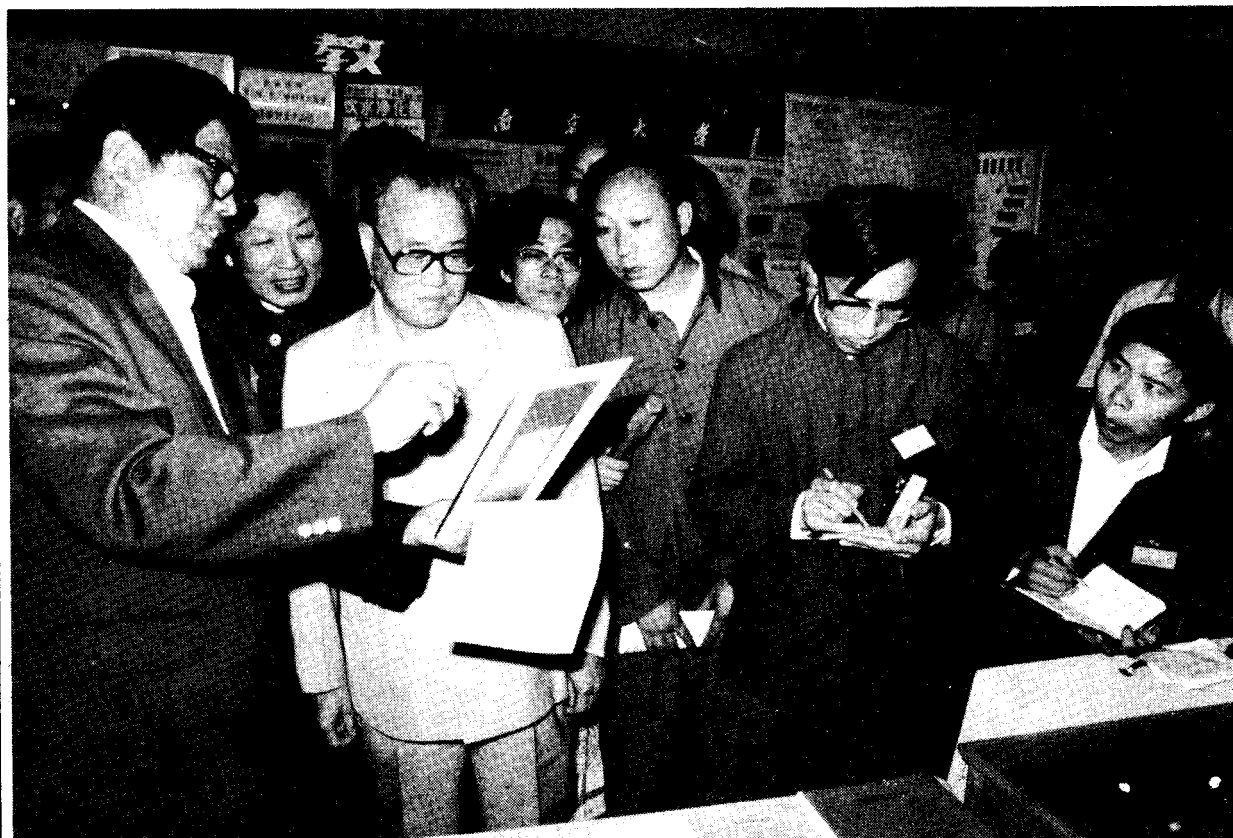
Since the beginning of the 1960s, many foreign countries have realized the relevance of science and technology to the achievement of their national goals. Therefore, they have taken many concrete measures to strengthen the links between science and technology and the development of their economy and society.

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\*The author is deputy director of the Science and Technology Policy and Management Research Institute under the Chinese Academy of Sciences.

Premier Zhao Ziyang at China's first scientific and technological achievements trade fair.

YANG WUMIN





MA ZHANCHENG

**At the Shanghai symposium on technological exchange, technicians of the Shanghai Jiaotong University receive visitors and answer questions concerning the transfer of new technology.**

Relieved from the 10-year turmoil of the "cultural revolution," and strongly desiring to advance its economy, China began to study the scientific and technological achievements of other countries. What interested China most was, in the first place, Japan's postwar introduction and utilization of foreign technologies, which were mastered and developed domestically to produce high-tech products for the international market. Second was the practice in the Soviet Union of combining scientific research institutes and productive enterprises into joint entities, and Romania's remunerative contract system. The widespread publicity of these experiences in China gradually led to important changes in the state's policies concerning science and technology in recent years. Major changes included the following:

- Emphasis was placed on the co-ordinated development of science and technology with the advancement of the nation's economy and society.

- Efforts were stepped up in research and development of applied science and technology.

- Horizontal links were es-

tablished between scientific research institutes and industries, enterprises and local governments.

- The commercialization of scientific research achievements was accelerated.

- The funding system was restructured to give research institutes more stimulus to orient their work towards economic construction.

These changes in state policies are a prelude to the reform of China's science and technology system.

Domestically, China has entered a new historical phase during which the nation's primary task is to develop its economy. The specific goal is to quadruple the value of the nation's gross annual industrial and agricultural production by the turn of the century, and to approach the level of developed countries in another 30 to 50 years. To attain such a goal, it is clearly necessary to advance China's science and technology.

However, science and technology has long been separated from the nation's economic construction. A research institute is only answerable to its superior

unit and lacks any ties with factories or enterprises. The results of this have been twofold. On the one hand, a great number of technical problems arising from production cannot be solved, while on the other, the majority of research findings cannot be widely utilized in production. The causes of this situation are drawbacks in both the economic structure and the science and technology system.

Drawbacks in the science and technology system can be summed up in the following three areas: First, government control and management of science and technology has been too rigid and all-embracing. Planned management has been favoured over economic levers and market regulation. Scientific research institutes and production units have not been bound by common interest through such economic incentives as technology contracts. As a result, research institutes lacked the capability of self-development and the initiative to serve economic construction.

Second, as research institutes have been unduly cut off from enterprises, research, designing, education and production have been disjointed. The military and civilian sectors, the various government departments and administrative regions of the country were also severely cut off from each other. Under such circumstances, research and development capabilities of production enterprises were weak, as was the link transforming research findings into a productive power.

Third, technicians and researchers have been severely restricted in their work and the reasonable flow of talent stymied. Intellectual work has not been properly valued or respected.

These prevailing conditions necessitated the reform of the science and technology system which was launched immediately after the national economic reform was decided upon in

October 1984 by the Party Central Committee.

### Major Reform Steps Taken

The science and technology system reform aims primarily at promoting the integration of scientific research with production, and bringing the role of researchers and technicians into full play.

The major steps taken in the reform include:

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***The reform is designed to promote the integration of scientific research with production and give full scope to the talents of researchers and technicians.***

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1) Replacing the funding system with a classified fund management system for research institutes. Funds for important research and development projects planned by the central and local governments and construction projects of key laboratories and experimental centres will be granted by the central and local financial departments respectively. A public bidding system and a contract system will be gradually instituted for the management of all these projects. A contract system also will be gradually introduced for technological development programmes and research projects that will yield quick profits. Institutes engaged in such research programmes will then earn their incomes by contracting the state's projects and accepting research programmes which the state entrusts to them. The research funds previously granted by the state will be gradually reduced,

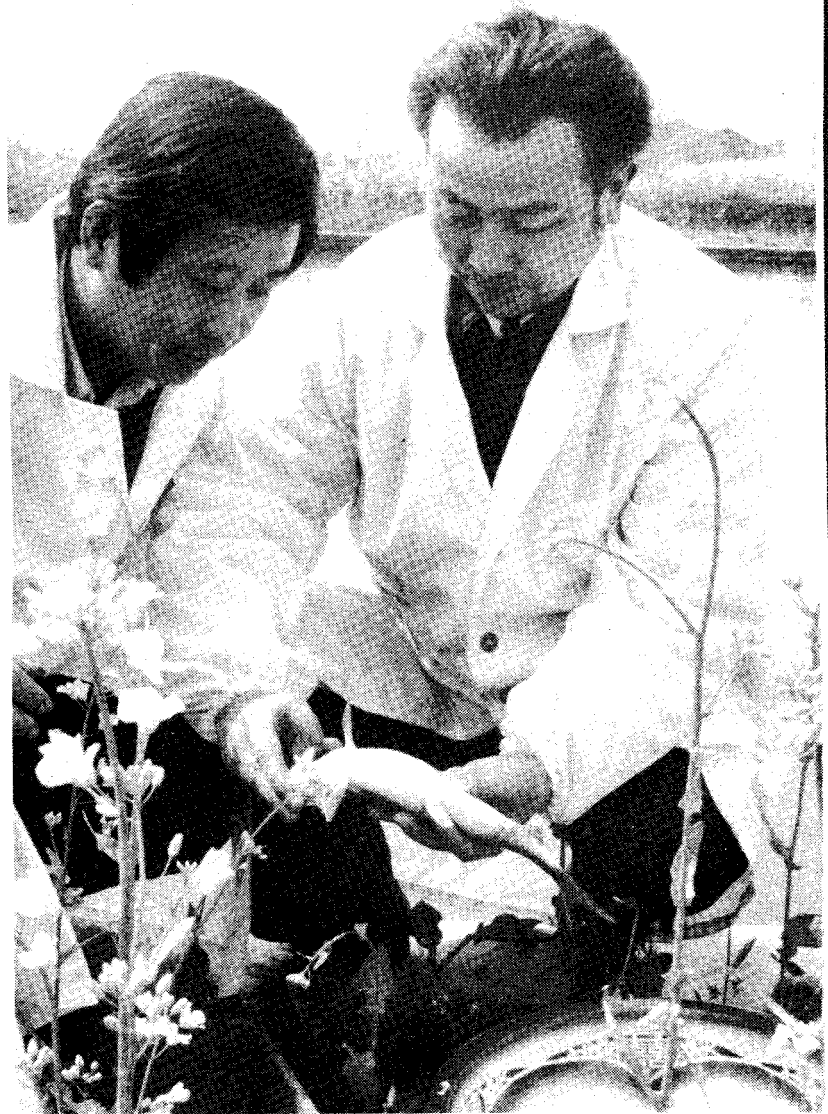
but not cancelled until the institute can support itself.

Science foundations will be established on a trial basis for research programmes of the basic sciences and some applied sciences. Priority support will be given to the best research subjects advanced by scientists and technicians and selected through

appraisal by specialists, so as to concentrate the limited funds on major science and technology projects. In a few years all institutes in charge of such programmes will operate on money granted by these foundations. However, the state will still grant a fixed amount to those institutions engaged in public

**Zuo Wengong (right), an engineer with the Changjiang Aquatic Research Institute of the Chinese Academy of Aquatic Products Industry, has been praised for his research achievements in the prevention and control of diseases affecting fish.**

YANG WUMING



welfare activities and technical services. As for high technology development programmes, the state will set up a special "start-up" fund to support them.

2) Speeding up the commercialization of research results. This will be effected by sponsoring technical information fairs, opening up channels for the smooth flow of research findings into production fields, and changing the practice of free transfer of technology achievements. As part of this effort, the state will encourage the development of the technical trade market, protect the ownership of intellectual property and provide favourable tax-exemption or reduction treatment for technical transfers and the manufacture of new products.

3) Beefing up enterprises' ability in incorporating advanced technology and developing new products. All technological development research institutes run by the Chinese Academy of Sciences, and colleges, ministries and commissions under the State Council, as well as those institutes under local governments will be encouraged to co-operate with enterprises and institutions in establishing a variety of inter-unit associations with the goal of gradually merging them into one economic entity. Research institutes can be developed into research-production type enterprises, or into a technological development institution serving a joint entity involving a number of medium-sized and small enterprises. Moreover, enterprises should actively seek to enhance their own technological development capability while making good use of the technical potential of society.

4) Reforming the management system for technical personnel. This will include a gradual introduction of the system of recruiting research workers and technicians from research institutes, designing offices and colleges. Scientists and technicians are also permitted to take on extra

jobs concurrent with their own jobs.

## Effects of the Reform

After the publication of the Party Central Committee's decision, research institutes across the country began reorganizing and adjusting their operations in line with the decision. With changes in the funding system, the operational funds formerly granted by the state to these research institutes will gradually be reduced, and this will place a heavy economic pressure on most institutes. The most important question for all the directors of the institutes has become how to get sufficient research funds through the three available channels—undertaking major state scientific research projects, contracting technological programmes with various departments and local governments, or simply applying for funds with science foundations. Such a new pressure, coupled with scientists' strong desire to do their bit in reviving the national economy, has brought

about remarkable changes in these research institutes.

First, the institute's research workers have displayed their high initiative in accepting and carrying out major scientific research projects assigned by the state. The proportion of research topics listed in the academy's internal and external contracts and research funds to the academy's total research topics increased from 20 percent in 1980 to 60 percent last year. Of the operational funds allocated by the government to the academy, 35 percent were granted to the best chosen projects according to specific research topics after appraisal and approval by relevant specialists. In 1985, 85 institutes took part in the joint effort for breakthroughs in some key research projects planned by the state for the Sixth Five-Year Plan period. The 85 made up 70 percent of the total institutes of the academy. About 5,000 research workers and technicians were involved, accounting for about 16 percent of the total technical personnel of the academy. By the end of 1985, the original plan for

**The Zigong Science and Technology Consulting Centre in Sichuan Province Provides rural enterprises with technical consulting service.**

XIONG RUOJING



the projects involving sophisticated technology had been completed.

To meet the needs of national construction, China's scientists have taken part in working out an overall plan for the development of northwest and southwest China, as well as some cities and regions, and in research on the comprehensive transformation and development of the loess plateau, the Huanghe (Yellow)-Huaihe river basin plains, the Heilong-Songhua-Wusuli river basin plains and the area around Taihu Lake. The project of estimating the natural resources on the Huanghe-Huaihe river basin plains and their rational use involved more than 280 scientists and technicians and whose joint efforts in tackling key problems in a variety of disciplines—including biology, geology, chemistry, mathematics and remote sensing—resulted in obtaining reliable materials and data and the establishment of three model agricultural zones. The per-capita income in the zones in 1984 more than doubled that of 1982, thus opening up bright prospects for the transformation of the Huanghe and Huaiha rivers.

It is expected that around 30 percent of the technical force will take part in the effort to tackle key scientific problems, an effort that will still be given priority during the Seventh Five-Year Plan period (1986-90).

Second, the work of technological developments and the dissemination and application of research findings have been improved. Technological development departments or companies have been established in various research institutes. During the Sixth Five-Year Plan period (1981-85) the academy popularized and applied more than 2,000 items of research findings. By 1985, the rate of popularization and application of research results reached 40 percent while the rate for important research findings reached 60

percent. According to a survey of the Shanghai Silicate Research Institute and the Shanghai Metallurgical Research Institute, the number of researchers now engaged in technological development make up about 30 percent of the total. Statistics from 78 institutes of the academy reveal that incomes from technological knowledge transactions and findings during the period from January to September last year

istics, in recent years China has sponsored more than 240 large-scale technology transaction fairs. The money involved in each fair was around 10 million yuan. More than 1,000 technological market service institutions have sprung up across the land. According to statistics compiled by technological market service institutions in Beijing, Tianjin, Wuhan and five other cities, more than 5,000 contracts on the transfers of

**The Beijing Electronic Microscope Laboratory of the Chinese Academy of Sciences opened to Chinese and foreign visitors in September 1985. Li Lin (right), a researcher of the Physics Research Institute, analyses experimental results with other scientists.**

ZHENG SHUFE



increased by 33 percent over the entire previous year. Moreover, more than 200 research-production enterprises specializing in technological and product development have emerged during the past year.

Third, commercialization of technological achievements has been accelerated and the market for technological transfers has been expanded. This is a far cry from the country's recent past, when technologies were given and taken without compensation. According to incomplete stat-

technological achievements or on co-operation have been signed since 1981, with business volume amounting to 130 million yuan. Moreover, more than 123 research-production entities have been set up, and 9,320 contracts have been signed, with contract values reaching 160 million yuan. The opening of the technological market promotes the progress and rejuvenation of China's technology.

Fourth, co-operation and ties between research institutes and industries, enterprises and local

governments have been promoted. So far the academy has signed long-term, technological co-operation agreements with more than 20 provinces and cities, departments and enterprises. The branches and research institutes of the academy have also established long-term relations of co-operation, technology transfer and technical consultancy with several thousand enterprises in several hundred cities and counties, and more than 120 research-production entities have been organized.

Twelve research institutes affiliated with the Shanghai branch of the academy, all engaged primarily in the research and development of applied science, have technological links with 460 enterprises, in addition to having established 64 joint research-production bodies and signed more than 1,000 contracts with various departments and local governments. The Shanghai Silicate Research Institute co-operated with the Deqing Electronic Materials and Equipment Factory in Zhejiang Province to help small factories with financial difficulties switch from the production of bricks and tiles to the manufacture of technological products. The volume of sales currently accounts for a third of the nation's total. The factory earned a profit of 380,000 yuan in 1984 and 660,000 yuan last year. The Deqing model was thus praised as it characterized the integration of research and production in Zhejiang Province.

Fifth, a number of talented and enterprising people with backgrounds in industrial development research as well as those specializing in research-business management have come to the fore. By the end of 1985 several thousand research workers at the academy had assumed positions of advisers to and directors in research-production bodies. They have acquired much experience in running a factory, turning research

findings into new products, and developing technology and production for marketing. Such expertise in key leadership positions has had an important bearing on integration of science research and production.

Sixth, much progress has been made in the integration of research and education. In 1985 for example, 35 research institutes of the academy established relations with nearby institutions of higher learning in which they helped train each other's postgraduates. Some research institutes associated to the academy's branch in Beijing also have begun to establish a joint academic committee with institutions of higher learning, so as to co-ordinate the research efforts and research topics of both sides. In 1985, the academy also opened two research institutes and 17 laboratories, attracting more than 700 researchers from institutions of higher learning to work at these open institutes and labs. In addition, 32 foreign specialists also work in these institutes and labs, where they are engaged in 24 co-operative projects.

## Problems & Solutions

After the publication of the decision, technical trade fairs, which have produced a positive effect on linking research institutes with enterprises and promoting the application of research findings, began to be held across the nation. However, there are two problems worth mentioning:

1) Research findings have been utilized in most cases by medium-sized and small enterprises and by rural enterprises, which have thrived since the economic reform began, rather than by large and key enterprises.

2) The best sellers at the fairs have been those simple and time-saving technologies which can yield quick economic returns in the process of production. Much less favoured have been so-

phisticated and time-consuming technologies that might involve production risks. All this testifies that a buyer's market at the technological fairs is yet to be developed. The development of the buyer's market depends on upgrading the technology of large and medium-sized enterprises by conducting urban economic reforms, as well as on the growth of demand by all levels of enterprises for research findings in the progress of production.

What this shows is that any reform in the science and technology system is closely related with the economic reform. The economic reform has developed gradually from rural areas to urban areas, from medium-sized and small rural enterprises to large and key enterprises. The science and technology system reform is bound to proceed in the same way the economic reform did.

Second, one must consider the arrangements for scientific research work. As the decision stipulates, while promoting technological development, efforts should be made to step up research in the applied sciences and bring about sustained, steady development of research in the basic sciences.

To realize this, some problems must be ironed out through practice. China has gained some experience during the four years it has supported basic science research and some applied science research through funding. The main problem was that because most applicants for science funds were individual researchers and research groups, research topics were not co-ordinate with each other. During the last four years the Academy of Sciences, having been entrusted with the responsibility by the state, organized the national assessment and allocation of science funds to support more than 400 research units for more than 4,000 research topics involving 30,000 technical personnel. The total sum of the allocated

funds was 170 million yuan, averaging 40,000 yuan for each topic and 6,000 yuan for each researcher. In addition, the academy used 12 million yuan from its own science fund, which has been set up this year to support 600 research subjects and programmes, with an average of 20,000 yuan for each programme. However, some major projects for basic scientific research that required considerable investments were unable to get support. This definitely had a serious negative effect on China's basic research. How to apply these funds to comprehensive and major projects involved in the research of basic sciences and some applied sciences, which require more investment, remains a problem to be solved in the process of establishing the science funds system.

Third, researchers must be used to their full potential.

Today, researchers in China are not fully appreciated. One important reason for this is the low investment in scientific research. When looking at the Academy of Sciences for example, there are 22,000 senior and middle-level researchers, accounting for 69 percent of the academy's total

researchers and having an average age of 43. They all have a strong desire to work hard and engage in independent research. Since investment in scientific research only averages 9,000 yuan per researcher (a small fraction of the figure in developed countries), research work has been hindered and researchers' initiative stifled. Since it is not practical to get more investment from the state for the time being, the only way to solve the problem of investment is to concentrate the available funds on a minority of research topics. One result will be that some researchers will have to be transferred to other jobs because they cannot get the research funds. How to open up prospects for employment to these personnel is a key problem in the course of the reform.

The decision suggested technical personnel might be mobilized to work in medium-sized and small cities, rural areas, remote border areas and in communities of ethnic minorities in an effort to avoid overstaffing and waste of talent. The realization of this proposal, however, would involve many difficulties, since those areas generally lack the favourable social conditions needed for research. Therefore, in addition to

creating conditions for the attraction of research workers to those areas, a major policy must be formulated for the coming years. One feature of that policy would be the encouragement of researchers to take other posts in various enterprises and localities while they are employed in research institutes. Furthermore, internal transfers would be encouraged such as transferring from a research post to a development post, or from a research and development post to a management post.

Finally, the technical force of the academy has functioned normally.

In the past 36 years since the founding of the People's Republic, apart from those in the academy, the technical forces in industries, colleges and the defence departments have been greatly strengthened and those in various localities have also developed. Under such circumstances, how to develop a more reasonable division of labour and organize better coordination among the forces mentioned above through system reform is definitely a must for the stimulation of their initiative and enthusiasm to achieve the best results in scientific research. ■

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## Call for Socializing Computer Service

**"JINGJI RIBAO"**

(Economic Daily)

Computers are used in almost every part of Chinese society. The computer craze in China has involved millions of technicians, managers, workers and students. During the Seventh Five-Year Plan period (1986-90), computers will be further used in communications, so that computer technology will be socialized.

Despite their popularity and growth, China's computers have not been as successful as hoped, though considerable manpower and material resources have been put into developing hardware and software over the past 30 years. One of the reasons for their lack of efficiency is that though much attention has been paid to developing computer technology and training, China has not given due attention to applying computer technology in as many areas as possible. In addition, China has failed to foster large numbers of computer development groups.

Since the 1960s, China has manufactured more than 200 types of computers. Though

China has in the past few years imported more than 1,000 computers of different sizes, as well as 100,000 micro-computers, most of them are still used for single purposes.

China now has many computer professionals. But most of them are scattered in enterprises and factories at low levels. Many computer technicians, who spend much time doing rudimentary work, would save time and energy if they had support from research institutes and development and training centres. Software technicians are usually a small part of a unit, making it difficult for them to form computer development groups, or other groups to help them keep abreast of the ever changing computer world.

In recent years although there have been increasing demands for computers, many enterprises are loathe to spend a single cent on consultations and programme analyses. Because of this, computer services need to be improved and should include not only service outfits and computer rooms, but also complete computer software systems and management services as well.

Given the rapid growth of

computers today, the formation of a nationwide computer service network is inevitable. Therefore, only using economic means to manage computer service is not enough. The state must give administrative guidance and supervision to the development of computerized information technology.

The situation calls for the establishment of a nationwide computer management committee to co-ordinate the use of large and medium-sized computers and the arrangement of computer technicians at the levels of government ministries, provinces and municipalities. In addition, a number of large computer development operations composed of specialists in hardware, software and information technology should be founded. With the guidance of these operations, the commercialization of software and the development of China's software export will be accelerated. At the same time, vocational schools and technical secondary schools should be encouraged to provide computer courses to train low-level and middle-level computer professionals.

In short, computers and information technology should serve the whole society. Only if the computer service is socialized, can China obtain effective economic and social benefits from it. ■

## 'United Front' Acquires New Guidelines

**"RENMIN RIBAO,"**

(People's Daily, Overseas Edition)

In his political report to the Chinese Communist Party's 12th National Congress in 1982,

General Secretary Hu Yaobang outlined the Party's policy towards the "patriotic united front." With regard to China's democratic parties, non-party personages, national minorities and religious people, the Party will stick to the policy of "long-term coexistence and mutual supervision" and the principle of "treating each other

with all sincerity and sharing weal or woe."

The new guideline differs from the previous policy, which was simply "long-term coexistence and mutual supervision."

In 1956, the Party announced it would establish relations with democratic parties in the principle of "long-term coexistence and mutual supervision." This was both an inevitable result of co-operation between the Communist Party and democratic parties



and an outgrowth of the need of the Party to develop a democratic style of work and make fewer mistakes. But, because of "leftist" mistakes, the guideline was not well followed. During the "cultural revolution," coexistence and mutual supervision existed only in name.

By the time the 12th National Congress was opened, the Party had accomplished the task of putting right its guiding ideology. The changed guideline was new because:

- It negated the slogan of "taking class struggle as the key link." The task of the united front was defined as striving for the reunification and revitalization of China.

- The united front was no longer an alliance of social classes but a broader alliance of all socialist working people and patriots supporting socialism and national reunification.

- It required Communists to further develop a democratic style of work in the united front. It was mentioned in Hu's report as an important effort in building socialist democracy.

China's democratic system has two basic forms. One is democratic centralism (namely, centralism under democracy and democracy under centralized guidance). This is embodied at the highest level by the National People's Congress. The other is political consultation, mainly represented by the Chinese People's Political Consultative Conference (CPPCC) and multi-party co-operation under Party leadership.

Over the last few years, the membership of democratic parties has more than doubled. The number of non-Communist Party members in both the central and local CPPCC committees has increased to some 220,000. The Party and central government have made it a point to frequently consult people outside the Party on such important issues as economic, educational and scientific reforms. In the state organs, many non-Communist Party members have been entrusted with responsible work. Non-Party members not only work closely with Party members, but also contribute to the common cause

through the CPPCC, democratic parties and people's organizations. In the future, this political consultation system will be gradually improved and codified into laws.

The new guideline is also applicable to the implementation of the principle of "one country, two systems." On the mainland, socialist modernization is the common aspiration of 1 billion people. In areas under the capitalist system, the basis for following the guideline will be the fundamental interests of the whole Chinese nation and patriotism.

Among the CPPCC members, some are from Hong Kong and Macao and believe in capitalism. But this does not stop them from working with other members on the basis of patriotism and national reunification.

When China is reunified under two social systems, all patriotic Chinese people, regardless of their political convictions or social classes, will stick to "long-term coexistence and mutual supervision" while "treating each other with all sincerity and sharing weal or woe."

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## China to Launch Space Shuttle in 2000

**"YANGCHENG WANBAO"**

(Guangzhou Evening News)

**A** Chinese space technology expert recently announced China's plans to launch a space shuttle in the year 2000.

"One of the items on the ministry's agenda is to launch a space station and shuttle," said Tu Shoue, deputy director of the Scientific and Technological Committee of the Ministry of the Astronautics Industry. He added, however, that a detailed plan has yet to be worked out.

Tu, who made his remarks in a speech at a meeting of the Chinese People's Political Consultative Conference on April 9, said China had launched seven retrievable satellites and two synchronous communications satellites with Changzheng carrier rockets since 1975.

To speed up the development of China's space technology, he said, a national programme must be worked out to concentrate resources from different scientific and industrial sectors on the project.

He also said bilateral co-

operation with other countries should be promoted, and that China plans to import satellite components and devices or produce them in co-operation with other countries.

"We expect to make breakthroughs between 1986 and 1990 that will lay the foundation for the take-off of China's space technology in 2000," he said.



# Satellite Launch: Competition Not Our Aim

In an exclusive interview with *Beijing Review* on June 9 in Beijing, Wu Keli, CGWIC deputy general manager and senior engineer, refuted recent Western press accusation that China was taking advantage of US and French failures in recent launchings of spacecraft and satellites. "This is sheer coincidence," Wu said. "Soon after the Chinese official announcement that China was to undertake satellite launching business for foreign countries in October 1985, many countries, including Sweden, Indonesia, Australia, Italy and Argentina, contacted the CGWIC for information about the the carrying capacity of the Long March-3. Some of them have already asked China to launch or help design satellites for them." However, Wu agreed that while the United States suffers failures in its spacecraft programme, China is doing a very good satellite launching business.

In recent years, the number of satellites planned to be launched by other countries has greatly

outstripped the capacities of the world's available carrier rockets. Many third world countries have planned to send up their own satellites. This is a good opportunity for China to expand its satellite-launching services. "Nevertheless," Wu said, "China has no intention of competing with Western countries in this field. We contract to do this business in order to make up for the shortage of carrier rockets." The success achieved by the Great Wall Industry Corp. in such a short period of time should first be attributed to the open policy adopted by China's astronautics industry. The second reason is that the level of China's astronautical science and technology has been acknowledged by an increasing number of countries throughout the world.

Wu said that to support the Great Wall Industry Corp. to contract the launching of satellites for other countries, the People's Insurance Co. of China will provide insurance services for the launches carried out in China.

As for keeping secrecy for the clients, Wu said satellites to be launched by China would be exempted from customs examination. According to a contract, the clients may send their representatives to supervise, protect, test and install their satellites in China. The Chinese side is responsible for the security after the satellites enter China. With the approval of the clients, the Chinese side may also provide testing and installation services.

Commenting on some clients' concern about China's delivery technology, Wu said, "This concern is understandable, as the level of China's astronautics industry has barely been known by outsiders, and China has only begun to display its capabilities in this field in recent years. But we can assure our clients that China has launched 18 satellites and only one failed. After the Long March Z-2 carrier rocket failed in launching its first satellite, the engineers and technicians involved in the work not only uncovered the causes and fixed the

■ Chief engineer of the China Great Wall Industry Corp. (CGWIC) Chen Shouchun, left Beijing for London on June 7 at the head of a six-member delegation for talks with the London-based INMARSAT on questions concerning costs and insurance of the Chinese launching of several marine monitoring satellites for the international organization.

■ The following day, Henry A. Schwartz, president of the Teresat Co. of the United States, headed a delegation to China to negotiate with the CGWIC, the Wanyuan Co. and the China Launching Telemeasure Control (CLTC) on

China's launching of two communication satellites for his company. The talks ended with the signing of an agreement between both parties. A CGWIC delegation will later be sent to the United States for negotiation with the Teresat Co. on the signing of a contract.

■ Prior to this, a delegation from the Western Union Telegraph Co. of the United States approached the China Insurance Co. from June 1-4. The two parties discussed insurance questions concerning the scheduled Chinese launching of a 1.4-ton Western VI S communication satellite in October next year.

■ According to reliable sources, Mr. Paul S. Visher, president of the United States Hughes Aircraft Co., recently proposed to the CGWIC that a satellite launching ground for long-term co-operation be set up on a Hawaiian island where the Chinese rocket carriers and launching technology shall be exploited to launch American civilian satellites in co-operation with the American company. The suggestion has received positive response from the Chinese side, and negotiation on related substantial questions between both sides is expected to be held soon. It was reported that the bulk of American satellites launched were made by the American company.

breakdown immediately, but also launched another satellite within 40 days."

China is currently developing carrier rockets with larger thrust, and plans to send up larger satellites into space in the Seventh Five-Year Plan period (1986-90).

## China, Japan Hold Trade Talks

Representatives from China and Japan met recently in Beijing to discuss ways to right the trade imbalance between their two countries that favours Japan.

During the meetings, held from May 27-31, the 160 Japanese delegates and their Chinese counterparts discussed the expansion of such Chinese exports to Japan as chemicals, grain, edible oil, metals and minerals.

Japan's delegation was made up of representatives from its Ministry of International Trade and Industry, the Japan-China Economic Association, the Japan Export Trade Promotion Agency, the Japan Export Trade Agency and the Japan Chamber of Commerce and Industry, as well as business officials.

Shen Jueren, head of the Chinese delegation and assistant minister of foreign economic relations and trade, said the talks made significant achievements. The two sides, he said, agreed that the imbalance in Sino-Japanese trade was an obstacle to the development of economic and trade relations between the two countries, and that it had to be removed. Shen said the Chinese government believes the imbalance should not remain for long. Shen said, the Chinese government maintains it is necessary to develop Sino-Japanese trade, by taking active measures to increase China's export.

The two sides agreed that in order to expand China's exports

to Japan, it is essential for China to increase the proportion of finished and valuable semi-finished products. The two sides expressed their willingness to co-operate in this regard.

To help China expand production of exports the Japanese proposed 84 preliminary plans for technical co-operation, loans, market studies and personnel training. The Chinese delegation also made more than 100 proposals.

Despite the agreement, no concrete programmes were devised at the meeting to remove the trade barriers such as high tariffs, import quotas, import prohibitions and plant and animal quarantines. The Japanese delegation, however, promised to communicate the conclusions of the meetings to the Japanese government.

The development of Sino-Japanese trade began in 1972 and proceeded smoothly for a while. The situation changed abruptly, however, in 1984. As the trade volume between the two increased, so did the unfavourable balance on the Chinese side which was US\$2 billion in 1984, and US\$5.2 billion in 1985. The underlying factors of the imbalance, Shen said, are as follows:

■ China has increased its import of raw materials and semi-finished products, machinery and chemical products from Japan to meet the needs of economic construction.

■ The bulk of China's exports have been petroleum, coal, farm produce, aquatic products and textiles, which are low in added value.

■ Japan's discriminating tariff and quota restrictions on many Chinese commodities have slowed China's exports to Japan. For instance, Japan needs to import great quantities of fruits and vegetables, but Chinese fruits such as Guangdong's lichee, Xinjiang's Hami melons, Tianjin's pears and Dalian's apples are prohibited from entering. Imports of organic

vegetables are also restricted. Exports of traditional items such as raw silk, silks and satins have decreased steadily since Japan adopted its restrictive policies.

Shen outlined two possible solutions to the imbalance. First, he said, Japan could increase imports from China. This is positive. The second possible solution would be for China to cut down on Japanese imports. This would be negative. China is in favour of the positive solution, he said, for it would raise the quality of export commodities, improve commodity structures, expand production of products suitable to the Japanese market and increase the competitiveness of Chinese goods. At the same time, Japan is expected to take an active position in removing the existing obstacles and solving the problems affecting the growth of Sino-Japanese trade.

## Drop in Foreign Exchange

The People's Bank of China recently announced that at the end of March, China's foreign currency reserves amounted to US\$10.348 billion, of which US\$2.555 billion was in the state treasury and US\$7.793 billion in the Bank of China. Gold reserves were registered at 12.67 million ounces.

China's foreign exchange reserves in December 1985 were US\$11.913 billion. Gold reserves remained the same.



# Dinosaur Museum Opens Gates to the Past

**A**fter the recent discovery in Zigong, Sichuan Province, of a host of dinosaur fossils dating back more than 160 million years, the city has opened a museum in which the fossils, now pieced together to replicate the dinosaurs, are displayed in scenes of their natural environment. During the first days of its opening this March, some 20,000 visitors visited the museum daily.

As early as 1972, a geologist discovered a dinosaur bone fossil 10 km from the city of Zigong. The finding was followed by a large-scale excavation, begun in 1979, that ended with the discovery of bone fossils from more than 100 different dinosaurs of eight species, and other prehistoric animals.

The restored skeletons of six dinosaurs are displayed in the exhibition hall. The largest of these which scientists say, weighed about 40 tons and only ate plants, is 20 metres long and 10 metres high. The only carnivorous dinosaur on display is 3 metres long and is shown with sharp teeth. (According to zoologists, only one-seventh of the dinosaurs were carnivores.) The carnivore's larger head, scientists say, may be an indication that it was more developed than the others. The museum also houses what some claim is the earliest and the best preserved stegosaurus in the world. With dorsal bony armour and a spiked tail for self-defence, it is as large as an elephant and lived on tender leaves.

The smallest dinosaur is only 1.4 metres long and has two short forelegs and longer hind legs, making it well-suited to running.

The museum also displays fossils of dinosaur footprints, one with four toes, and six with three, showing about 1.3 metres between each step. There are also fossils of the pterosaur, a prehistoric bird

and the plesiosaur, which lived in the water. Some of these exhibits were discovered by local residents, who have been awarded by the local government for their efforts. One such exhibit is of a perfectly preserved fossil of a labyrinthodontia, which was discovered last year by the museum construction team. Labyrinthodontias are said to have inhabited every continent in great numbers and began to disappear around 200 million years ago. The discovery of Zigong's labyrinthodontia shows that the animal was still in existence 185 million years ago.

At the excavation site, workers continue to look for fossils. Many of the workers are local villagers hired by the museum and have been doing this job under the instruction of experts for more than six years. The workers are currently trying to excavate eight fossil teeth from stone, as well as several pieces of hipbone fossils. Scientists say the area beneath the rocks in which the teeth and bones are embedded was probably a river bank in ancient time, and its currents and whirlpools collected dinosaur bones.

In addition to the answers the site has provided, it has also aroused a series of questions: Why does the Zigong area have so many dinosaur fossils? More than 50 spots with dinosaur fossils have been discovered since 1915 when an American geologist discovered fossils of a tooth and part of a hipbone there. The findings now are vast, of a great variety and cover a wide span of ages. Others also wonder how these fossils have been so well preserved.

According to Zhu Shida, a researcher at the museum, a strong crustal movement took place more than 190 million years ago in the Sichuan Basin where Zigong is located, which made the area warmer, more humid and dense

with vegetation. This provided an appropriate habitat for dinosaurs. For ages, the dead dinosaurs were covered under sand and stone and later fossilized by the elements. However, two crustal movements 70 million and 2 million years ago once again changed the situation, and exposed the fossils in the eroded rocks.

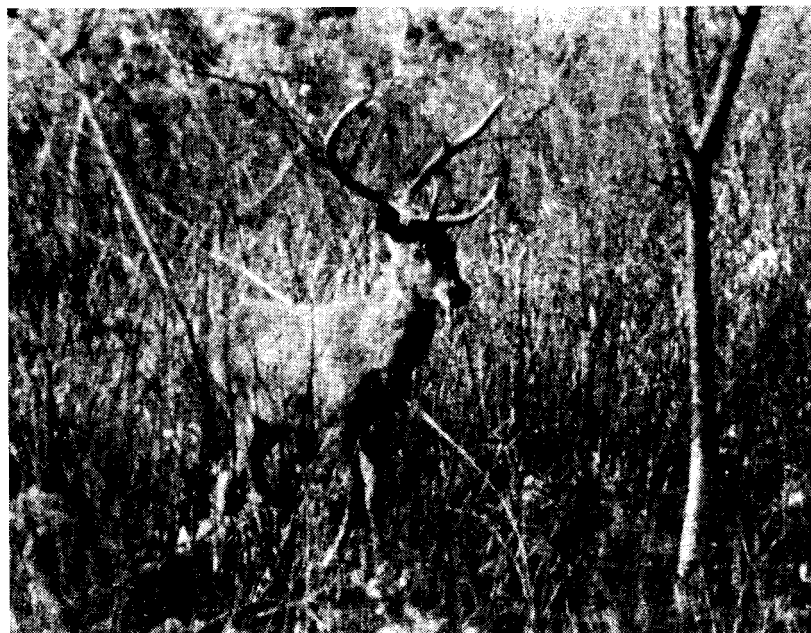
Zhu said he is still puzzled, however, as to why dinosaurs became extinct and why so many dinosaur egg fossils have been found in other places of China, but not in Zigong. These and other riddles, Zhu said, will continue to spur scientists and lay people to probe into the past in search of answers. ■

## Hainan Saving Rare Animals, Plants

**C**hina's Eld's deer, which were once on the brink of extinction, now number more than 120 since being placed on the national register of protected animals.

By the end of last year, 26 nature reserves at provincial, prefectural and county levels had been set up on Hainan Island, to which the Eld's deer are indigenous. Macaques, which are under the state's second level of protection, have increased of late from mere dozens to more than 1,000 in number.

In 1980, the island had only four nature reserves with a total space of 5,300 hectares. That figure now stands at 86,000 hectares. Officials on Hainan say they are trying to publicize the importance of protecting the island's rare wild animals and plants, and they say they have encouraged area residents to stop damaging the reserves. In 1985 some poached



An Eld's deer in the forests.

PAN JIAMIN

animals, which included the Chinese pangolin, python, macaque, and other fish and birds, were confiscated.

Hainan Island is rich in wild animals and plants. In the 1950s, 800,000 hectares of tropical primeval forest were home to rare and wild animals. Gibbons lived in the island's six big mountains, while the coastal areas teemed with Eld's deer, red jungle fowl, silver pheasants, parrots, otters, civet cats, red muntjacs and other birds. Chinese Eaglewood and other rare plant species grew wild across the island.

Since the late 1950s, however, the primeval forest decreased to 360,000 hectares due to indiscriminate hunting, felling and slash-and-burn cultivation. As a result, many rare plants and animals began dying out, as the ecological balance was undermined. Major portions of land became infertile, and most of the island's 10 rivers dried up.

The situation began to change in 1977 when the State Council sent experts in agriculture,

forestry, meteorology, ecology, environmental protection and water conservancy to inspect the island. In 1980 measures were taken to rearrange farming, forestry, animal husbandry, sideline production and fishing. In the past five years, 22 nature reserves have been established.

As for the rare vegetation on Hainan, the island's mangrove is now under the state's key protection. Its 9,300 hectares of plants in the early 1950s slid to about 4,600 hectares in 1982. Thanks to the efforts over the past three years, however, the amount has increased by 730 hectares. ■

## Xinjiang Excavates Ancient Corpses

The well-preserved corpses of a 2-metre-tall man and a 1.9-metre woman estimated to have died 3,000 years ago, were found last September in a tomb unearthed in the Xinjiang Uygur Autonomous Region, in north-

western China. The corpses are the tallest of the hundred found in the region, according to archaeologists at Xinjiang's museum.

The male corpse, with a round face and make-up, a high-bridged nose and greying hair, was found clothed in a pair of felt stockings and white-deer leather boots. Scientists say the man probably died in his 50s.

The female corpse also had facial make-up, a high-bridged nose and deep-set eyes, and was wearing four dark brown braids, two of which were artificial. The corpse was dressed in a crimson knit dress, stockings and white-deer leather boots. She is thought to have died at the age of 50.

Along with the two bodies were found funeral objects, including dark pottery bowls, wooden swords, bone combs, animal skins, felt and woollen articles, roasted meat and other food. No iron or copper wares were found in the tomb. A primitive baby bottle, made from a sheep's breast, was also found buried with the couple. The bottle is the first such item excavated in China.

Most ancient corpses in China have been found in northwest Xinjiang, where the heat of the desert dries the corpses and keeps them from decaying. ■



# Kite-Making Soaring High in Weifang

## "Weifang Kites"

Edited by the **Shandong Friendship Book Press**

Published by the **Shandong People's Publishing House**

Distributed abroad by **China International Book Trading Corp.**  
(Guoji Shudian) P.O. Box 399,  
Beijing, China

Visitors to Weifang, Shandong Province, are always enchanted by the colourful kites of all shapes and sizes that can be seen wheeling and flapping against the blue sky anytime in the warmer months.

Kite-making is the pride of the people of Weifang, whose talents in the field date back to ancient times, according to a recently published book entitled *Weifang Kites* (in Chinese), which describes the development of Weifang kite-making.

*Weifang Kites* says that since Weifang held its first International

Kite Festival in 1984, more and more countries and regions have been swept away by the "kite craze." Though throughout the world, kites vary in patterns, styles and colours, the book says many can be traced to a common hometown—China. Now, kites and kite enthusiasts, like "peace-loving envoys" carrying with them friendship from around the world, have returned home in search of their roots.

The International Kite Festival has become a spring tradition in Weifang. This year marked the third festival which went from April 1 to 10, attracting 418 kite fliers and 18,000 spectators from other provinces of China and 18 foreign countries and regions. Vice-Premier Wan Li and other Chinese leaders attended the opening ceremony and gave all kite-flying teams souvenir awards.

Foreign kite fliers taking part in the festival were from Great

Britain, France, the Federal Republic of Germany, Norway, Switzerland, Italy, the Soviet Union, Romania, the Netherlands, the United States, Canada, Australia, the Democratic People's Republic of Korea, Japan, Thailand and Singapore. There were also kite enthusiasts from Hong Kong and Macao.

Weifang, which is one of the four kite-making centres in China, was, according to *Weifang Kites*, the site of a grand gathering in 1984 when kite fliers from several countries converged at the first Weifang International Kite Festival, the subject of the book's first of four chapters. The second and third chapters outline the development, legends and styles of Weifang kites. A chapter on how to make one's own kite is also included and is replete with colour photos and illustrations that will help the novice builder construct a Weifang-style kite. ■

by **Xiao Jun**

## Understanding Chinese Cuisine

Food and Drink in China  
—A Visitor's Guide

by **Gong Dan**

95 pages; 4.20 RMB

Published by **New World Press**  
Beijing, China, 1986

Distributed by **China International Book Trading Corp.**  
(Guoji Shudian) P.O. Box 399  
Beijing, China

Food and Drink in China, published in 1986 by New World Press, is a slim volume that introduces various aspects of Chinese cuisine. To meet the needs of Westerners in this respect, the book explains eating and drinking conventions and techniques such as the use of chopsticks, porcelain spoons, and how to arrange seating. It also provides descriptions on the colours, smells and tastes of many of China's dishes, soups, pastries,

drinks and liquors.

The book also contains concise introductions to all the main culinary traditions in China. Among these are the cuisines of the Yuan, Ming and Qing imperial courts and of the descendants of Confucius in Qufu, both of which are examples of Shandong cooking, the cuisine of Sichuan Province, known as the land of plenty, and the delights of Guangdong, which prevail in thousands of Chinese restaurants abroad.

A major feature of *Food and Drink in China* is its many illustrations and colour photographs of various dishes. It also contains some splendid Chinese ink and wash paintings as well as detailed maps and diagrams. By following the text and illustrations the reader can master the arts of eating Peking duck, making *jiaozi* and handling slippery sea cucumbers.

The author, Gong Dan, is an American who understands China well, having lived and travelled widely in the country. In addition to writing this culinary handbook, Gong Dan has also translated several Chinese literary classics. *Food and Drink in China* can be compared to a dish of appetizers or a delicious stewed chicken; what makes this book so good is Gong Dan's pen, which is as sharp as a chopping knife. His clear, humorous style should bring alive the world of Chinese cuisine for eager gourmets everywhere.

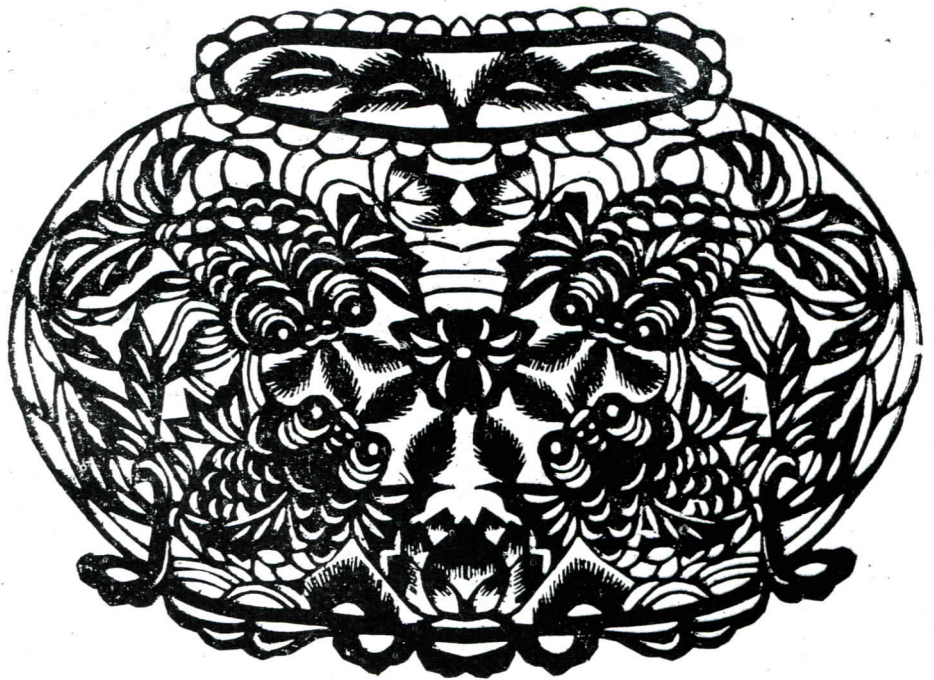
Packed full of useful background information and handy hints, *Food and Drink in China* is invaluable to visitors to China and connoisseurs of Chinese cuisine alike. Well-designed and attractively laid out, with souvenir fill-in menus at the centre, this little book is bound to prove a popular addition to many kitchens.

by **Dun Yi**

## Papercuts



by Sun Guixiu



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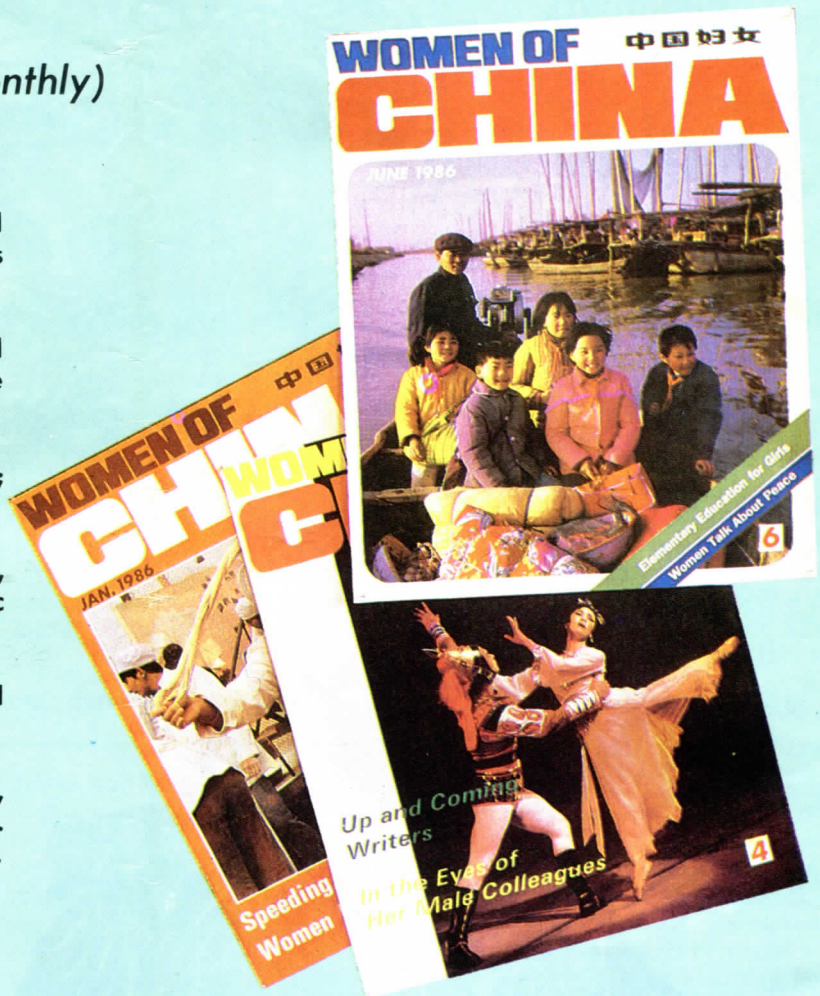
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