

BEIJING REVIEW



A CHINESE WEEKLY OF
NEWS AND VIEWS

- Scientific Exchanges With Foreign Countries
- Trend of Economic Development in the West



HIGHLIGHTS OF THE WEEK

China's Capital Construction

Minister in charge of the Capital Construction Commission Han Guang gives a brief account of China's achievements in capital construction, problems which it has encountered and measures taken to overcome shortcomings (p. 17).

Scientific Exchanges

Vice-Minister Jiang Ming explains China's policies in scientific and technological exchanges with foreign countries and the progress made in this field in the last few years. Three examples given by our reporters show how such co-operative activities benefit all parties concerned and contribute to friendship (p. 21).

Western Economy

What are the prospects of the economy in the developed

capitalist countries? Why is the Western economy in an epoch of stagnation? Huan Xiang, a noted economist and Vice-President of the Chinese Academy of Social Sciences, presents his views in an analytical article (p. 13).

Official Exchanges With Taiwan Opposed

The Chinese Foreign Ministry issued a note declaring that China is firmly opposed to any country conducting exchanges of an official nature with Taiwan which is a province of the People's Republic of China (p. 7).

Don't Forget Afghanistan

Renmin Ribao Commentator called on the world not to forget the Soviet Union's invasion of Afghanistan, which is a strategic move by Moscow for a southward thrust (p. 9).

Petroleum Engineering Meeting

An international meeting on petroleum engineering was held in Beijing, with participants from numerous foreign countries (p. 8).

Notification letters were issued for the second stage of the first round of bidding for offshore oil exploitation (p. 8).



Professor Cheng Xinnong (right) giving a talk to foreign students in the Beijing International Acupuncture Training Class.

Photo by Chen Junchao

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People's Communes

Will there be great changes in the system of people's communes in China's countryside?

China is currently restructuring its economy. Whether it is necessary or not to change the system of rural people's communes, which combine government administration with commune management, is a question still under study. But from current developments, it appears that increasing numbers of people realize it is more reasonable to separate government administration from commune management.

China now has 54,000 people's communes which are in charge of the work and lives of the country's 800 million peasants. Within the present administrative system, they serve two functions: both as *xiang* (which usually embraces several villages) governments below the county level and as collective economic organizations.

The people's commune system was founded in 1958 following the completion in 1956 of the movement for collectivization, in which mutual-aid production teams and agricultural producers' co-operatives of an elementary type were first formed and then they moved on to become advanced co-operatives.

At that time, we lacked experience in socialist construction and were overly anxious for quick results. As a result, the movement for people's communes brought changes in the relations of production that were far removed from the level of development of the productive forces. Later, the Party Central Committee and Com-

rade Mao Zedong discovered that it was impossible to quickly achieve the goal of "large in scale and with a greater degree of public ownership" originally planned for the people's communes. This led to a reduction of the communes' scale and management powers and the institution of the system of "three-level ownership by the commune, production brigade and production team, with the production team as the basic accounting unit." (A commune generally embraces several thousand households whereas a production team only 20 or 30 households.) Although this decision corrected the "Left" mistakes to a certain extent, the system of combining government administration with commune management has remained intact.

An evaluation of the 20-odd years of the experience of the rural people's commune as an economic unit leads most people to the opinion that the communes have played a positive role in organizing the construction of large water conservancy projects, expansion and levelling of arable land and to development of rural industry and sideline occupations. They have also helped develop the rural economy in some places. But, taken as a whole, the system of combining government administration with commune management has many shortcomings.

In fact, the two functions of the people's communes are contradictory to each other. As governments at the grass-roots level, they have the right to oversee the political, economic and cultural affairs of the areas

under their jurisdiction, and as collectively owned economic organizations, they need independent economic accounting. Because of interference from the people's communes, it is often difficult to protect the production teams' decision-making rights which have been granted them as a result of the flexible economic policies adopted in the last few years. Moreover, the people's communes often require that the production teams share such expenses as subsidies for the commune cadres, teachers in the village schools and bare-foot doctors, which inevitably increases the burden of the peasants. On top of this, the system of combining government administration with commune management often leads to overconcentration of power in the hands of a few people. This is neither conducive to the consolidation of political power and the improvement of democratic life in the grass-roots units, nor to the development of socialized rural economy irrespective of administrative divisions.

In recent years, with the implementation of the responsibility system and the development of production, numerous forms of co-operation have appeared around the country, such as trans-team, trans-commune and trans-regional economic joint enterprises set up between units with different forms of ownership. This has actually effected a breakthrough in the system of combining government administration with commune management and "three-level ownership."

In order to find a suitable way to reform the rural economic system, some provinces have selected a few communes for experimentation. Conditions

LETTERS

Cleaning up Corruption

I read that the people of China are seeking to clean up the corruption among the leaders in their country.

I think this is a very good thing to do and hope the Chinese will be successful in cleaning up corruption in their country, and will set an example for the world in clean, fair government.

Yacub Amin Muhammad
Dallas, Texas, USA

The People's Commune

The people's commune, which is large in size and collective in nature and integrates government administration with commune management, is the most ideal form of organization in the countryside. This has been my consistent understanding about the commune. However, on January 13 an item in a Japanese agriculture newspaper said that the Chinese magazine *Research on Agricultural Modernization*, issue No. 4, 1981, carried an article on the thorough transformation of the commune system in Guanghan County, Sichuan Province. The article said that the commune form is not compatible with China's reality, and that the same transformation would be instituted in other parts of China.

I hope that *Beijing Review* will give further coverage to the cur-

rent situation in the communes and their future development.

in the three counties in Sichuan Province where such experiments were conducted suggest that though each county has done things in its own way, they have arrived at the same conclusion, that is, it is necessary to do away with the limitations of combining government administration with commune management and to overcome the shortcomings in the present economic management system. In the experimental three years, the economy in these three counties has developed at an unprecedented speed.

rent situation in the communes and their future development.

Toshio Sato
Yamagata, Japan

Please read the article on the people's communes published in the column "Notes From the Editors" in this issue. — Ed.

Criticism of Reagan's Policy

Many of us were very pleased to read of China's trenchant criticism of President Reagan's interventionist policy in El Salvador, which indeed is basically very similar to earlier interventions in Korea and Indochina.

The peoples of the Central American nations of Nicaragua, El Salvador and Guatemala, long the victims of imperialist pillage, are rising up to get control of their societies and change them. In Nicaragua a people's regime has been established but it is threatened by the kind of destabilization campaign by which the US helped to bring down the Allende government of Chile. In El Salvador a linking up of guerrilla forces and mass organizations has created a power which has grown despite massacres. Guatemala is the El Salvador of tomorrow, despite the killing of thousands.

China had a particular interest in the long Indochina struggle because the Indochina states were just over the border. Central America is far away but China will honour its revolutionary past by doing what it can in behalf of the struggles taking place there. And broad international support

After these experimental counties separated government administration from commune management and re-established the rural political power (i.e., the *xiang* government) the people's communes as economic organizations now exist side by side with agriculture-industry-commerce complexes and agriculture-animal husbandry cooperatives. And as a form of socialist, collectively owned economy in the countryside the communes will continue to play a positive role.

— Economic Editor Jin Qi

for them will keep the Cuban role within bounds and help assure independent revolutionary development.

Hugh Deane
New York, N.Y., USA

Access to Different Views

The articles in the international column helped me dismiss my doubts.

Dealing with a wide range of problems, they are very helpful and conducive to understanding different views.

In addition, your articles about Latin America are very good because they are concise and to the point, unlike those in some newspapers. If you would publish articles about inflation in the whole of America, that would be interesting.

Jorge Medina Alvarez
Lima, Peru

I found the magazine very interesting. It gives an alternative view to world politics and, especially, to China. I would like to read articles which deal with Chinese foreign and domestic policy, Chinese development strategies and developments in China.

Pertti Laine
Helsinki, Finland

Suggestions

China's criticism of the film script *Unrequited Love* is well known to all Japanese because of the undue exaggeration of it in our newspapers. I think it represents a struggle between ideological and political lines carried out in the form of literary criticism, whereas others hold that this criticism signals a beginning of a "turning Left." Although this problem has already been made clear by Hu Qiaomu's speech and Bai Hua's letter in issue No. 2, I still hope the column "Notes From the Editors" will continue to answer questions on this subject.

I would like to see more articles on the Party resolution.

The magazine has a feeling of rigidity. Would you give more coverage to novels, poems, films and dramas in addition to articles about politics, economy and international affairs? Japanese readers want to know what literature and art are the most popular among the Chinese people. How is the comic dialogue in China?

Masuo Arashida
Osaka, Japan

POLITICAL**The Right Attitude
Towards One's Children**

Zhu Xiaoguang felt relieved when his father was rehabilitated after the fall of the gang of four in 1976 and became Vice-Chairman of the Chinese People's Political Consultative Conference of Zhejiang Province and deputy minister of the provincial united front work department. He thought that being a restaurant waiter was beneath him and that his father would surely find him a better job. He was surprised when his father, after taking office, gave him a Chinese cookbook and a kitchen knife. He complained that his father did not care about his future.

"We Communists can't follow the feudal practice that a son should become somebody once his father becomes an official," said the father. He explicitly told his son that revolutionary jobs should not be divided into inferior and superior ones and that he would never take advantage of his position and power to transfer his son to another job. "As a cadre's son," the father said, "you should set an example in breaking with the traditional concept that working in the catering trade is inferior."

After patient efforts, the father's wisdom finally prevailed and the son began to take a more positive attitude towards his job. In fact, he acquitted himself so well that he was commended as a model worker for four years running.

Although the story lacks drama, it recently appeared on

the front page of the Party organ *Renmin Ribao*, because it speaks to a not uncommon problem in the current effort to rectify the Party's style of work.

The problem is that some leading cadres in China have given up their revolutionary ideals in favour of selfish pursuit of personal gain and fame. Uppermost in their mind is their desire to secure jobs for their children that promise easy and comfortable lives. Some even abuse their power by bribing people who can be instrumental in helping them attain their selfish ends. But in so doing, they not only spoil their children but also damage the Party's image.

While exposing these wrongdoers, Chinese newspapers are giving coverage to positive examples of veteran cadres who educate their children to be good ordinary workers. The same day the waiter's story appeared, *Renmin Ribao* published another story about Cao Xiaoyu, a member of the standing committee of the Taiyuan city Party committee, who encouraged his daughter to serve as a street cleaner. The mother, thinking the job unworthy of her daughter, asked Cao Xiaoyu to find her another job. But the father answered: "Since quite a few people look down upon street cleaners, it's the duty of Party cadres to take actions that will help change their attitudes."

With her father's support and encouragement, Cai Xianglan continued in her job, fearing neither dirt nor fatigue, still less the disdainful eyes of a few people. Her colleagues only found out that she was the daughter of a Party official

because of the newspaper story. One co-worker commented, "Cao Xianglan is a fine example for us, but her father is all the more admirable. With officials like him, our Party's fine style of work will surely be revived."

ECONOMIC**Civil Aviation Advances**

In 1981, the international air routes of the General Administration of Civil Aviation of China (CAAC) and its airline to Xianggang (Hong-kong) handled a total of 230 million ton-kilometres in air transportation and the number of passengers CAAC served was over 1 million.

Due to the country's open policy towards foreign countries and particularly to improved enterprise management since 1980, civil aviation has developed rapidly and has shown an annual average increase of 21 per cent in passengers, cargo and mail in the last few years.

CAAC has opened 19 international air routes and 7 air routes to Xianggang and other regions, covering more than 140,000 kilometres. In addition, it has aviation agreements with more than 40 countries and cooperative relations with airlines in 180 countries and regions.

The flying safety record of CAAC ranks among the best in the world and for a long time it has had no serious accidents. If the weather is not suitable for flying or if a plane shows any maintenance problems, for the passengers' safety's sake, CAAC would rather postpone flying and bear the economic losses. Nonetheless,



Serving cold drinks on board a CAAC airliner.

while continuing to emphasize safety first, in recent years CAAC's takeoff punctuality rate has been gradually increased. Last year, 96.6 per cent of the CAAC's international scheduled flights took off on time.

The China Aviation Food Company established in 1980 has helped noticeably improve CAAC's food, and it currently supplies food for more than a dozen foreign airlines, including Japan Air Lines. Following recent training, all flying crews now provide better services, and CAAC often receives letters from passengers thanking its staff for helping them find lost belongings.

CAAC has established an educational system to train its staff in various fields of work. Each of the country's civil aviation administration bureaus and centres has its own technical school. In addition, two aeronautical engineering institutes have been founded to train professionals of all specialities, one in Chengdu in southwest China's Sichuan Province and the other in north China's port city of Tianjin.

To meet the increasing needs of international and domestic air transportation and develop-

ing tourism, airports in some provincial capitals and scenic spots have been expanded. The enlarged Capital International Airport of Beijing, which was commissioned on January 1, 1980, has become a modern international air harbour.

CAAC has opened more than 20 new domestic air routes in recent years to scenic places for the convenience of tourists. It now has 166 domestic air routes, which fly 190,000 kilometres, providing direct or connecting services between Beijing and all the other 28 provinces, municipalities and autonomous regions, except Taiwan.

China's specialized aviation has also developed. The country now has about 600 specialized aviation bases and a specialized flying contingent directly serving industrial and agricultural production and scientific and technical research. The specialized aviation services have constantly been expanded and now include 20 operations, such as aerial geological general surveys which have already covered about 81 per cent of the country's total land area. Other services are tree planting and forest protection, insecticide spraying, cloud seeding and monitoring fish shoals. Further, aids for offshore oil exploitation

and aerial remote sensing have been developed in recent years.

Enterprise Diagnosis

A sick person should consult a doctor. Similarly, a factory with management problems can ask a "physician" to help analyse its deficiencies. Economists refer to this as an "enterprise diagnosis."

Some losses incurred in China's enterprises are certainly a result of obsolete equipment and an insufficient supply of raw materials, but many more are caused by improper management and unsound rules and regulations as well as a low level of technical knowledge.

Therefore, factories in many cities are currently conducting "enterprise diagnoses" in order to improve management. Most of the "diagnostic" personnel are management specialists with intimate knowledge of the economy, a fair theoretical level and some practical experience. They make penetrating analyses based on thorough investigations using modern scientific management techniques, and they express their views with accurate statistics and data determined through scientific processes.

In the Nanjing Printing and Dyeing Mill of Jiangsu Province in east China, the quality of the dyed cloth varied greatly and profits from its sale was declining every year. The factory directors invited many "doctors" to examine the factory's condition. The experts listened attentively to opinions from various quarters, made on-the-spot investigations, looked into the working conditions and the equipment, and analysed a host of first-hand information. Two weeks later, their diagnosis suggested that the main elements affecting the dye quality were irrational use of technology and

imperfect inspection procedures. Their diagnosis included numerous suggestions for permanently overcoming these shortcomings and achieving good results.

More than 60 cadres and technicians from Jiangsu Province's factories have been chosen and trained to publicize the method of enterprise diagnosis throughout the province. It is expected to become an important means of consolidating enterprises.

SOCIAL

Protest Against Pope John Paul II's Slanders

Bishop Michael Yang Gaojian, a leading member of the Administrative Commission of the Catholic Church in China, the Bishops' Conference of the Chinese Catholic Church and the Chinese Catholics Patriotic Association, issued a statement on March 19, expressing great indignation at Pope John Paul II's call on the Catholic churches all over the world to "pray for the persecuted Chinese Catholics" on March 21.

The statement said: "Ever since the founding of New China, all the clergy and laity of the Chinese Catholic Church have been enjoying the right of freedom in religion. Freedom in religious belief as a policy of the Chinese Government was laid down in official documents in the early years of the People's Republic and officially proclaimed in China's Constitution in later years; and it has been firmly carried out in all these years except the 10 years of the "cultural revolution" (1966-76), during which this and other

policies were violated. But this policy has been restored since the fall of the gang of four in October 1976. The Bishops' Conference of the Chinese Catholic Church was founded in 1980. In the past few years, national and diocese administrative organizations have been set up and church affairs have gradually expanded."

The statement pointed out that Pope John Paul II's allegation that there is "persecution of the church" in China is nothing but vicious slander. It demanded that Pope John Paul II call a halt to his false testimonies and accusations against Chinese churches. Otherwise, the Chinese churches will launch a counterattack.

FOREIGN RELATIONS

Exchanges of Official Nature With Taiwan Opposed

The Chinese Foreign Ministry, in a note sent recently to the foreign diplomatic missions in China, declared that China is firmly opposed to any country permitting Taiwan to establish representative offices of an official nature on its territory and establishing in return such representative offices in Taiwan and conducting exchanges of an official nature with Taiwan.

The note said: "In recent years, the Taiwan authorities have, in the name of cultural, economic, trade and scientific-technological exchanges, tried hard to set up representative offices of an official nature or

essentially of an official nature, such as commercial offices, information offices or liaison offices for scientific-technological exchanges, in the countries which have established diplomatic relations with China, and to induce these countries to set up similar offices in Taiwan. The Taiwan authorities have also tried by every possible means to enter into contacts with these countries, contacts which are actually official in nature but conducted in the name of economic, cultural and technological exchanges. Obviously, these acts of the Taiwan authorities are designed to undermine the normal relations between China and those countries."

The note stressed that Taiwan is an inalienable part of Chinese territory, and the Government of the People's Republic of China is the sole legal government of China. It added: "The Chinese Government is firmly opposed to any activity which may lead to the creation of 'two Chinas' or 'one China, one Taiwan,' or which is tantamount to treating Taiwan as an independent political entity."

The note requested the diplomatic missions to report the above to their respective governments.

International Day for Elimination of Racial Discrimination

Vice-Premier and Foreign Minister Huang Hua on March 18 sent a message to the special meeting of the United Nations in observance of the International Day for the Elimination of Racial Discrimination. On

behalf of the Chinese Government, he extended his warm congratulations and support to the meeting.

The message said: It is of great significance that the United Nations special committee against apartheid is holding a special meeting in observance of the International Day for the Elimination of Racial Discrimination in the International Year of Mobilization for Sanctions Against South Africa.

The message pointed out that the South African racist regime, in open defiance and wilful violation of the United Nations Charter, has obdurately pursued a policy of racial discrimination, apartheid and racial oppression, persisted in its illegal occupation of Namibia and carried out repeated aggressions and subversions against the neighbouring independent African states, thus committing a crime against the whole mankind, particularly the people of southern Africa.

The message expressed China's full support for the struggle of the people in southern Africa. It said: "The Chinese Government has always firmly refused to enter into any relations whatsoever with the South African authorities and supported the imposition of sanctions on South Africa by all countries as stipulated in Chapter 7 of the United Nations Charter."

International Meeting on Petroleum Engineering

The International Meeting on Petroleum Engineering was held on March 19-23 in Beijing. Sponsored jointly by the Petroleum Engineering Society of the Chi-

Second Stage Bidding for Offshore Petroleum Exploitation

The China National Offshore Oil Corporation issued notification letters on March 16 for the second stage of the first round of bidding for offshore petroleum exploitation. The closing date for bids is April 25, 1982.

The letters of notification for the first stage of the first round of bidding were issued on February 16 (see issue No. 8 p. 5). Fifteen foreign oil companies had submitted their applications by March 10.

The second stage of bidding covers 42,700 square kilometres in 17 areas for bidding in the geophysical survey areas in the southern part of the South Yellow Sea, the southern part of the Beibu Gulf basin and the western part of the Yinggehai basin.

nese Petroleum Society and the Society of Petroleum Engineers (SPE) based in Dallas, Texas, USA, it was the first large international petroleum engineering meeting held in China since the founding of the People's Republic.

The meeting was attended by more than 700 experts and scholars from Canada, France, the Federal Republic of Germany, Italy, Japan, Mexico, Norway, Sweden, the United Kingdom, the United States and China.

Eighty-four papers on oil exploration, drilling, production and other technical problems were read at the five-day meeting which included 23 group lectures and 21 seminars on different specialized technological problems.

In his speech at the opening session, Vice-President of the Chinese Petroleum Society Min Yu said that China has already discovered and opened nearly 200 oil and gas fields and that its annual output of crude oil has exceeded 100 million tons

for four years running. To ensure a continuous development of China's petroleum industry, the country will try to improve its oil prospecting on land, increase the output of existing oilfields and develop its offshore oil and gas exploitation and production.

Clyde Barton Jr., 1982 President of SPE, said that the presentations, discussions and informal professional exchanges during the meeting will unquestionably have far-reaching and very positive benefits to the exchange of technical information and views among professional engineers, scientists and managers. It is absolutely essential for the petroleum industry worldwide to meet the challenge to fill the world's needs for oil, he said.

An international petroleum equipment and technology exhibition was held simultaneously in Beijing. It was organized by SPE, and 209 companies from the United States, Canada, Italy, France, West Germany, Japan, Norway, Sweden and Britain took part.

Afghanistan Must Not Be Forgotten

ON Afghanistan's New Year's Day, which fell on March 21, China urged the world not to forget the Soviet Union's invasion of Afghanistan. Commentator, in a *Renmin Ribao* article, said forgetting will invite further Soviet aggression.

The Afghan people are defending their country and battling a superpower bent on attaining world domination. Afghanistan is the first third world country to fall to Soviet aggression. If the world forgets that Afghanistan is the first country outside the Soviet sphere of influence to be invaded by Soviet troops, then the world can expect to see a second and a third Afghanistan.

"The Afghanistan problem must not be regarded as a local and regional problem," said Commentator. "It is one concerning the world situation as a whole."

Afghanistan's people are again proving that a superpower is nothing to be afraid of, for the outcomes of wars are not decided by superior weapons, but by the nature of the struggle and the unity of people. As a result, the Afghan guerrillas are upsetting Moscow's plans by denying the Soviets a firm foothold in their country for a push south into the Persian Gulf and the Indian Ocean.

The people of Afghanistan are also demonstrating to the world that the greatest danger of war comes from the Soviet Union. Afghanistan is a small country, yet the Soviet Union has sent in 100,000 troops and is employing numerous sophisticated weapons.

The Soviet invasion of Afghanistan should be seen as a struggle transcending national issues. This is not what the Soviet Union would like to happen. It would like the world to turn its attention to some other trouble spot somewhere in another part of the world. Soviet proposals for a "political settlement" are also designed to sidetrack the issue. The Soviet Union wants the world to forget the UN resolutions calling on it to withdraw its troops. It also wants Afghanistan's neighbours to accept its puppet regime in Kabul, for acceptance of the regime means acceptance of Soviet aggression.

Haj Iliyas Shen Xiayi, Vice-President of the China Islamic Association recently wished the people of Afghanistan still greater successes in their struggle against Soviet aggression.

"Chinese Moslems," he said, "fully support the Chinese Government's stand on the Afghan issue. They demand that the Soviet Union withdraw its troops from Afghanistan immediately and unconditionally, restore and respect the sovereignty, independence and territorial integrity and the status of non-alignment of Afghanistan. The Soviet Union must end its criminal interference in the internal affairs of Afghanistan and let the Afghan people decide their own destiny without any foreign intervention."

In a statement on March 21, Hou Tong, Vice-President of the Chinese People's Association for Friendship With Foreign Countries, said, "The Afghan people's struggle against Soviet aggression and for national independence is inseparable from the



Afghan guerrillas during a lull in the fight against Soviet invaders.

interests of the other peoples of the world. They are undaunted in battle. They are containing and weakening Soviet social-imperialism in its global expansion, and playing an important role in the defence of world peace."

The Soviet Union's leaders know they cannot hope to completely wipe out Afghan resistance. They have publicly acknowledged that the war is "very, very arduous."

If the peoples of the world continue to uphold the UN Charter and give support to those fighting against superpower bullying, the Soviet Union's war against the people of Afghanistan will become more than just very, very arduous.

— Duan Lian

Can Compromise Loosen Soviet-Vietnamese Alliance?

THE Soviet-Vietnamese "Treaty of Friendship and Co-operation" signed in November 1978 signalled the establishment of a military alliance between the two countries. Then Viet Nam sent its troops to invade Democratic Kampuchea. The Vietnamese aggressive war is threatening the whole of Southeast Asia and other countries are uneasy.

Without Soviet support, without this alliance, Viet Nam would have had to think twice before attempting to subjugate neighbours by force of arms. On this, there is consensus in the international community. On the matter of the Soviet-Vietnamese alliance, opinion varies. Lately, some people aver that frictions have appeared between the two countries and measures of compromise, such as giving economic aid to Hanoi, should be adopted to loosen this alliance. But will it?

The Link Between Regional And Global Hegemonism

The Soviet-Vietnamese military alliance must be seen for what it is. It is a strategic, mutually reinforcing union between regional hegemonism and global hegemonism. Viet Nam wants Soviet military and economic aid; the Soviets want to use Vietnamese expansion in Indochina and Southeast Asia to gain a foothold in the region. Soviet warships, for instance, now operate out from the naval bases of Cam Ranh Bay and Da Nang in Viet Nam and Ream in Kampuchea. Soviet military and civilian personnel have streamed into the three Indochinese countries to establish

and to expand Soviet influence in the region. This is in return for its aid to Viet Nam. If Viet Nam moves into Thailand and other ASEAN countries, the Soviets are sure to follow. The two share one common goal. Any discernible friction between them is only secondary. It is only over the division of spoils, between regional hegemonism and global hegemonism, and not between expansion and anti-expansion.

Adversity is certainly straining the alliance. The attrition of a long war of aggression is forcing the Vietnamese authorities to ask for more aid from the Soviet Union. Complaints are being heard about the Soviet Union failing to fulfil Vietnamese demands. The Soviet Union, burdened by its policy of global expansion, is also beginning to complain about Vietnamese impotence, corruption and misuse of its aid. These mutual recriminations will multiply as things get more difficult for both.

However, these will not lead to the two allies falling out. They are joined together by their common goal of expansion in Southeast Asia. Neither will give up its expansionist policy until they are taught that expansion does not pay. The alliance cannot be broken up by offers of economic aid. The Vietnamese economy is in terrible shape as it is, but the Viet-

namese are continuing their aggression against Kampuchea. If Viet Nam gets aid from sources other than the Soviet Union, it will only encourage the aggressor.

Two Barriers Against Soviet-Vietnamese Expansion

Some people claim that the more losses the Kampuchean patriotic armed forces inflict on the Vietnamese invaders, the closer Viet Nam will cling to the Soviet Union. The way to weaken or disrupt the aggressive Soviet-Vietnamese military alliance, some suggest, lies in reducing the combat effectiveness of the Kampuchean patriotic armed forces fighting against the Vietnamese, by recognizing the Vietnamese occupation of Kampuchea as a fait accompli. This is a fallacious argument. This will only help the Soviet-Vietnamese military alliance, not weaken it.

Soviet-Vietnamese expansion in Southeast Asia has been restrained because (a) the Kampuchean patriotic armed forces for the past three years have tied down Vietnamese forces and (b) the overwhelming majority of UN member states have come out resolutely against Viet Nam's aggression against Kampuchea and demanded the withdrawal of Vietnamese troops.

These are two barriers containing Soviet-backed aggression in the region. The series of military offensives against Kampuchean resistance and the series of political offensives



initiated by Viet Nam, including proposals for convening a "regional conference" and "partial troops withdrawal," all with Soviet backing, have the aim of demolishing these two barriers. If these two barriers are removed to appease Hanoi, the Soviet-Vietnamese military alliance will become a greater threat to the ASEAN countries. The Soviet Union is already making use of military bases it has acquired in Indochina to exert greater pressure on coun-

tries in Southeast Asia to further its strategic drive south.

The Soviet-Vietnamese military alliance must be firmly met by greater unity among those being threatened by this Soviet-Vietnamese military alliance, by resolute support for the Kampuchean Patriotic Army and the Kampuchean people's struggle and by the implementation of the relevant UN resolutions.

— Tang Tianri

The Continuing Nuclear Arms Race

— Moscow's proposed "moratorium"

SOVIET President Leonid Brezhnev's recent remarks on nuclear weapons in Europe have cast doubts on Moscow's intentions.

He announced Moscow's decision "to introduce, unilaterally, a moratorium on the deploy-

ment of medium-range nuclear armaments in the European part of the Soviet Union" and "to suspend the replacement of old missiles, known as the SS-4 and SS-5, by newer SS-20 missiles."

This action, he claimed, is to "set a good example" for a

major reduction of nuclear weapons in Europe, and demonstrates the "peaceful intentions and good will" of the Soviet Union.

But analysis of Brezhnev's statement gives rise to a series of questions.

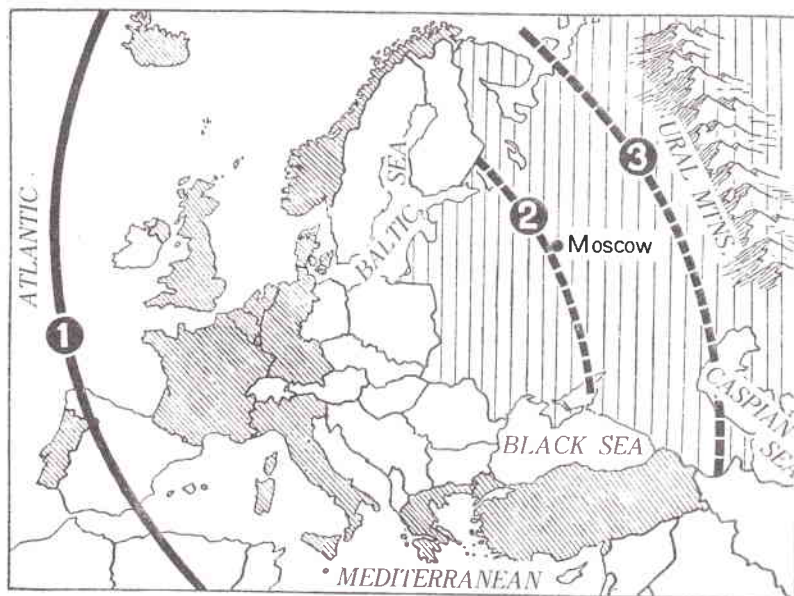
Maintaining Nuclear Superiority

First, Brezhnev's "moratorium" is only applicable to the "European part of the Soviet Union." This means that nuclear weapons, including the medium-range SS-20, will continue to be deployed in the Asian part of the Soviet Union, east of the Urals. It is commonly known that the SS-20, which has a range of 5,000 km, is capable of hitting targets in West European countries from east of the Urals. Thus a "moratorium on deployment" means nothing as far as Western Europe is concerned.

Secondly, the "moratorium" will only remain in force until the United States begins preparations to deploy Pershing-II missiles and cruise missiles in Europe. This is the same proposal that NATO turned down long ago: a halt in the deployment of SS-20s in exchange for a cancellation of NATO's planned deployment of new US missiles.

In the view of NATO, acceptance of Brezhnev's "moratorium" would be tantamount to legalizing the existing Soviet nuclear superiority in Europe.

Thirdly, the "moratorium" was announced after completion of Moscow's deployment of SS-20s. Since NATO's December 1979 decision to deploy Pershing-IIs and cruise missiles in Western Europe to cope with



▭ USSR
 ▨ NATO countries

- ① Effective range of Soviet SS-20 missiles
- ② Effective range of US Pershing II
- ③ Effective range of US cruise missiles



the SS-20, the number of the latter has trebled whereas the NATO plan remains on paper. Therefore, NATO's arsenal doesn't contain any missiles which match the SS-20. Given this, a "deployment moratorium" on the SS-20 in the European part of the Soviet Union will not decrease Soviet superiority.

Continued Tension

Moreover, Brezhnev has also announced that "the Soviet Union intends already this year, unless there is a new aggravation of the international situation, to reduce a certain number of its medium-range missiles on its own initiative." But he refrained from identifying the type of missiles to be reduced and the way it is to be done. If the reduction only involves SS-4s and SS-5s, which are obsolete and scheduled to be replaced anyway, or if reduction means only a temporary transfer of SS-20s to other sites, this would not result in decreased international tension. As to Brezhnev's prerequisite of no "new aggravation of the international situation," the Soviet leadership could, as usual, offer its own interpretation in the

light of Moscow's political needs.

It is worthy to note that Brezhnev warned that in the

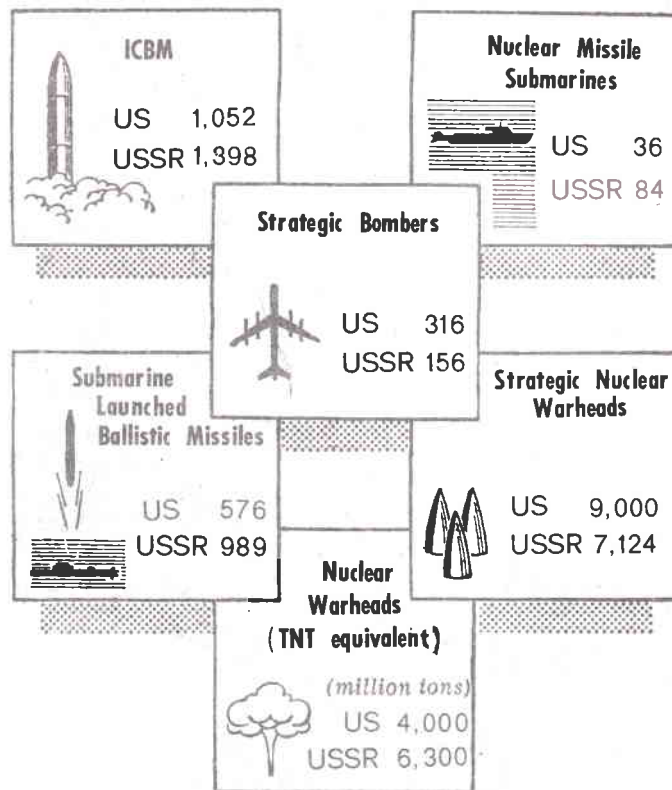
take "reciprocal measures" to subject the other side, including US territory, to a similar threat.

Similar "peaceable intentions and goodwill" have been professed time and again by Moscow with the same objective of preventing a buildup of NATO's nuclear force and preserving Soviet nuclear superiority.

Washington will neither be reconciled to nor accept defeat in the nuclear arms race. In its March 16 statement, the White House has made it clear that new missiles will be deployed in Western Europe as planned.

Apparently the bitter nuclear arms race will continue. Neither the recent Moscow announcement nor the nuclear arms limitation agreements already

COMPARISON OF US-USSR STRATEGIC FORCES



absence of a positive response from the West and if the Soviet Union is confronted by a "greater threat" by execution of the NATO plan, Moscow will

reached between the USSR and the United States will play any positive role in a genuine reduction of nuclear arms.

— Wang Ziyong

Economic Trend of Western Capitalist Countries

by Huan Xiang

After 30 years of development, the Western capitalist countries have entered a long period of economic stagnation since the mid-1970s — a stagnation caused by three basic factors.

Unless it is stimulated by external factors, the Western economy will remain at a low level. Its period of relative stability has gone for ever. In the coming decade, instability and frequent crises will prevail in the capitalist world.

ALTHOUGH the West European economies experienced a slight upturn towards the end of 1981 and some studies predict the US economic situation will improve in mid-1982, most Western economists are very pessimistic about the possibilities for the capitalist economy and many are also pessimistic about the world economy in the rest of the century. Kondratieff's long wave theory of the capitalist economy is enjoying increased attention in the West from many Marxist-Leninist economists and some capitalist economists, including US Professor Paul Samuelson. The professor has predicted that in the last quarter of this century the capitalist economy will not enjoy the vitality of the previous 25 years. According to his prognosis, its economic development will, in fact, be quite poor.

In the past, most Western economists held the view that the capitalist market economy had a self-regulating mechanism which kept the postwar Western economy on a healthy road despite some ups and downs. This view is not consistent with the facts. In the 30 years from 1945 to 1974, the average annual growth rate of industrial production in the Western countries was about 4 per cent: the lowest being 2 per cent; and the general high, 6 to 8 per cent; and the highest more than 10 per cent as in

Japan. After the economic crisis of 1974-75, the average annual industrial growth rate between 1974 and the beginning of 1981 was less than 1 per cent, with the highest being 2 per cent and the lowest being minus 2 to 3 per cent. Some Western economists assert that this situation is unlikely to substantially improve before the end of this century. The Western economy will continue to suffer depression or at least experience a stagnation characterized by both high unemployment and high inflation.

In my opinion, there are three basic factors why the Western economy is in an epoch of prolonged stagnation.

Collapse of US-Centred Political-Economic System

After World War II, the United States dominated the capitalist world which consisted of three systems in the economic sphere. First was the production system in which the industrial production of Western Europe and Japan was controlled by the Marshall Plan and US multinational corporations. Production in all capitalist countries was under the influence of US science and technology and under US control. Second was the trade system with the United States at the core, which was based on the General Agreement of Tariffs and Trade (GATT). This agreement reduced international trade barriers and generated fairly brisk trade among capitalist countries. Third was the monetary and financial system established at the 1944 Bretton Woods Conference. This made the US dollar a reserve currency as acceptable as gold, and set a fixed exchange rate between the dollar and gold which remained constant until 1968 and relatively stable until 1972. As a result of the powerful US productive forces and the above-mentioned trade and monetary systems as well as the deferred demand for equipment and consumer goods left over from the period of 1929 to 1939 and the war years,

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the capitalist economy experienced steady development from 1945 to 1973.

Now all the three systems have collapsed. In the first 10 years after World War II, US multinational corporations dominated every field worldwide. Today they still remain powerful, but they are no longer predominant as in the past. Multinational corporations in Western Europe and Japan have gained strength. After the Tokyo round of 1979 and with protectionism growing in numerous countries, the implementation of GATT has become more difficult. GATT has lost its power in the advanced Western industrial countries and only plays a role in connection with certain third world products such as textile and leather products. The US dollar is no longer a reserve currency as solid as gold. The monetary and financial system with the US dollar at the core has collapsed completely. The capitalist world may have three monetary blocs: the US dollar, the Euro-currency unit and the Japanese yen. The breakdown of these three systems has transformed the Western economy from a period of smooth development to a stage of vicissitudes. As for the deferred demand which was unfulfilled in the war years, it has been satisfied and is no more a factor stimulating the economy.

There also used to be a US-centred capitalist political-military system. First, the United States provided a nuclear umbrella over Europe and Japan.

Secondly, the United States assumed the responsibility of carrying on the cold war and containing the Soviet Union, and used this as a political condition to maintain its hegemony in the capitalist countries. In the 30 postwar years, the development of the European economy and the "taking-off" of the Japanese economy all benefited from this system. Since the United States assumed the cost of countering the Soviet Union, Europe and Japan did not need to allocate huge sums to expand their military strength. Therefore, their economies developed greatly. Because Europe basically enjoyed peace over the first 30 postwar years, European countries have become less vigilant about the Soviet threat of aggression and expansion and are unwilling to increase their military expenditures. In the past when the US was spending billions of dollars on defence, the European countries spent money trying to catch up with and overtake the United States economically. Although in the past 30 years strikes took place one after another and the relations between la-

bour and management were fairly tense in these European countries, the labour-management relationship was only "routinely" tense and did not lead to a serious crisis.

Thirdly, the United States spent a great deal on its wars of aggression against Korea and Viet Nam, which benefited Japan greatly and even brought some profit to Europe. The US political-military system thus has contributed to the economic progress of Western Europe and Japan.

This political-military system is in the process of collapse. Though NATO still functions, it has become a question for Western Europe. Europeans now doubt the reliability of the United States' nuclear umbrella. When the Soviet Union reaches parity in nuclear armaments with the United States, Europeans will not and dare not trust the US willingness and boldness to use its nuclear strength for European security. A crisis of trust has developed between the United States and its allies in Europe and Japan. The political-military system now is not the same as in the first 30 postwar years.

The US-centred capitalist political, economic and military systems are in decline or have totally collapsed, and the capitalist world as a whole is in a confused and weak position. It has failed to cope with the present-day economic crisis, let alone reverse the trend and again get on the road of development. In the predictable future, no Western country can manage to gain the dominant position formerly held by the United States; the Western capitalist countries are economically and politically split and unstable. There are three centres: the United States, Western Europe and Japan. And how the situation will develop is unclear. However, there are no signs that the Western countries are going to restore economically and politically the stability and security that existed 10 years ago.

The Soviet Union is now diplomatically in a more favourable position. In the past it had to cope with the United States and other Western countries, a US-led united challenge to the Soviet Union. In addition, the Soviet Union was militarily inferior to the United States. Now the Soviet Union can feed the disintegration of the West. It takes advantage of the contradictions among Western countries, Western Europe's pulling away from the United States, the West's fear of war and desire to appease the Soviet Union's political ambition by establishing economic ties. Looking at the current situation, it can be prognosticated that the split of the

Western alliance probably will not be basically mended and is likely to increase by the next decade.

The old US hegemonist system has collapsed and a new system has not yet emerged in its place. The Western capitalist countries are in a period of big changes and stand at a political and economic turning point. This is why the capitalist economies are in a state of prolonged crisis and lack the ability to recover.

State Economic Intervention in An Impasse

State intervention in the economy played a crucial role in the development of the Western economies in the last 30 years. However, today it has met new obstacles.

In the past, West European countries used the state apparatus to interfere in their economies with the purpose of splitting the workers' movement and bring it into the orbit of the bourgeois political system, easing tense labour-management relations and promoting the economic development. With the rising productive forces, major West European countries began having high wages, increased consumption and greater borrowings, with the result that the workers' living standards improved and their real wages increased to a certain extent. Under these circumstances, the European workers' movement struggled for economic rather than political goals in the last few decades. It chiefly strived to maintain a balance between wage increases and price increases or realize indexation. Although there continued to be strikes, the labour-management relationship was basically stable. The "welfare state" was the first field and an extremely important result of state economic intervention.

State intervention also plays an important role in regulating conflicts of interests within the ranks of the bourgeoisie. Which industry should be transformed, which industry should be eliminated and which industry should be established—all these problems of adjusting the economic structure are regulated by state intervention. Closely connected with state intervention are the efforts of the bourgeoisie to transform small farms into larger ones and finally into agro-businesses. In the United States, small farms were hit hard and large farms registered rapid growth as a result of state intervention. Western Europe went through a similar process.

After World War II, old and new industries coexisted. The old industry left over from the

war called for maintenance and renovation while new industries such as electronic and aviation industries also needed further development. As a result, labour was in short supply. Then the bourgeoisie, by harsh economic means with the help of the state, forced large numbers of farmers to leave the countryside and enter the labour market, thus providing sufficient labour force for the new industries and service trades. The new electronic and nuclear industries needed young, skilled and better educated workers. The original skilled workers were transferred to the new industries. Unskilled labour from the countryside went to fill the vacuum in the old industries. From the mid-50s to the late 60s the Western rural population streamed into industrial centres. Without state intervention, this migration would not have occurred.

In this period the service industry expanded greatly. The growth of new industries created the need for new service items. In addition to the food and clothing sectors, the service industry also served the new industries by maintaining and renovating equipment and improving the quality of products. The number of teachers, doctors, lawyers and accountants also increased and their skills improved. Trades serving production grew quickly in the Western countries.

State intervention assured the monopoly groups high rates of profit. Marx pointed out that logical developments dictate a decline in the average rate of profit. This is true, but state intervention may prevent its fall or at least keep it at its original level. This is one of the major functions of state intervention.

It is necessary to point out the state's role in protecting multinational corporations. When a multinational corporation wants to buy some enterprises of another country, its home country inevitably provides direct or indirect support and assistance. The interests of the monopoly capitalists are defended by the state through laws and by economic and diplomatic means. The purpose is to slow down the decline in the average rate of profit. The United States has many statutes which have this as their aim.

The state apparatus is a tool of class rule. This is true. But we must not speak of the state's role in class struggle alone. We should also recognize the bourgeois state's function in co-ordinating and adjusting the relations within the ranks of the bourgeoisie. If we fail to do this, our analysis will be neither thorough nor

complete. Apart from being a tool for one class to suppress another, the state also plays a decisive role in adjusting the relations and coordinating the different interests within the ruling class.

The state intervention practised in Western countries has reached a dead end. In Sweden, any further state intervention in the economy will impair the basic interests of the bourgeoisie. Some Swedish scholars maintain that social welfare in Sweden is the most complete in the world and it is almost impossible to improve it. But the welfare system has imposed a heavy tax burden on the populace. These scholars hold that there are only two possible solutions for the nation: One is to nationalize enterprises and put them under worker control, which would meet opposition from capitalists and provoke greater confusion. The other is to levy heavy taxes on the enterprises and use them as a "workers' fund" to purchase the existing big enterprises or let workers establish new factories to compete with the old private factories run by capitalists. These Swedish economists support the latter indirect transformation. But this is also opposed by the bourgeoisie, whose papers commented that confiscating enterprises is instant murder and using "workers' fund" to buy enterprises is slow poison.

The troubles of Sweden, a nation renowned for its social welfare, show that "welfare states" have reached a dead end. They can only try to maintain the status quo, and if the world economic situation continues to worsen, they will not be able to do that. So the United States and Britain are already chopping away at social welfare and restricting the trade unions' rights.

Some countries propose further state intervention but the problem is how. Some propose further rationalization of the industrial sector through the state apparatus, which is something they can do. But they will face stubborn resistance if they want to step up nationalization. President Francois Mitterrand nationalized some enterprises and banks in France, but he has already backed down on some proposals to avoid stronger opposition from the bourgeoisie. The method of state economic intervention is failing.

State intervention also facilitates exploitation and plunder of third world countries. It was the third world's low-priced energy and cheap raw materials that expedited the economic development of the Western countries in

the "golden time" for the West. Exploiting exchanges at unequal values, neo-colonialists grew fat on the surplus value expropriated from the third world countries. But the situation has changed. The soaring prices of energy after 1973 posed great difficulties for the Western world. Though many countries have been working to develop alternative energy, some scholars conclude that there will be no new commercially viable energy source to replace oil for 10-15 years. As to raw materials, though many synthetic materials have emerged in place of costly raw materials, the West still is dependent on the third world for many items. The Western countries, however, no longer can exert pressure on the oil-producing countries for lower oil prices.

New state intervention will not invite an upsurge in investment. It can bring about mistakes instead. Take the US policy of high interest rates for instance. In the first half of 1981, its interest rate went as high as 21.5 per cent annually; some hoped this would draw foreign floating capital. Paradoxically, it gave a spurt to speculation which cashed in on the short-term money funds, instead of investment. The industrialists are discontent because speculators reap the benefits of the short-term funds while the interest rates are too high to justify new investment in industry. This is another example of the failure of state intervention.

A Relatively "Saturated" Point in Science and Technology

In the past the West's science and technology advanced often as a result of the production of arms. Even today, 50 per cent of scientific and technological advances occur in the development of arms production. Even some new emerging semi-industrialized countries also develop arms production and export arms. Only when the scientific and technological advances were applied to civil purposes did new industries emerge, such as the computer, nuclear power and space aviation industries. These new industries spurred new investment, brought economic upsurge and prosperity and attracted many foreign workers to the developed countries. This lasted for about two decades following World War II.

Now science and technology have developed to a relatively "saturated" point. In the past the utilization of science and technique was aimed at creating new industries, today it is design-

ed to improve such process of production as automation; that is to say, science and technology are being applied to renovate old equipment rather than create new one. Since there have been no new significant breakthroughs in science and technology in recent years, another investment drive will not occur. Of course, the improvement of production methods can spark an investment drive. For instance, after the invention of microelectronic products, an increase in investment ensued in order to use these products to renovate machines, especially to improve automation. However, fast transformation is not possible, because an enterprise cannot be automated overnight. Further, automation means saving labour which creates a serious social problem.

The amount of investment in science and technology is decreasing yearly. In the 50s and 60s, the governments and corporations of the

West invested heavily in scientific and technological studies. The US Government spent 3 per cent of its GNP for this purpose in the 60s, but only 2 per cent in the 70s. Now investment in science and technology is plentiful only in the electronic industry and genetic engineering. Compared with the 50s and the 60s, the stimulation to economic upsurges by science and technology has decreased.

In view of the above-mentioned factors, it can be said that the Western economy will not grow substantially in the coming one or two decades. The Western economy, if not stimulated by external factors, will maintain itself at a lower level. It will probably grow slightly, but cyclical crises will be more frequent. The period of relative political and economic stability for the capitalist countries is over. In the coming decade, instability and frequent crises will characterize the Western capitalist world. □

Capital Construction: Achievements And Problems

by Han Guang

Improved capital construction is one of the major tasks of China's present economic readjustment. At one time capital construction was undertaken on an extended scale and some investments were made without proper assessment of the overall investment orientation. But the situation is looking up. At present the industry's main targets are to shorten the building cycle and increase the returns on investment.

Achievements

SINCE its founding, New China has finished many successful capital construction projects. A good number of the 3,500 large and medium-sized and the hundreds of thousands of smaller ones were completed in a short period, required moderate investments and yielded quick economic returns. At present, several hundred large and medium-sized projects and about 10,000 small projects are under construction.

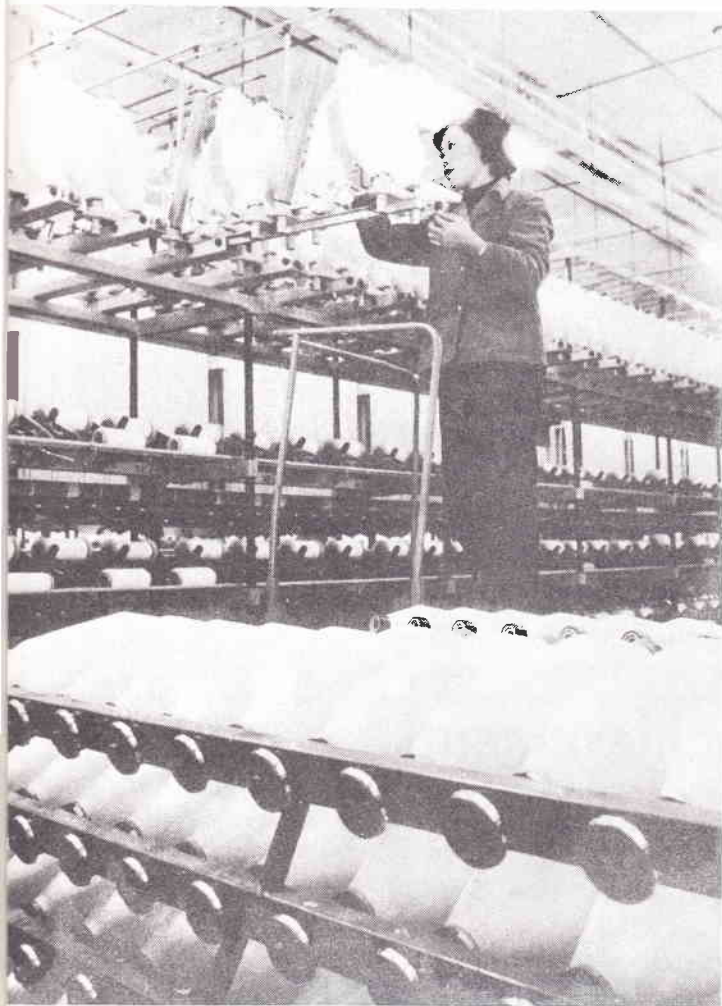
Most of the over 100 projects of the First

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and Second Five-Year Plans period (1953-57, 1958-62) were completed within the planned schedule and budget, with an average construction cycle of three or four years. The Daqing Oilfield in northeast China and the Panzhihua iron and steel complex in southwest China were exploited or built quite rapidly in the early 1960s.

During the early 1970s, most of the large and medium-sized projects introduced wholly from abroad took only three years to complete



The Shanghai General Petrochemical Works has boosted its production of chemical fibres.

because their techniques were sophisticated, their plans remained unchanged and because the investments and material supplies for them were guaranteed. The building cycle for 7 of the 13 large 300,000-ton synthetic ammonia chemical fertilizer plants introduced from abroad averaged two years and 11 months, which was two years and three months shorter than that of the 19 medium-sized nitrogenous fertilizer plants built earlier. The first-stage work of the Shanghai General Petrochemical Works, which included the installation of 18 sets of production equipment, only took three and a half years from ground breaking to production.

In 1973, Premier Zhou Enlai called for upgrading China's harbours within three years. In response, harbour construction was accelerated and, by the end of 1975, the total handling capacity of China's harbours was nearly doubled with the completion of 40 deep-water berths for

vessels with a tonnage of 10,000 and of 50 harbour operation lines.

A project that had begun in May 1978 to electrify the 158-kilometre Baoji-Tianshui section of the Longhai Railway was completed and open to traffic in only 20 months.

The construction of thermal power plants has proceeded at a fairly fast pace in the last few years. Large or medium-sized thermal power plants require only three to six years for completion, with a building cycle close to that of similar power plants built abroad.

These examples show that China's present designing and construction capacities can accommodate any technically difficult large-scale construction projects and can complete them within a reasonable period of time so long as they are well planned, their funds and supply of materials and equipment are guaranteed and their designing and construction are well organized.

However, due to the interference and sabotage of the gang of four and the influence of "Left" thinking in a period of over 10 years, quite a few problems existed in our country's capital construction. The scale of our capital construction kept expanding, the investment in construction was used in a disorganized way and the building cycle of many projects was too long. All this seriously affected China's economic construction.

In 1981, as the country further readjusted its national economy, we resolutely halted or postponed the construction of a number of big projects which had not been well planned and were tying up too much fund. We challenged the assumption that big projects could never be reduced and, as a result, solved many financial problems that had occurred. The country's investment in capital construction was cut from 53,900 million yuan in 1980 to 41,700 million yuan last year (initial estimates) and the number of large and medium-sized projects under construction was cut from over 1,700 in 1978 to some 600 in 1981. At the same time, the construction of new projects was strictly controlled. But funds and materials were guaranteed for the capital construction projects already in the state plan.

In 1981, 66 big and medium-sized projects and 168 single-item projects were completed and went into production.

Energy construction achieved marked progress last year. The country built another 23

coal pits, increasing the country's annual coal mining capacity by 12.43 million tons. The annual coal washing capacity rose by 2.25 million tons.

As for the country's electric power construction, the year's total installed capacity amounted to 2.24 million kw. During the same period, dozens of high-voltage transmission and transformer projects were completed, and 4,880 kilometres of no less than 110,000-volt transmission lines were added. In recent years, this was a year of fairly rapid development in high-voltage transmission and transformer projects.

Petroleum industry construction also overfulfilled the state plan, expanding the country's crude oil exploitation capacity by 5.19 million tons.

The building materials industry increased its cement producing capacity by 880,000 tons.

The textile industry completed and put into production three large and medium-sized projects and five small ones, adding more than half a million cotton spindles. Other light industrial departments completed and put into production 35 large and medium-sized and small projects, adding the following production capacities—70,000 tons of chemical fibre, 210,000 tons of machine-refined sugar, 210,000 tons of raw salt and 48,000 tons of paper and pulp. All these figures have outstripped the state plans.

The investment orientation was further readjusted. Investment in textile and other light industries rose from 1980's 8 per cent of the nation's total to 11 per cent in 1981 and investment in heavy industry dropped from 46 per cent to 43 per cent. Investment in non-productive construction projects (including apartment buildings, schools, etc.) rose from 34 per cent of the total to 41 per cent and investment in productive construction projects dropped from 66 per cent to 59 per cent. Textile and other light industries and non-productive construction projects were strengthened, while the investment in capital construction was reduced. This is of great importance to adjusting the ratio between heavy and light industries and improving the people's standard of living.

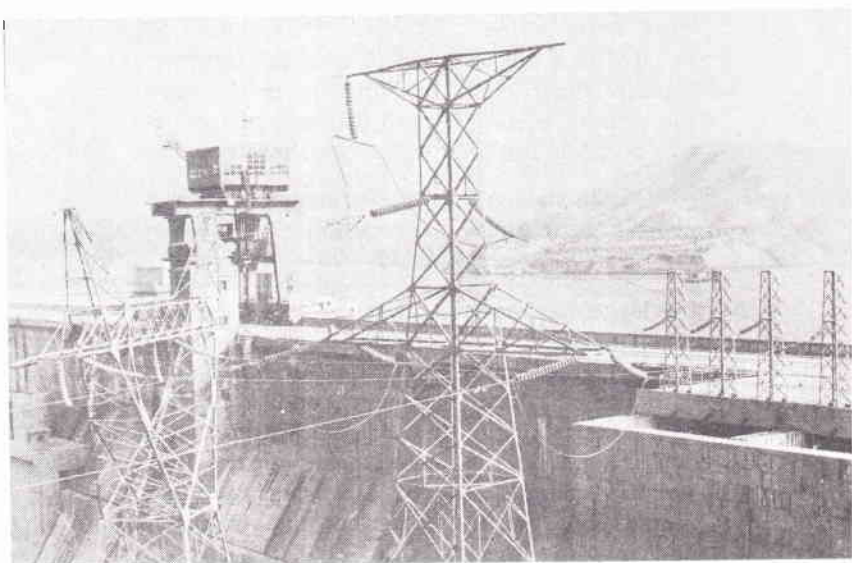
Long Building Cycle

The length of the building cycle is the outstanding problem in today's capital construction. The building cycle for projects completed during the "cultural revolution" (1966-76) was double those of the projects built in the First and Second Five-Year Plans period (1953-62). Furthermore, consumption went up as the building cycle was extended. According to a rough estimate, if the average building cycle of the nation's construction projects is extended for one year, wages alone will increase by 5,000 million yuan.

As the building cycles dragged on, many projects were under construction, but few went into production. During the First Five-Year Plan period, 83.7 per cent of the construction projects turned into fixed assets, but during the 1966-80 period, only 67 per cent became productive.

Of course, many reasons account for prolonged building cycles. But, fundamentally, the "Left" mistakes were the main causes. First, it was an error to go after more and larger projects without allowing time for proper planning. The construction scale was too large, and too many projects were under construction, so the demands on investment and materials fell short of supply and the construction forces were scattered.

Second, many projects started before feasibility studies were made. In some cases, the construction workers were called to the construction site before the project was designed.



The Liujiaxia Hydropower Station, the largest of its kind in China, withstood a heavy flood in 1981.

and construction was undertaken simultaneously with surveying and designing, which prolonged the building cycle.

Third, poor organization and management plagued the course of construction. The correct procedures for the construction of many big items were violated and the management of their construction sites was in chaos.

Fourth, lacking strict rules and regulations, the building schedule control was neglected. For some projects, no reasonable terms of delivery were stipulated and the planned schedule was often changed at will. There was no responsibility system in the construction schedule control so that it was all the same to the participants whether the construction speed was fast or slow, whether the building cycle was long or short and how much money was spent.

Fifth, it was difficult for the state to take over the land, and the compensation for land crept higher and higher. So, some urgently needed projects often could not start because of the problem of land.

Improving Measures

This year, all capital construction work will emphasize shortening the building cycle and earnestly seeking solutions to different problems in the work. We will strive to reduce the average building cycle for large and medium-sized projects to the First Five-Year Plan period level by 1985. All but a few of the large and medium-sized projects now under construction should be completed during the Sixth Five-Year Plan period (1981-85). This should also be cited as a target for increasing the returns on capital construction investments made during the present economic readjustment period. For this purpose, the following work should be done:

First, strengthen the management of the projects now under construction.

The construction schedules and funds for the large and medium-sized projects now under construction will be rechecked. Timetables for finishing these projects will be designed in accordance with their particular conditions. Funds and materials will first be guaranteed for the building of dozens of urgently needed items, such as energy resources, transport and communications, textile and other light industries and building materials, so that they can be completed on schedule. Simultaneously, resolute measures must be adopted to help those

projects which have been completed or basically completed but have failed to finish the winding up work for whatever reasons.

Second, be competent in the early stages of preparation work.

Feasibility studies must be made in advance of a new construction. The construction plan will be examined and approved on the basis of these studies. After the plan is approved, serious attention must be paid to preparatory work such as site selection, designing, equipment purchase, land acquisition and rehousing persons displaced by the acquisitions. Any item which lacks necessary preparation work should not be allowed to start.

Third, consolidate the construction enterprises.

Measures must be taken to strengthen the construction enterprises' ideological and political work, as well as their management this year. The problems of low efficiency, poor quality, heavy waste and too many accidents must be tackled seriously. Efforts will be made to build the country's construction force gradually into a construction army with advanced ideology, strong technical skills, strict discipline and scientific management.

Fourth, strengthen the surveying and designing work.

Designing will be improved and some standard designs will be prepared in advance. The responsibility system in designing will be resumed and perfected, the designing system will be reformed and design contests will be carried out on a wider scale.

We will also introduce the construction schedule responsibility system. Once a construction item is listed in the state plan, each level should be responsible throughout its construction for the planned construction schedule and the budget assigned to it. The funding method must also be reformed. After the state plan is adopted, the financial allocations for construction in industry, transport and communications will gradually be replaced by bank loans. The bank will also take part in examining the construction plans and supervising the results and repayment of investment. Different interest rates and floating rates for loans will be introduced. Those who delay delivery or overrun their budget will be charged double interest or their loans will be stopped. Strict business accounting in construction investment will be introduced. □

Scientific and Technological Exchanges With Foreign Countries

China has increased its scientific and technological exchanges and co-operative activities with other countries since adopting an open-door policy. Many foreigners, especially those in scientific and technological circles, have shown great interest in the principles and policies related to these exchanges.

This special feature, which consists of Vice-Minister of the State Scientific and Technological Commission Jiang Ming's interview with correspondents and three reports by our correspondents, addresses questions raised by those interested in China's new exchange policies. — Ed.

Vice-Minister Jiang Ming's Interview With Correspondents

Question: What progress has China made in scientific and technological exchanges and co-operation with foreign countries since the adoption of an open-door policy in 1978?

Answer: The question can be answered in three ways.

First, exchanges and co-operation are being carried out on a large scale and involve numerous people. Last year's exchanges exceeded 3,000, more than double the number in 1978. They involved approximately 10,000 people, an increase of 50 per cent. Methods of exchanges vary from general technical surveys and discussions to common studies, joint surveys, co-operative experiments, technical consultations, training courses and symposiums. These include Chinese-French surveys of the geological structure of the Himalayas, the formation and evolution of the earth's crust and upper mantle and Chinese-West German co-operation in an energy programme for Guangdong Province.

Second, new channels are being opened for intergovernmental scientific and technological co-operation and multilateral exchanges and co-operation.



Before 1978, China conducted scientific and technical exchanges and co-operation mainly with governments of Asian, African, Latin American and East European countries. While continuing activities with governments in these regions, China has since 1978 established similar relationships

with governments of developed capitalist countries. These include 13 agreements on scientific and technological co-operation and agreements on economic industries and scientific and technological co-operation with the Governments of France, Italy, West Germany, Britain, Sweden, the United States, Finland, Denmark, Belgium, Luxembourg, Greece, Australia, Norway and Japan. According to these agreements, 200 projects involving wide-ranging co-operative activities of study on basic science, applied science, industrial and agricultural production techniques are being conducted in ways which benefit both sides. At the same time, scientific and technological officials are being exchanged between China and other countries.

Multilateral scientific and technological co-operation is being developed and strengthened. Co-operation with associated organizations of the United Nations is being strengthened. For instance, China has established scientific and technological contacts with the UN Educational, Scientific and Cultural Organization, the UN Industrial Development Organization, the UN Conference on Trade and Development, the Food and Agriculture Organization, the World Health Organization, the International Labour Organization, etc. Since 1979, China has actively supported and participated in UN Intergovernmental Committee on Science and Technology for Development, UN Centre on Science and Technology for Development as well as UN Interim Fund on



US Industrial Science and Technology Management teaching group lecturing in Dalian.

Science and Technology for Development.

Chinese scholars and specialists have organized and participated in many international scientific and technological symposiums and strengthened academic exchanges with their counterparts in other countries. For instance, an international laser conference was held in Shanghai and then in Beijing in May 1980; the specialist conference on science and technology policy of countries in the Asian-Pacific region took place in Beijing in August and December; the May 1981 world ore-mining conference was sponsored in Beidaihe, Hebei Province. Chinese scholars have also joined some international academic organizations. By the end of 1981, China had become a member of more than 60 international scientific, technological and academic organizations.

Third, China has gained a lot from its co-operative projects. Advanced foreign sciences and technologies, and management experiences are being used to promote China's economic development. For example, the China Electronics Society's co-

operative experiment on "symphonic" satellites with West Germany and France have benefited its experiment with ground station equipment. China has also provided France and West Germany with profitable experimental data. China sent people to the United States on an investigation and study tour which has helped develop our high-energy physics work. During their study in the United States, the Chinese students also contributed to American high-energy experiments.

Q: Are there also non-governmental exchanges and co-operation?

A: Yes. Non-governmental scientific and technological exchanges and co-operation between China and capitalist countries were quite developed in the early 60s. At present, such activities have developed still further. Originally, scientific and technological contacts were conducted between scientists and scholars or between enterprises; now co-operative relationships have been established between Chinese and foreign academic organizations, foundations, research institutes

and institutes of higher learning. Exchanges and co-operation are being conducted on an ever larger scale.

Q: What policies has China adopted for scientific and technological co-operation with other countries?

A: China pursues the following policy: under the premise of independence and self-reliance, on the basis of equality and mutual benefit and proceeding from the actual conditions at home and abroad, the Chinese conscientiously learn from other countries' advanced technology and management experiences suited to their specific conditions and promote friendly relationship with the people of other countries and the development of science and technology.

Q: What changes have taken place in China's scientific and technological exchanges and co-operation with other countries?

A: Given changes in the international and domestic situation, China's international scientific and technological exchange and co-operation objectives are also developing and changing. The process has been gradual.

In the 1950s, as a result of the economic blockade imposed on China by the United States and other Western countries, China conducted scientific and technological exchanges and co-operative activities primarily with the Soviet Union and East European countries.

Between the early 60s and 1966, as a result of the Khrushchov clique's perfidious scrapping of contracts and withdrawing of experts, thereby creating serious difficulties for the Chinese people, China began to carry out scientific and technological exchanges with Japan and West European countries while conducting exchanges and

co-operation with Asian, African and Latin American countries. However, due to serious interference by Lin Biao and the gang of four during the "cultural revolution," China's scientific and technological exchanges with foreign countries came to a standstill.

After the overthrow of the gang of four in 1976, particularly after the Third Plenary Session of the 11th Party Central Committee in December 1978, China began to adopt an open-door policy towards foreign countries and its scientific and technological exchanges and co-operation with other countries entered a new stage of development.

During the years ahead, we will continue to conduct governmental and non-governmental activities of scientific and technological exchanges and co-operation with more countries on the principle of equality and mutual benefit.

Q: Do China's exchanges and co-operation with foreign countries benefit others?

A: China consistently adheres to the principle of equality and mutual benefit, conscientiously implements agreements and undertakes due obligations. This is publicly acknowledged by many governments and renowned activists and scientists. The "symphonic" satellites and high-energy physics co-operation projects mentioned above benefit both sides.

However, some individual foreigners say that exchanges with China "benefit only the Chinese side." They are certainly viewing things with jaundiced eyes. Many foreign scientific workers have learnt that conducting scientific and technological exchanges and co-operation with China benefits both sides, George Keyworth, Science

Adviser to the US President and Director of the Science and Technology Policy Office, said at the second session of the Sino-American Commission on Scientific and Technological Co-operation held in Washington on October 15, 1981: "The US community has already begun deriving significant scientific benefits from the results obtained from these co-operative projects."

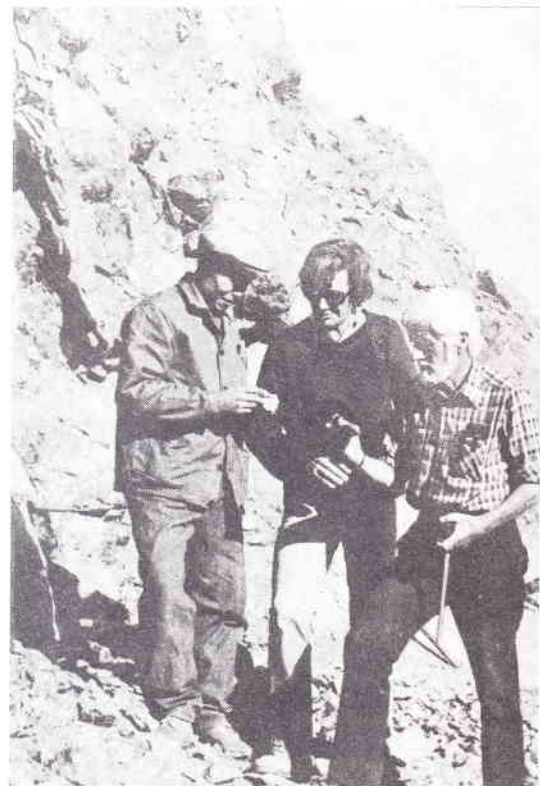
At present, China is still rather backward in economics, science and technology and so may learn more in certain fields from the developed countries. But many foreign scholars and experts highly praised the advances New China has made in science and technology since its establishment. They have a strong interest in China, a civilized ancient country with a vast expanse of territory and 1,000 million people. Many believe that major portions of China's traditional sciences and technologies, after being integrated with modern science and technology, still occupy a dominant position. For instance, the advanced agricultural science and technology in breeding fine strains for food and cash crops, advanced industrial production procedures like our techniques of blast furnace powdered coal injection and dome-combustion hot blast stove; the time-honoured traditional Chinese medicine, Chinese medicinal herbs and acupuncture anaesthesia and the advanced medical techniques for early diagnosis of cancer of the liver, carcinoma of the esophagus and cancer of the nose and larynx, as well as forecasts of earthquakes and floods—all these enjoy a certain international prestige. Traditional Chinese craftsmanship of handicrafts is world-famous. In addition, China abounds in mineral resources, animals, plants and micro-organisms, all

these provide favourable resources for scientific and technological exchanges and co-operation between China and other countries.

Nowadays, many sciences and technologies, such as astronomy, topography and oceanography cannot be mastered exclusively by one country. Co-operation and study in these fields obviously benefit both sides.

Q: Regarding scientific and technological exchanges and co-operation with other countries, what problems still face China today? How will these problems be solved?

A: Although we have accumulated some experiences in expanding scientific and technological exchanges and co-operation with foreign countries, there are still many problems that necessitate further study. They are mainly the following:



Chinese, French and Swiss scientists (from left) examining rocks in Tibet.

1. Certain governments do not quite understand China's policy towards scientific and technological exchanges and co-operation. In order to promote scientific and technological exchanges with other countries, we still need to do a lot of informative work so as to increase mutual understanding and trust.

2. Existing projects tend to be general academic exchanges with insufficient long-range co-operative objectives. We are willing to conduct multifaceted co-operation with governments, academic organizations and scientists in the spheres and topics of interest to both sides, so that both can derive benefits.

Export of Rice Hybridization Techniques

by Our Correspondent Wei Min

THE China National Seed Corporation's transfer of the patent for rice hybridization to the Occidental Petroleum Corporation is China's first export of an advanced agricultural technique to Western capitalist countries.

Equality and Mutual Benefit

When Dr. Armand Hammer, Chairman of the Board of Occidental Petroleum Corporation, and Mr. Ed Welch, Chairman of the Board of the Ring Around Products Corporation (the former's affiliate), visited China in 1979, the China National Seed Corporation presented them with hybrid rice

seeds. They cultivated the seeds on a trial basis upon their return home. Observations demonstrated that China's hybrid rice seeds are unusually strong.

During subsequent visits to China, they proposed discussions on importing China's hybrid rice seeds and related technology. In March 1980, the China National Seed Corporation signed a contract on comprehensive transfers of hybrid rice technology with the Occidental Petroleum Corporation.

The basic contents of the contract are: The China National Seed Corporation will provide the Occidental Petroleum Corporation with a certain

amount of hybrid rice seeds free of charge. China will send experts to the United States to pass on the technology necessary for producing hybrid rice seeds. Occidental will pay all costs for experiments, production and marketing of hybrid rice seeds. During the 20-year period covered by the contract, Occidental will pay initial fee and royalties to the China National Seed Corporation. The Occidental Petroleum Corporation has the patent right to sell the hybrid rice seeds in the United States, Brazil, Spain, Portugal and Italy, as well as countries agreed upon between both sides.

Leading Position in the World

The United States began research on hybrid rice in 1926.

Agricultural scientists from India, Malaysia, Pakistan and Japan began similar research in the 1930s, followed by those of Italy and the Philippines. But their work which proceeded at a slow pace essentially remained in the experimental stage.

Rice is a self-pollinating plant and it is difficult to artificially pollinate rice plants in order to produce hybrids. If the seeds of a male sterile line can be bred which later on are hybridized artificially with pollens of other strains so as to produce a new generation of hybrid seeds of stronger vigour, then they can be grown in a large area. For decades, because ideal seeds of male sterile lines could not be cultivated in many countries, rice seeds of hybrid vigour could not be applied to production for long.

China began the research on this problem in 1964. With the support of the people's government and the co-operation of agricultural departments at various levels, China succeeded in producing seeds of male



Representatives of the China National Seed Corporation and Ring Around signing an agreement on a comprehensive transfer of hybrid rice technology.

sterile line, B-line and R-line in less than 10 years and achieved seeds of strong hybrid vigour. These seeds were grown on a trial basis in 1974, produced for demonstration in 1975 and sown over large areas between 1976-80. The accumulative acreage sown in five years amounted to 17 million hectares (four times the rice-planting areas of the United States), yielding an addition of 13,000 million kilogrammes, the average per-hectare yield was 750 kilogrammes higher than that of other strains. Moreover, the hybrid rice seeds have big roots, strong tillering, thick stalks, fine quality, wide adaptability and strong resistance.

At the 1979 annual meeting of the international rice research institute held in the Philippines, over 200 rice specialists from various countries unanimously agreed that "China's hybrid rice holds the leading position in the world."

Doubts

Officials from the US Agricultural Department, agricultural scientists and workers rejoiced at the news about China's hybrid rice seeds and technology which were to be

Seeds Exchange

THE China National Seed Corporation which is responsible for seed import and export established contacts in 1981 with 180 seed corporations in over 50 countries. It imports and exports approximately 100 strains of seeds.

The corporation has 2,426 branches and 2,000 state-owned seed growing farms. A total of 22,000 scientific and technical personnel and 300,000 technical workers are engaged in the cultivation and breeding of seeds. The nation has 2 million hectares of seed production centres.

The corporation's 1981 seed exports exceeded 1980's by 16-fold and hybrids production in co-operation with other countries increased nearly 6-fold. During the past two years, China imported sunflower and vegetable seeds and 10 sets of advanced seed-processing equipment.

Since 1979, foreign countries have shown growing interest in importing China's rice, hybrid sorghum, soybeans, jute, red beans, white beans, radish, Chinese cabbage, broad beans and garlic.

During the 32 years since its founding, New China has cultivated 3,000 varieties of seeds. It has now basically used improved seeds for the major crops of rice, wheat, maize, sorghum, cotton, soybeans and ground nuts.

brought to the United States when it was published. Since the United States is a grain-rich country, it desires fine rice seeds to boost per-unit yields.

But some Americans have the following doubts:

- Since China's natural and production conditions are different from those of the United States, they doubt whether China's hybrid rice seeds can

yield a 20 per cent increase of rice on American soil.

- If hybrids production is successful, then how will the synchronizing of the flowering periods of both parents be solved?

- Whether the hybrid rice seeds are adaptable to a wide area?

- Whether the quality of hybrid rice is to the liking of the American people?

Yuan Longping and Chen Yiwu, research fellows (equivalent to professors) of the Academy of Agricultural Sciences in Hunan Province, and Du Shenyu, agro-technician with fairly rich experience and skill in hybrids production, after making repeated study, and analysis and comparison of the natural and production conditions of China and the United States, pointed out that hybrid rice seeds can take root, sprout, blossom and produce on American soil.

The three outstanding Chinese agricultural experts were sent



Chen Yiwu and Du Shenyu and Alfonso Calub of Ring Around (From left) in the test field in the United States.

SPECIAL FEATURE/SCIENTIFIC EXCHANGE

by the China National Seed Corporation to the United States to pass on the rice hybridization technique. Yuan Longping helped work out a plan for growing rice on a trial basis.

Results

In June 1980, with the help of Dr. William F. Lehman, an agronomist of California, and agricultural workers Chen Yiwu and Du Shenyu began work in the Imperial Valley Field Station of the University of California. After making a comparison between Chinese hybrid rice seeds and the US Starbonnet strain, they found that Chinese hybrid rice seed yields 10,481 pounds per acre; while US Starbonnet, only yields 3,793 pounds.

While affirming the high yield of China's hybrid rice seeds, US experts claimed that California is not representative because it is not an American rice-producing area.

In accordance with the Occidental Petroleum contract, Chen and Du went to Texas in early 1981. Texas is a major rice-producing area in the US. They continued trial growing at the field station of the Ring Around Products Corporation near Houston. They carried out hybrid rice demonstration culture sterile line multiplication, hybrids production and other experiments on 20 acres of experimental plots. Yield tests of hybrid seeds were also conducted at field stations in Arkansas, Mississippi and Louisiana.

Harvest in Texas station showed (see table):

Names	Per-acre yield (pound)
Chinese hybrid rice	10,103.2
Starbonnet	5,712
Nato	5,315
Staturm	5,279

China's hybrid rice seeds also produced 30 to 50 per cent yield increases at the field stations of the other three states.

Experiments also show that Chinese hybrid rice seeds require fewer seeds (hybrid rice requires 25 pounds per acre while US good strains require 100-125 pounds) and low production cost. They are adaptable to wide areas; they can be grown in the United States south of 36° north latitude. Moreover, the problem of synchronizing the flowering periods of both parents and adjustment of the flowering period was solved.

However, China's hybrid rice is more viscid than American

rice. This needs to be further studied and improved.

Appraisal

Dr. Armand Hammer is convinced that China's hybrid rice seeds were successfully trial grown in the United States. This should increase the income of the above two corporations. It should also contribute to solving the world's food problems.

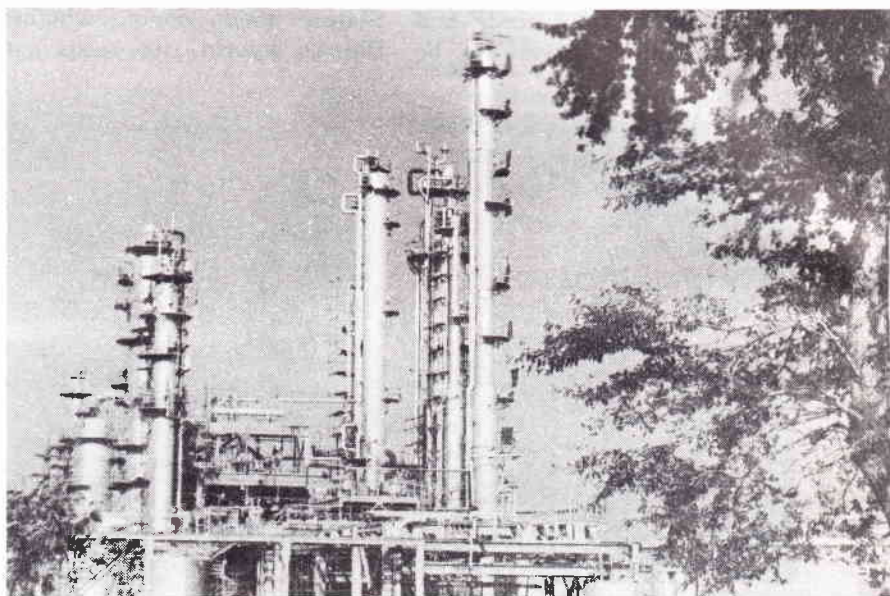
The Occidental Petroleum Corporation plans to begin commercial production of hybrid rice in the United States this year and to begin trial growing in the market countries as stipulated in the contract.

Two Imported Projects

by Our Correspondent Han Baocheng

THE Qianjin Chemical Plant is one of the seven major associated factories of the Yan-shan Petrochemical Company located on the southwestern outskirts of Beijing. The plant constitutes a striking example of China's growing industrial capacity.

The plant has two imported projects: an ethylene-producing operation which uses equipment imported from Japan and



Ethandiol component of the Qianjin Chemical Plant.

an ethandiol-producing unit (ethandiol is a raw material used for making dacron).

Exchange Agreement

Zhu Shihua, 39-year-old deputy head of the ethandiol-producing workshop, said: "This installation was designed by the US Scientific Design Company, Inc. (SD) and built by Japan's Nisso Engineering Company (NSE). Its products won the state's gold medal in 1981."

Before the plant started trial production, a group of technicians were sent to Japan to study technology and technical management. Japanese experts were also sent to China to train technicians. The Japanese experts provided detailed lectures on technical production problems and their solutions. They also discussed the causes of factory accidents and ways to prevent them.

In May 1980, China and Japan signed a technical exchange agreement. The agreement involves a bilateral exchange of technical data on the operation and analysis of production facilities.

Since the agreement was signed, information has been exchanged every six months. "We tell the Japanese experts about the examination and repair of the equipment and possible trouble in production," said Zhu Shihua. "Each time they give us timely explanations and answers and offer opinions and suggestions."

"We Have Also Gained Experience"

Such technical exchanges meet the needs of both sides. "In helping you solve problems, we also gain experience beneficial to our future work," said a Japanese expert. Japan's Nisso



Chinese and foreign technicians exchanging experiences.

Engineering Company has made improvement in design in response to China's suggestions about technological and equipment problems.

The US Scientific Design Company, Inc. also maintains contact with the plant. SD officials conduct a meeting every three years. The plant officials were invited to participate in the meetings, and although they declined, SD supplied them with technical data.

Sometimes SD and NSE technical representatives come to China for other purposes. On such occasions, they visit the plant to make inquiries about its operation and engage in discussions with their Chinese counterparts.

Technical Exchange Meetings

Five years have elapsed since the Qianjin Chemical Plant began production. During that time, workers mastered the necessary production techniques. They also improved some aspects of the production system.

For example, when the plant began production, the soda

liquid discharged could not be used and thus caused pollution. The plant's technicians now use carbon dioxide emitted during the course of production in one of the plant's workshops to treat the waste soda liquid. This alteration constitutes an improvement on the original design. It has also eliminated the pollution problem because now waste materials discharged by the two workshops are being transformed into useful raw materials for producing aerocrete.

In October 1981, the Yanshan Petrochemical Company held an ethylene technical exchange meeting. Fifteen representatives from eight US and Japanese companies and factories attended.

At the meeting, the Chinese presented a 4-part report on ethylene production, technical improvements and future objectives. Subsequently, specialized group discussions were conducted. The discussions provided opportunities for the Chinese and their guests to exchange information and experiences on various aspects of ethylene production. The foreign technicians who attended the meeting were

impressed by the manner in which the Chinese have mastered basic production techniques and their improvements. They also offered valuable suggestions about technical problems and ways to increase production.

After the meeting, Mr. Ryuji Kobayashi, Manager of Tokyo Bussan Co., Ltd., said: "I believe that such technical exchange

not only will strengthen the relationship of friendship and co-operation between the enterprises of China, the United States and Japan, but will also raise technical levels. The convocation of such technical exchange meeting shows that your plant has made fairly big achievements in production and technical management."

the Chinese Ministry of Public Health, in co-operation with the UN Committee for Development Planning and the World Health Organization, set up acupuncture training centres in 1975 in Beijing, Shanghai and Nanjing.

By the end of 1981, the three centres had run 27 training courses and trained 500 doctors from more than 90 countries and regions. Most of them came from developing countries, but a few came from developed countries, including the United States, Canada, West Germany, Switzerland, Japan and Australia.

International Acupuncture Training Course

by Our Correspondent Zhou Xiwen

ON a fine day in March, I visited the Beijing International Acupuncture Training Centre run by the Chinese Ministry of Public Health. The centre occupies the second floor of a three-story building in the courtyard of the Academy of Traditional Chinese Medicine.

Purpose

As I stepped into one of the acupuncture treatment rooms, I saw an African student treating a patient with the help of a grey-haired Chinese doctor. He was a bit nervous. His name is Gabriel M. Mhagama. He is a surgeon from Tanzania and had only been at the centre for a month.

When asked why he came to China to study acupuncture, Dr. Mhagama said: "We have a Chinese medical team in our country. The Chinese doctors cured a lot of people with their acupuncture needles and have the confidence of our people. President Nyerere appreciates Chinese acupuncture very much and instructed us to learn it well so as to serve our people."

Dr. W.S.S. Dealwis from Sri Lanka said he wants to learn

acupuncture because it is safe, efficient, inexpensive and has practical value in developing countries.

Many students at the centre consider acupuncture, which has existed for thousands of years, to be an important component

Study Contents

The Beijing Acupuncture Training Centre's staff includes a director, two deputy directors who are concurrently teachers and four other teachers. Of the six teachers, one is a professor and five are lecturers.



A class on acupuncture points.

of Chinese medicine. They said acupuncture should be learnt and applied by more people to treat the patients of various countries in the world.

In order to meet the demands of many developing countries,

Each of the training centres runs two three-month courses each year. Each centre enrolls about 20 students. Before 1980, students came from two channels—multilateral and bilateral relations. In the first case, students from developing coun-

tries were selected by the World Health Organization. In the second, the number of students invited was given to health ministries of related countries by the Chinese Ministry of Public Health through official channels such as health co-operation, cultural exchange and scientific and technological co-operation. Beginning in 1980, the training centres began to enrol students who pay their own fees. Any medical college graduate with at least two years of clinical experience or any acupuncturist who has a licence to practise can apply to join the course after paying a fee.

The curricula include: Outline of the Development of Acupuncture Treatment, A Brief Account of the Basic Knowledge of Traditional Chinese Medicine, Techniques of Acupuncture and Moxibustion, Main and Collateral Channels and Acupuncture Points, Acupuncture Treatment of Common Diseases and clinical probation and practice. Each centre also arranges lectures on ear acupuncture treatment and acupuncture anaesthesia and visits to hospitals which perform operations with acupuncture anaesthesia. The students are asked to take examinations at the end of the course and certificates are given to those who qualify.

The training centres emphasize the use of traditional Chinese medical theory for students seeking to master acupuncture techniques and clinical practice. For this reason, students begin clinical practice just 10 days after they start the course. The ratio between theoretical classes and clinical practice is 1:1.5.

In order to help students master acupuncture techniques as quickly as possible, teachers provide individual tutorials

when necessary. To test student skills, the teachers always ask them to acupuncture the teachers themselves. This approach tends to be widely admired. Dr. Li Do Jen, research fellow of the Korean Institute of Oriental Medicine, told me: "Our teachers are well experienced. Their lectures are very lively and they have a high sense of responsibility. I'll follow their example and run an acupuncture course after I go home."

Thanks to the concerted efforts of their teachers, students quickly master the basic acupuncture techniques and the 120 acupuncture points most commonly used to treat 25 common diseases.

Rosas, a student from Chile, came across a patient suffering from acute suppurative tonsillitis during his clinical practice. After analysing the case, he gave the patient appropriate acupuncture treatment which helped ease the soreness and infection.

Results

In order to objectively evaluate the centres, the Chinese Ministry of Public Health, supported by the UN Committee for Development Planning and the Pacific Regional Office of the World Health Organization, sent a group for a one-month investigation tour to Sri Lanka, Thailand and the Philippines in October 1981. The group investigated the manner in which doctors trained at the Chinese International Acupuncture Training Centres perform acupuncture treatment.

The group's report indicated that most of the students use the methods they learnt in China and have set up fairly comprehensive case history and

registration systems. The Siriraj Hospital of Thailand under Sallard Tupavong, doctor of anaesthesia who studied at the Nanjing Acupuncture Training Centre, has treated many patients and dealt with numerous kinds of cases, including asthma, digestive system diseases, hypertension, the aftereffects of apoplexy, nervous system diseases and skin diseases caused by allergies. According to patients, the results are satisfying.

I.G.A. Jayatillake, a Sri Lanka doctor who recently returned from the Beijing training centre, said results were outstanding with the guidance of the theory of traditional Chinese medicine. He encountered a patient who suffered headaches for two years and failed to respond to many kinds of treatment. After a dozen acupuncture treatments, the patient's headaches ended.

The investigation group also discovered some problems. The main one was that some former students are not skilled and fail to choose acupuncture points accurately. Some know very little about the theory of traditional Chinese medicine. In response to the group's findings, the training centres have been strengthened. □



AGRONOMY

New Cotton Variety

The acreage sown to the *CRIC No. 10*, a new fine cotton variety developed by the Cotton Research Institute of China, has expanded in the Huanghe (Yellow) River valley over the last three years.

At the fourth national meeting on seed breeding held last January, delegates acknowleg-

Shandong, Henan, Hebei and Jiangsu Provinces; this year, 26,000 hectares will be sown.

Lin Dongsheng, director of the institute, reported that *CRIC No. 10* was bred from a long-staple and high-yielding plant series of natural hybridization with *Heshanmian No. 1* as the base. It was developed in two successive breedings undertaken since 1975. The average growth period for *CRIC No. 10* is around 140 days, and it

per hectare of *CRIC No. 10* cotton strain was 0.75 ton, with 3.75 tons of wheat also being reaped. In warmer areas in Jiangsu Province, experiments of rape as the early crop were carried out with good results.

Collection of Crop Strains

A three-year nationwide collection of seed strains has gathered 90,000 new varieties. These have been added to the 160,000 found in the 1950s. Though there may be a few strains that are catalogued twice, the total of about 250,000 varieties reveals that China is one of the richest countries in crop strains.

China, with its diverse climatic and soil conditions and its long history of agriculture, is the homeland of numerous grains, fruit trees, vegetables, mulberry and tea. The continued collection of good seed strains from the peasants and the selection of the best are vital to the development of agriculture.

Last year the Chinese Academy of Agricultural Sciences, in co-operation with other institutions, determined the disease- and pest-resistance of 20,000 strains of rice, wheat, maize and other grains. They also ascertained the protein, fat, lysine and starch component of 2,000 varieties. Seeds and data were gathered about some rare, long-neglected strains. Some of these old strains have already been planted on a trial basis.

As the result of this work, *A Catalogue of Wheat Strain Resources in China* has been published and catalogues of other crop resources are being prepared.



Inspection of "CRIC No. 10" cotton plants by experts and others.

ed that the fibre of *CRIC No. 10* is better than that of *Lumian No. 1*, a strain that has been popularized throughout China. According to the Beijing Fibre Inspection Bureau the length of the fibre averages 30.8 millimetres and its strength 4.31 grammes. Trial industrial production has shown that the fibre is suitable for spinning both fine and super-fine yarns.

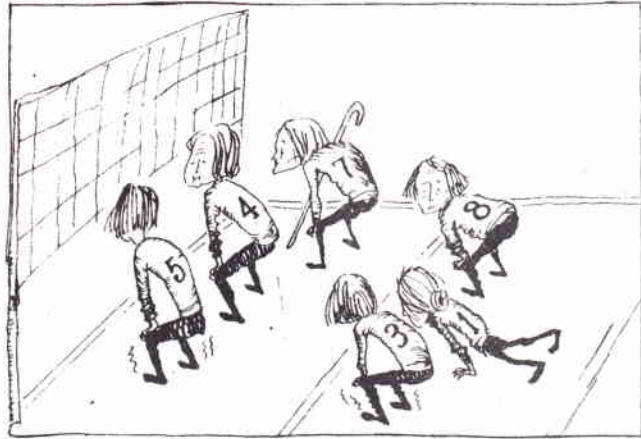
CRIC No. 10 was cultivated on 660 hectares last year in

is suitable for double crop cultivation of wheat and cotton along the middle and lower reaches of the Huanghe River, where the frost-free period is 190 to 230 days. In absence of a short-growing period cotton variety in the past, the peasants in this region had to choose from growing one crop of cotton a year or growing wheat plus another quick growing grain crop.

Experiments made last year showed that the average yield

“Fengci Yu Youmo”

This fortnightly *Fengci Yu Youmo* (Satire and Humour), a cartoon tabloid in colour, was started by the national daily *Renmin Ribao* in 1979 to criticize, satirize and eulogize various aspects of life in China and also to expose hegemonist and imperialist machinations endangering world peace.



Office holders for life.

—Chen Zhongyao



“I don’t see any talent.”

—Shan Xun

“It can’t catch mice!”

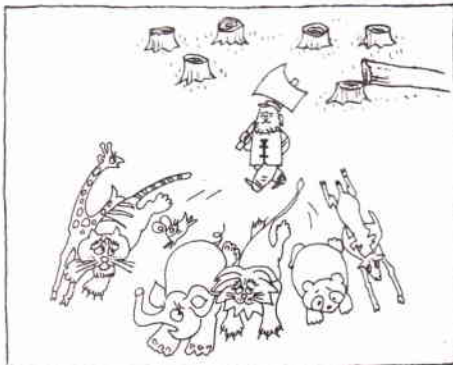
“A poor manure producer!”

“Can’t win any race!”

“It can’t guard a house!”

“A poor swimmer!”

“Can’t work in rice paddies!”



The king of beasts.

—Fang Xiangzhong

Indiscriminate felling of trees has resulted in natural calamities. The perpetrators are thus more harmful than ferocious beasts.

Strolling in Kabul.

—Fang Cheng



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