

A CHINESE WEEKLY OF NEWS AND VIEWS

# Beijing Review

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## Jinan: A New Open City

# UTILIZING YELLOW RIVER WATER RESOURCES





"A Fisherman's Helping Hands."

*Photo by Sun Yi*



## Jinan Opens to the Outside World

□ The State Council recently decided that Jinan, the capital of Shandong Province, be incorporated into the Economic Open Coastal Area of Shandong Peninsula. The significance of this move was explained by Di Yongbo, mayor of Jinan, during a recent interview with our correspondent Lu Yun. Full text of Di's answers (p. 11).

## Entrepreneurs Defy Difficulties

□ Like many of their counterparts in Shandong Province, the three entrepreneurs introduced in this article have each in their way successfully come to grips with the economic difficulties and challenges of the world market, adapting their enterprises to the changed business climate in both the domestic and foreign marketplace (p. 14).

## Tapping Yellow River Resources

□ Forty years of water conservation and diversion projects have brought the intractable Yellow River under control, injected fresh vigour into the North China Plain and made possible abundant harvests in years to come. Some river sections with pollution problems, however, must be dealt with without delay (p. 18).

## Africa Faces New Challenges

□ In order to break out of its unfavourable position in the international arena caused by the current changing world situation, Africa must have its countries united. It is necessary for each African country to choose a road of development in light of its national conditions (p. 8).

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**COVER:** Fengjiashan Reservoir—one of the nation's key projects built in Shaanxi Province in the late 1960s.

Photo by Shui Liu

General Editorial Office  
Tel: 8314318  
TLX: 222374 FLPDA CN  
FAX: 8314318  
English Dept. Tel: 8315599 Ext. 546

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## China All Out for Asian Sports Rally

**B**eijing and the rest of China have been mobilized for a successful Asian Games in September.

Wu Shaozu, executive president of the Beijing Asian Games Organizing Committee (BAGOC), said on July 27 that the nationwide mobilization aims at providing a convenient, safe and comfortable environment to Games participants.

With preparations near completion, Wu said one of the finishing touches is to train committee staff and volunteers.

Wu, who is also minister of the State Physical Culture and Sports Commission, was speaking at a three-day meeting of chefs for participating delegations.

Roy de Silva, vice-president of the Olympic Council of Asia (OCA) from Sri Lanka, attended the meeting as the representative of OCA President Sheikh Fahad al Ahmad al Sabah.

BAGOC Executive Vice-President He Zhenliang described the Games, which is to take place from September 22 through October 7, as "a great gathering of the Asian family."

The organizers have succeeded in having all the 38 member organizations of the OCA participate in the games.

"This means a long-cherished wish of the Asian peoples will come true," he said.

He, who is vice-president of the International Olympic Committee (IOC) and president of the Chinese Olympic Committee, said that more than 60 IOC members, including President Juan Antonio Samaranch and all the executive board members, have confirmed they will be attending the Games' opening ceremony.

"The 16-day Asian Games is a

chance to demonstrate the solidarity of Asian sports circles and all the Asian peoples," He said.

"Only a united Asia can speak with strength in the world of sports," he said. "It's up to joint efforts by all of us to make the Games a great success."

Those attending the three-day meeting also visited the Games venues and had special meetings with BAGOC officials about the details of the games, believed to be Asia's unprecedented sports gathering. ■

## Top Leaders Meet Zambian PM

**C**hinese Vice-President Wang Zhen described China and Zambia as "all-weather friends" when he met visiting Zambian Prime Minister Malimba Masheke on July 24 in Beijing.

China and Zambia enjoy "very friendly relations," Wang said.

He called "the profound

friendship," which was cultivated by Zambian President Kenneth Kaunda, the late Chairman Mao Zedong and the late Premier Zhou Enlai, "an inspiring chapter in history."

Masheke concurred that a friendly relationship has always existed between the two countries, saying that his current visit will show once more that Zambia will forever firmly stand and remain united with China.

He said the Zambian government and people are happy that the situation in China remains stable.

Referring to the recent summit of African countries, he said that the meeting unanimously agreed that the internal affairs of third world countries, which brook no interference by external factors, are to be determined by their own governments and peoples according to their own realities.

No one will be able to impose their "format" on third world countries, he stated.

Briefing his guests on China's domestic situation, Wang said that China will unswervingly advance along the road of socialism. China, he added, is bound to accomplish its goals of the four

Premier Li Peng hosts a welcoming ceremony in Beijing in honour of visiting Zambian Prime Minister Masheke.

LI SHENGNAN



modernizations and socialism with Chinese characteristics.

Chinese Premier Li Peng met with Masheke on July 23. During their talks, they expressed identical views on international issues of common concern and held detailed discussions on bilateral economic co-operation.

Li pointed out that although the world situation is developing towards detente, there are some unstable factors and in some regions the situation has even become turbulent.

"The world will quite possibly experience a period of turbulence," Li said.

Such negative elements in the world situation and the new hegemonism and power politics have brought pressure and difficulties to developing countries, the premier said. Therefore, developing countries should strengthen their unity and co-operation, he added.

Li reiterated that based on the Five Principles of Peaceful Coexistence, China regarded developing relations with third world countries as the cornerstone of its foreign policy.

In their talks, Masheke briefed Li on the situation in southern Africa. He said that though there were some positive changes in the southern part of Africa, the problem of South Africa's apartheid policy has not been settled.

Vice-Premier Wu Xueqian also met with Masheke and reiterated that China will continue to support the just struggle of the southern African people until their final victory.

He spoke highly of Zambia's efforts to promote the unity and co-operation of Africa and to actively seek peace, stability and development of the southern African region.

Referring to positive progress in Africa, Wu said he believes that "the day of complete inde-

pendence on the African continent is not far away." ■

## Border Towns Ride The Tide of Reform

The majority of the 600 townships along China's land boundaries more than 20,000 kilometres in length have taken on a new look over the past 10 years.

A recent conference on the reconstruction of frontier trading centres and towns held in the city of Yanji in Jilin Province demonstrated that substantial achievements have been made over the past decade in China's opening to the outside world and reform. Border trade has been booming, allowing the local people to enjoy the first taste of prosperity.

China has nine border provinces and autonomous regions —Jilin, Heilongjiang, Liaoning, Inner Mongolia, Gansu, Xinjiang, Tibet, Yunnan and Guangxi.

Before 1978, the year the Third Plenary Session of the Chinese Communist Party's 11th Central Committee was held, these border regions were as a rule handicapped by poor transportation, harsh living conditions, and a backward lifestyle.

But things are much different now. With the support of both the central and local governments, such difficulties as shortages in drinking water, housing, schools and hospitals have been alleviated to varying degrees. Many towns bordering North Korea, the Soviet Union and Burma have taken on a touch of modernity.

Jilin Province, bordering the Soviet Union to the east and across a river from North Korea in the southeast, has nine cities and counties including 59 townships along the boundary line. During the Seventh Five-Year Plan per-

iod (1986-90), the provincial government pooled its capital and central government allocations to build a water supply system, a power plant, a highway network and many houses in the border area.

At the same time, the government adopted a preferential policy to encourage the local people to develop the economy and build their homeland with their own hands.

As a result, 55,946 peasant households, or 66.7 percent of the total living in the border area, renovated their old houses or built new ones by the end of 1989. Tap water has been supplied to 442 of 1,293 villages in the area. All the towns and 80 percent of the villages can be reached by trucks and buses as a result of a newly completed highway network covering 646 kilometres.

Other improvements have been seen in cultural, educational and medical care undertakings, broadcast and TV, postal services and communications.

In southwestern Yunnan Province, border trade volume increased 35 times between 1980 and 1989. In the Dehong Dai and Jingpo Autonomous Prefecture which is adjacent to Burma, total border trade volume rose as much as 20.74 times in 1988 as compared with 1984. The average annual income per capita increased by 450 percent in 10 years. About 60 percent of the towns are supplied with potable water and all the towns have electrical power supply. ■

## Sino-British Ties: A Warming Up?

A July 25 meeting in Beijing between Chinese Premier Li Peng and Francis Maude, visiting British minister of state of the Foreign and Com-

monwealth Office, indicated that both China and Britain, as permanent members of the United Nations Security Council, attached great importance to their bilateral relations.

Li described Maude's visit as a sign of further improvement in Sino-British ties. He expressed the hope that such ties would continue to improve and develop.

Maude said his visit was aimed at helping restore Sino-British relations to their normal high level. Britain is ready to work with China toward this end, he added.

Li and Maude also discussed a number of issues concerning Hong Kong. They expressed willingness to have more consultations and co-operation to ensure stability and prosperity in Hong Kong.

Li also told Maude that China now enjoys political and economic stability.

"Economically, China has tided over the most difficult time, with inflation under control, industrial output up, good harvests being reaped and the international balance of payments improving," the premier said.

Chinese Vice-Foreign Minister Tian Zengpei held talks with Maude on a separate occasion. They exchanged views on the implementation of the Sino-British Joint Declaration on the Question of Hong Kong, the strengthening of co-operation and consultation between China and Britain as well as international issues. ■

## Pensions for One-Child Parents?

Some experts have suggested the state award single-child parents with old-age pensions, rather than the cash bonuses that are currently given out.

A decade ago, the monthly

five yuan bonus for one-child families, available until the child reached the age of 14, was enacted as part of the state's policy to control the rapid growth of China's population.

But Tian Xueyuan, director of the Population Institute under the Chinese Academy of Social Sciences, said the bonus has not been as successful as hoped.

Tian, along with other population experts, suggested that the yearly bonus of 60 yuan be deposited in a bank to be used as life insurance for the child or as an old-age pension for the parents.

An average total of 5,700 yuan plus interest at the state bond rate would have accumulated when single-child parents turned 60. Then, they could withdraw about 800 yuan a year as their pension, according to the plan.

The experts said their method was aimed specifically at farmers to encourage them to stick to China's one-child policy. Even today, the children of farmers are expected to be farm labourers for the family and supporters of their aging parents.

Deyang City in Sichuan Province has agreed to test the experts' plan among 160,000 couples, or 44 percent of the city's one-child families.

Yang Chunle, a farmer, calculated that she would be able to receive 200 yuan a month—more than the monthly wage of a county magistrate—as old-age pension when she turned 60. Right now, she feels comfortable with having just one child, she added.

Authorities in Sichuan Province, which has a population of more than 100 million, recently urged the local people to support the plan throughout the province.

The pension award, Tian said, would be one of the most effective ways to control population growth in China's rural areas. ■

## Hi-Tech Zones: A Good Beginning

A hi-tech development zone will be built in Zhongshan County, Guangdong Province as an important base for China's high technological industry.

Zhongshan is just one of 20 hi-tech zones chosen from across China to form the nation's bases for the development of high technology. And the government will soon announce preferential policies for the development of high technology in the bases.

Some of the zones are jointly operated by the State Science and Technology Commission and local governments such as those in Zhongshan; Weihai in Shandong Province; and Amoy in Fujian Province.

The state will pay more attention to transferring the hi-tech findings to commercial and industrial production and to guiding and boosting some developmental projects in their preliminary stages.

The hi-tech development zones are designed to attract research institutes, schools of higher learning and large and medium-sized enterprises to come to set up hi-tech companies in the zones.

An international hi-tech fair, the first of its kind in China, was held in the Zhongshan hi-tech development zone on June 20-22. And 115 projects were slated for co-operation with foreign firms in areas including electronics, bioengineering, new materials, new agricultural technology, food refining processes, and new energy resources and high efficiency energy-conservation technology.

Researchers, financiers and entrepreneurs from Singapore, Japan, the United States, Australia, Taiwan Province and the Hong Kong and Macao regions attended the fair. ■

## Washington's Aboutface on Kampuchea

*The decision by the United States to withdraw support for the Coalition Government of Democratic Kampuchea will certainly damage the peace efforts by the international community to solve the 11-year-old conflict in Kampuchea.*

by Chu Qimen

**O**n July 18, US Secretary of State James Baker announced in Paris that the United States would cease to recognize the seat of the Coalition Government of Democratic Kampuchea at the United Nations. Baker made the announcement following a meeting with Soviet Foreign Minister Eduard Shevardnadze. Baker indicated that Washington would open dialogue with Viet Nam, but he refused to acknowledge that it meant the beginning of the normalization of ties with Hanoi.

Until now, Kampuchea's UN seat has been held by the resistance coalition, which includes the Khmer Rouge and the two groups led by former monarch Prince Norodom Sihanouk and former premier Son Sann.

This move by the United States has been generally regarded as an aboutface in attitude towards Kampuchea. The coalition government seriously criticized Washington's decision and stated that it would not be conducive to the political settlement of the Kampuchean issue. Sihanouk, in the Democratic People's Republic of Korea, issued a statement

saying that Washington's shift in attitude has strengthened his resolve to battle the Viet Nam-installed government of Kampuchea.

Son Sann also expressed his dissatisfaction with Washington's decision. He said that it was not suitable for Baker to announce such a decision, and, if the United States resumed aid to Viet Nam, it would only help prolong the war and deepen the misery of his nation. The international community, he said, should continue to support the just struggle of the Kampuchean people against Viet Nam, and their pressure on Viet Nam should not be lifted.

Members of the Association of Southeast Asian Nations (ASEAN) also feel the United States' decision will not help settle the conflict in Kampuchea.

"We sincerely doubt whether at this stage of negotiations such a move would help towards reaching a comprehensive solution that is mutually acceptable," said Indonesian Foreign Minister Ali Alatas.

It is believed that Washington's withdrawal of support is intended to prevent the Khmer Rouge from returning to power. And, it has been

reported that the change in US policy had been a subject of debate in the US Congress for several months. Some senators had urged US President George Bush to readjust his policy, and the final decision was made at a secret meeting attended by Bush, Baker and national security adviser Brent Scowcroft.

Because of this change in the US attitude, the members of ASEAN are now greatly concerned with the future of Kampuchea. They feel the US decision will have a major impact on the situation in Kampuchea and Southeast Asia.

Kampuchea's seat in the United Nations should not be left vacant before an agreement on a political settlement of the Kampuchean issue is reached. A vacant seat for Kampuchea will not help promote a comprehensive, fair and reasonable settlement of the Kampuchean question. The existence of four political and military forces in Kampuchea is a fact that has been recognized internationally, and none of them should be left out or considered the dominant one when the Kampuchean question is to be addressed. ■

# The International Climate's Impact on Africa

by Liu Lu

**T**oday the African continent remains underdeveloped. Few African nations have the strength to be self-supporting and they find themselves easily influenced by the outside world. As well, close geopolitical connections with Europe have had an impact on the African continent. Therefore, the current world situation, especially rapid changes in the Soviet Union and East European countries, is certainly reflected in Africa's political situation. Today's Africa faces a complicated and changing situation, an easing of tensions versus turbulence, difficulties and opportunities existing side by side.

## Easing Trouble Spots

Influenced by detente in the world and adjustments in American and Soviet policies, tensions have eased in several trouble spots in Africa. Conditions have changed in southern Africa, especially in South Africa. With Namibia's independence, the African continent has completed its historical mission of decolonization.

South Africa's system of apartheid has been shaken. In February, the South African government announced the lifting of bans on the African National Congress (ANC), the Pan-Africanist Congress of Azania and the South African Communist Party. It also lifted restrictions on 33 anti-apartheid organizations and released Black leader Nelson Mandela and other political prisoners. At the beginning of May, the ANC headed by Mandela held their first round of talks with South African President F. W. de Klerk. On June 7, de Klerk announced the lifting of the state of emergency for all areas of South

Africa except Natal, where violence periodically erupts. On June 19, South Africa's parliament passed a bill scrapping the Separate Amenities Act, a cornerstone of racial segregation in South Africa. With the passage of the bill, anyone of any race was allowed to enter any public facility. It was one of the ANC's preconditions before it would agree to talk with South African authorities. It appears the trend towards politically settling the South African question has reached the point of no return.

Other countries on the African continent are in the process of trying to resolve war-created domestic chaos by peaceful means.

The Ethiopian government has displayed greater flexibility in reaching a political settlement to the war raging in the northern part of the country. The parties involved have been holding secret talks. In Mozambique, the government and anti-government forces have agreed to negotiate directly. The governments and military resistance forces in both Angola and the Sudan are continuing their efforts to negotiate an end to their conflicts.

## Fluid Home Situation

Political changes in Eastern Europe, however, have had a major impact on Africa's political situation, once relatively smooth. The changes have provoked a chain reaction in several African countries. Rioting has erupted in several capital cities; some governments have taken measures of suppression and others have chosen to institute a multi-party system and mixed economy.

The leaders of Kenya, Zimbabwe, Tanzania and Zambia feel

that African countries have their own characteristics and should not blindly follow other nations. They believe a multi-party system will only intensify disputes between tribes and nationalities and deepen contradictory elements in African countries, even splitting some countries. Many African countries thought that they should uphold their existing social and political systems, further expand democracy under a one-party system and gradually carry out reform. Ethiopia and Mozambique have abandoned their past ideologies and diversified their economies in preparation for lifting the ban on political parties and realizing multi-party politics. Benin, Gabon, Zaire and the Ivory Coast have all announced the end of their one-party system of government which has existed for many years. They will be trying to govern under a multi-party system.

The political situation in some African countries has been in a state of turbulence because of international influences and unresolved domestic problems. Over the past six months, more than 10 African countries have witnessed strikes by students and workers, military discontent, mass demonstrations and even violence. Even such politically stable West African countries as the Ivory Coast and Gabon have seen large-scale riots. Demonstrators in the Ivory Coast set cars on fire, robbed stores and spearheaded a campaign against the nation's president. The unstable situation in Gabon lasted several months. Rioters jailed the French consul-general and forced petroleum companies to stop production. Nigeria, Sudan and Madagascar were also the victims of aborted coups and military rebellions.



### Age-old Problems Remain

Although instability in some African countries has decreased, factors that are likely to cause new problems still exist. And this worries many African leaders. Their concerns are reflected in the following:

1. Since the United States and West European countries have shifted their attention to the changing situations in the Soviet Union and East European countries and such issues as establishing a unified Germany and an integrated European market, African countries will become less important and be ignored politically. As one Kenyan leader put it: "Eastern Europe, in the eyes of some countries, seems to be a charming young girl while the African continent is just like an ugly old woman."

2. As the United States and some West European countries transfer capital and technology to East European countries, the shortage of capital and technology in some African countries will be aggravated. Manuel Marin, vice-president of the European Community (EC) Commission, has indicated that as the situation eases in East European countries and their ability to absorb foreign capital increases, EC assistance will be transferred from African countries to Eastern Europe. He urged African nations to prepare for such a development. The United States, France and some other countries have even indicated that their assistance will not be given to countries that have no plans to introduce democracy and a multi-party system. According to the fourth Lome Agreement, the European Community is to give a total of US\$10 per capita in aid to African, Caribbean and Pacific countries within five years. However, according to a plan, the European Community will provide US\$60 per capita in aid to two East European countries that have highly developed economies. Hardly any private capital is now

flowing into African countries. And capital resources for African countries are in danger of running out. Two-thirds of the French enterprises now in African countries are planning to invest outside of Africa while some British entrepreneurs are preparing to withdraw from the African continent. Togo President General Gnassingbe Eyadema recently pointed out that Western countries should not abandon their "black friends" for the interest of their "Eastern brothers."

3. Economic aid from the United States and the Soviet Union to African countries has been greatly reduced. The Soviet Union has stopped commenting on the "unconditional assistance" to African countries. It has also slashed aid to some of the countries it has assisted in a major way in the past. The US aid budget for African countries decreased to about US\$900 million in 1990 and it will decrease to US\$800 million in 1991. To African countries, while economic aid from the big powers has decreased, the attached political conditions have become stricter.

4. With the easing of East-West tensions, there are at least 50,000 tanks, 40,000 pieces of artillery, 56,000 armoured personnel carriers, 40,000 to 50,000 fighter jets and helicopters and enough light weapons to arm 500,000 troops waiting to be transferred out of Europe. These weapons will likely be traded to Africa and other third world countries or given as aid. They represent a direct threat to the security and stability of African nations.

### Unity and Self-reliance

In order to overcome their unfavourable position in the international arena, African nations have been studying their policies and looking at reform. Many have been scrutinizing their economic adjustment plans. This has resulted in finance ministers from various African countries devising a developing strategy called the Af-

rican Alternative Framework to Structural Adjustment Programmes (AAF-SAP). The strategy, which includes making full use of natural resources and guaranteeing the extensive involvement of the public in economic activities, is aimed at a long-term development for African countries. The Economic Commission for Africa of the United Nations had urged the various governments of African countries to make their own plans according to the different situations in their own countries. Kenya and Nigeria made some adjustments to their economic structures in the spirit of the AAF-SAP and achieved 5 and 4 percent economic growth respectively in the past year.

An increasing number of African countries have come to realize that they can no longer rely on foreign aid but must co-operate with each other and present a unified front. In the middle of June, the Permanent Steering Committee of the Organization of African Unity (OAU) drafted a plan to establish an African economic community and submitted it to the Assembly of Heads of State of the OAU. This move signifies that African countries have made an important step towards an integrated economy.

At the same time, African countries began South-South co-operation and are calling for a new round of North-South dialogue. Senegal, Nigeria, Zimbabwe, Egypt and Algeria recently participated in the 15-nation mini-summit on South-South co-operation held in Kuala Lumpur. In addition, the African countries were the first of the third world countries to call for a small-scale summit to discuss North-South co-operation. Some pressing issues they want to discuss include foreign debt, shortages of capital and the price of raw materials.

For the African continent, now sitting at a crossroads, the future promises many challenges and opportunities mixed with difficulties. ■

# Saudi Arabia Strides Into the Future

by Chang Qing

**P**etroleum, a mainstay of Saudi Arabia's national economy, has made the Islamic nation a modern economic power with an annual per capita income of US\$18,000. The Saudi government has steadfastly pursued a policy of neutrality, non-alignment and peace. And this policy has been successful.

Saudi Arabia, situated in the middle of the Arabian Peninsula, drilled its first oil well in 1938. The discovery of oil resources promoted Saudi economic development. With the accumulation of petroleum dollars the economic structure, which used to be based on agriculture and commerce, has gradually modernized. Prior to 1960, the kingdom had only one oil refinery and no petrochemical factories, and had to import petroleum products to meet its domestic needs. But since then, the country has set up several oil refineries, established basic industries and built 13 major petrochemical factories. Sanitation, education and welfare services have also been developed.

With the energy crisis of the 1970s, oil prices skyrocketed. The sharp increase in petroleum dollars, however, further promoted the development of the oil industry and other capital construction projects, laying down a solid foundation for Saudi Arabia's economic modernization.

Today, Saudi Arabia boasts many major projects such as a 95,350-kilometre-long road network, the only railway system on the Arabian Peninsula and the largest airport — the King Khaled Airport which occupies 226 square kilometres. There is an efficient postal service system and an advanced telecommunications network. Through its four five-year

plans between 1970 and 1990, Saudi Arabia has established a modern industrial system based on petroleum, natural gas and petrochemical industries as well as metallurgy, cement, machinery, electricity, desalination of sea water and car assembly.

By the end of last year, Saudi Arabia claimed to have a proven reserve of 255 billion barrels of oil, accounting for 25.46 percent of the world's total. In the same year the kingdom registered an average daily petroleum output of 4.94 million barrels and received US\$30 billion from petroleum exports.

While promoting petroleum production, Saudi Arabia also wants to keep its economy balanced — a key to the country's strategy for continued prosperity. With the establishment of its 13 petrochemical factories and major oil refineries in Riyadh, Jidda and Yanbu al Bahr the output of petrochemical products has steadily increased, from 2.782 million tons in 1986 to 9.766 million tons in 1987 and 11.25 million tons in 1988.

Saudi Arabia has achieved even more outstanding success in agriculture over the past 10 years. The planting area for wheat has increased to 2.5 million hectares from 150,000 hectares and grain output increased to 3.9 million tons in 1989 from about 3,000 tons in 1975. Of that, wheat output increased by 95 percent. Its export volume of wheat ranks sixth in the world. Saudi Arabia is not only self-sufficient in food staples, but has also started to export vegetables, poultry, eggs and milk products. Dates are also exported. As a result of the successful plan to diversify the economy, the income of non-petroleum sectors has surpassed that of oil.

In foreign affairs, Saudi Arabia believes countries should act on mutual respect, good neighbourliness and non-interference in each other's internal affairs, and should co-operate to bring about stability and prosperity. Saudi Arabia has always been supportive of the just struggle of the Palestinian people and opposes Israel's policy of aggression. It seeks a fair and comprehensive solution to the Middle East issue through an international conference and stresses the need for closer unity and co-operation among the Islamic, Arab and Gulf countries. Saudi Arabia's foreign policy has been widely appreciated in the international community.

China and Saudi Arabia began their non-governmental direct commercial exchanges as early as the 1950s.

In recent years exchanges of economic delegations and business personnel have increased, thus greatly promoting bilateral trade. In 1987, the China Council for the Promotion of International Trade established contacts with Saudi Arabia's Chambers of Commerce and Industry. In November 1988, the two countries decided to set up offices of trade representatives in each other's capital. Last December, a high-ranking economic and trade delegation from China toured Saudi Arabia. Transactions worth US\$30 million were the result of the first Chinese export commodities fair in Riyadh.

Recent years have witnessed an increase in contacts between high-ranking officials of the two governments. Now, with the establishment of diplomatic relations, China and Saudi Arabia have realized the aspirations of their peoples and opened a new chapter in their relations. ■

## The Opening of Jinan City

*The State Council approved the incorporation of Jinan City, Shandong Province, into the Open Coastal Economic Area on the Shandong Peninsula. To acquaint our readers with the background behind this move, our correspondent Lu Yun recently interviewed the mayor of Jinan, Di Yongbo. The following are his answers to Lu's questions.—Ed.*

**Question:** Could you please tell us about Jinan's incorporation into the Economic Open Coastal Area?

**Answer:** Since its opening up to the outside world, China has set up many open areas such as special economic zones and open coastal areas and cities. As early as 1984, Qingdao and Yantai, both located on the Shandong Peninsula, became two of the 14 coastal cities designated to open to foreign investment and trade. Four years later, Zibo, Weifang, Laizhou, Weihai and Rizhao in Shandong, together with Qingdao and Yantai, became part of the Shandong Peninsula open area and, on Fe-

bruary 19 this year, the State Council approved Jinan City's inclusion in the Economic Open Coastal Area. This move is one of several important measures taken by China to expand economic co-operation with various countries and regions. (Other steps include the establishment of the new investment and development zones in



Di Yongbo

Fujian Province, the opening and development of Pudong in Shanghai, and the revision of the Law of the People's Republic of China on Chinese-Foreign Joint Ventures.) It shows China's continued effort to implement its open policy and improve the

geographic layout of the peninsula's open area.

**Q:** What favourable conditions are there in regard to Jinan's opening to the outside world?

**A:** Jinan began to implement a strategy for the development of an export-oriented coastal economy two years ago. During this period, as the necessary agencies were set, the city's foreign trade and economic co-operation has gradually expanded. The value of goods supplied for export hit some 900 million yuan last year or 6 percent of the city's industrial and agricultural output value. Some 60 Sino-foreign equity joint ventures and co-operative and solely foreign-owned enterprises have been set up in the city. Currently, 25 are in operation.

Jinan has a good geographical





The colour TV production line at the Shandong TV Factory.

location, plentiful mineral resources and a solid industrial foundation. The capital city of Shandong Province, Jinan lies in the central western part of the Shandong Peninsula and is sandwiched between the economic zones of east China and north China. One of China's 16 central cities, it exercises jurisdiction over five prefectures and five counties and has a total area of 8,257 square km and a population of 5.13 million, including 2.28 million living in the urban areas. Lying at the foot of the world's famous Taishan Mountain to the south and sitting astride the Huanghe (Yellow) River (known as the cradle of the Chinese nation), Jinan was first settled some 2,600 years ago and has been Shandong's economic, scientific and technological, cultural and political centre since the Ming Dynasty (1368-1644).

Jinan abounds in grain, vegetables, fruit, aquatic products, economic crops and medicinal herbs. It is also rich in such mineral ores as iron, cobalt, copper, coal, hard clay, limestone, dolomite, granite and gabbro. The city's key geographical location makes it the communica-

tions and transportation hub (rail, highway and aviation) of Shandong. The city now has a new 15,000-line programme-controlled telephone exchange, Asia's longest highway bridge over the Huanghe and inner-city roads which total 934 km in length.

Jinan is one of China's most important industrial bases and is particularly advanced in such fields as machinery, paper making, chemical, textile, metallurgical, food processing, electronics and articles for daily use. It boasts a considerable scale of production of building materials, medicine and industrial art works. The city has some 1,750 industrial enterprises, the output value of which totalled 19.9 billion yuan last year. They produce some 3,900 varieties of goods, 640 of which have been granted quality-product titles and 391 of which are exported to more than 120 countries and regions. In the last ten years, Jinan has attracted 358 foreign projects designed to speed up technical improvements in local enterprises.

Jinan has 16 schools of higher learning and some 200 scientific

and technological research institutes staffed by 190,000 technical personnel. Therefore, Jinan boasts a good scientific and technological force, backed by a good cultural foundation.

**Q: What's the situation in Jinan since it opened its doors to the outside world?**

**A:** The officials and populace in Jinan are optimistic. In the first half of this year, the value of goods supplied for export totalled 550 million yuan or 53 percent of the planned figure and 21.7 percent higher than the corresponding period of the previous year. Also, in the first half of this year, Jinan approved 58 projects which used foreign investment. The total investment was 3.3 times more than the preceding year. Of the total investment, foreign investment amounted to US\$33.34 million, an increase of 87 percent. The number of projects using Taiwan investment has also been on the increase. Foreign investment flows mostly into production projects, including some technologically advanced ones.

In the first half of this year, 22 foreign-funded enterprises were approved for Jinan, increasing the number of foreign-funded enterprises to 33. To support their development, banks provided 16 million yuan of loans and more than 70 Chinese managers were trained. Some of the ventures' problems were solved. The output value, export volume and export earnings of these foreign-funded enterprises were 57 percent, 149 percent and 127 percent respectively over the corresponding period of the previous year. Moreover, those which operated in the red are in better shape when compared to the first quarter of the year.

With the improvement of the investment environment, many projects have already begun and are in full swing. For example,

ecological work is well under way and tree planting and landscaping are going well. Also, in a bid to improve communications, Jinan began construction of a belt-road on May 19 and an inaugural ceremony for the Jinan-Qingdao Highway was held on July 3. In addition, the state has approved the construction of a chartered airplane service from Jinan to Hong Kong and preparation for the installation of "blind-landing" equipment at the Zhangzhuang Airport is in full swing. The second-phase project to divert Huanghe River water to the city is now well under way. The government has promulgated rules and regulations, as well as preferential policies, to attract foreign investment and to encourage an export-oriented economy. Projects involving foreign investment and investment from Hong Kong and Macao enjoy

priority with regard to the supply of water, electricity, gas, steam and raw and processed materials, communications, transportation, land and construction resources. These preferences include the exemption or reduction of an assortment of taxes. Many departments work together to increase work efficiency and make it convenient for foreign businessmen and businessmen from Hong Kong and Macao to successfully complete business talks, sign letters of intent and quickly get business licences. Assistance is given to help those already in operation solve problems in construction and production. They also provide consultation on such matters as law, policy, accounting, auditing and foreign trade.

**Q: What important measures will the Jinan municipal government take in the future in regards to its opening to the outside world?**

**A:** The government has the following plans:

—The basic policy recognizes the importance of opening to the outside world and so, support will be given to all projects favourable to foreign trade. Efforts will be made to catch up with those areas which opened themselves up to the outside world earlier.

—Increase production and export of products with a ready market abroad; develop production bases and enterprises groups which integrate industry with commerce, agriculture with commerce, technology with

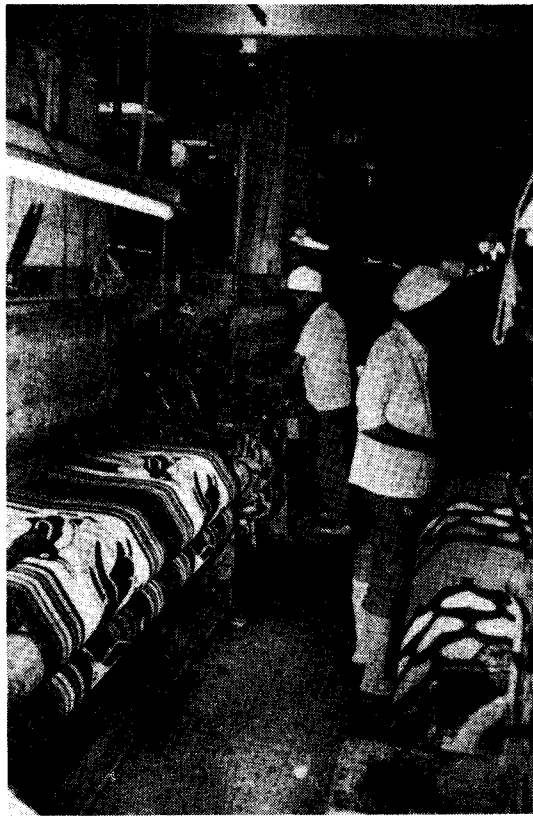
trade; and speed up the development of tourism, export of labour and contract of overseas projects. Local scenic and historic sites will be renovated. Foreign-funded enterprises will be given a free hand in management and allowed to conduct their businesses based on international practice. Help will be available to them in times of difficulties. Existing equipment and factories will be provided as the Chinese investment. Foreign capital, advanced technology and managerial expertise will be used to facilitate the renovation of old enterprises.

—Speed up construction of the Yaoqian Airport. There are plans to complete construction of the runways before the end of the year. Construction of auxiliary facilities of the Zhangzhuang Airport will be moved forward so that chartered air service to Hong Kong will soon be possible. Channel more support into the construction of the Jinan-Qingdao Highway and improve inner-city traffic. Add 28,000 lines of programme controlled telephones this year and 27,000 lines next year. Quicken construction of the water supply projects and improve the soft investment environment by adopting more flexible policies.

—Set up special economic and technological development zones and high-tech experimental areas. Efforts have begun to select sites, develop plans and carry out feasibility studies.

Generally, there is a great potential in Jinan which, once tapped, will greatly expand its foreign trade. We'll continue to make every effort to create a better investment environment for foreign businessmen. As a new open city, Jinan warmly welcomes businessmen from all over the world, including those from Hong Kong and Macao, to enter into co-operative economic and trade projects. We welcome friends from all over the world to come and visit. ■

Production line at Jinan Quanren Cotton Textiles Co., a Sino-foreign joint venture.



# Difficulties Spurs Entrepreneurs On

by Our Staff Reporter Lu Yun

**T**he people of east China's coastal province of Shandong do not take temporary economic difficulties lying down. They have managed to extricate some industries from financial straits and turn their business around. In the first half of this year, the province's total industrial output value registered a 7.7 percent increase over the same period last year, and the area's growth rate was higher

than the nation's average of 2.2 percent.

In the Shandong Peninsula Open Zone, there are many astute and capable entrepreneurs who, each in his or her own way, have successfully confronted the grim economic situation and challenge of the world market, adapting their enterprises to the changed business climate. Their enterprises are now able to provide quality products and services.

annual growth in factory profit and 18,000 yuan in annual per-capita profit and taxes. After fulfilling the Polaris Group contract last year, each factory director was entitled to 3,000-4,000 yuan in bonuses and an extra dividend on the mortgage of their own properties, but Zhu suggested that they take a smaller percentage of the bonuses in order to narrow the income gap between themselves and the workers.

Working conditions at the factory's sintering workshop are rough. In mid-summer, despite the high temperature, Zhu and other cadres took turns working alongside the workers in the shop and, in winter, realizing that the factory was running out of coal, he instructed that office heating be shut off in order that heat to the workshops continue. Such actions, of course, give a boost to the morale of the workers and so they are willing to contribute more to the factory.

The workers and technicians joined forces to improve the sintering technology and renovate the old equipment, reducing electrical consumption from the advanced provincial level of 1,180 kwh for each kg of artificial rubies produced to 888 kwh and lowering the overall cost of production by 9.2 percent. The factory's product twice won award for quality, making it the only enterprise in the nation's gem trade to acquire a quality product certificate.

## Zhu Xiangmiao—a Man Who Defies Every Difficulty

**Z**hu Xiangmiao, director of the Yantai Ruby Factory which employs only 370 people, is a stalwart Shandong native. When he took on his post in September 1987, he found the factory like a boat stranded in the harbour. As a member of the Polaris Clock and Watch Group Co., the factory was stymied in its attempt to grow; its products, artificial rubies, went unsold because of plummeting prices of the group's wristwatches.

Zhu did not believe that there was no market for his factory's artificial ruby: it was pure, of good quality and reasonable in price. He decided to make an attempt to enter the world market and wrote to many Hong Kong businesses to inquire whether there was any interest on their part in his factory's products. He got a quick response. A Hong Kong jeweller agreed to import 3 tons of rubies from his factory, about one-third of the factory's

annual output. Following this, the factory also found markets for its rubies in Thailand, India, Singapore and Japan. Factory production picked up. The total work force rose to 500. The factory's economic returns and per-capita income also rose. Last year, its foreign exchange earnings amounted to US\$210,000 and, in the first half of this year, the sum had already reached US\$195,000.

Zhu, 35, formerly a worker, previously served as secretary of the Communist Youth League committee and workshop head at a Yantai wristwatch factory. After he took the post of director of the ruby factory, he made it a point to always keep the workers' interest in mind and to act fairly. His methods have brought results. The factory signed a three-year contract with the Polaris Group which it fulfilled in only two years. In recent years, there has been an average 60 percent

## Jiang Shuqing—An Energetic and Meticulous Director

**J**iang Shuqing, 60, a former resident of the countryside, is now director of the Haiyang Arts and Crafts Factory. In the first five months of this year, the factory yielded 27 million yuan in output value and 2.5 million yuan in profits and taxes, the most profitable enterprise in Haiyang County.

Jiang, who is a frank and outspoken country woman, is one of Shandong Province's top ten model women entrepreneurs and a winner of the national May 1 Labour Medal. Jiang was quite the tom-boy in her childhood, daring to swim in the sea and climb trees, activities not common for Chinese girls. She became the head of the Anti-Japanese Children's Corps in her village when she was only 11 and joined the Communist Party at the age of 15. At 17, she was elected to take charge of women affairs in her village; she was a model worker in her

county.

Jiang's friends said her success lies, despite her bold and unrestrained personality, in her meticulous work style. She did not attend school consistently when she was young, but she has an excellent memory. She remembers all the important data about her factory, including the size and floorspace of the factory buildings.

In August 1970, Jiang, then head of a kindergarten in Haiyang County, was transferred to the Artistic Woven Ware Factory to take on the job of deputy director. The factory, with a little more than 70 employees and less than 200,000 yuan in fixed assets, could only produce corn-skin woven baskets, cushions and carpets and, because of the simple and outdated product design, could only secure business deals valued at 200,000 yuan at the Guangzhou Export Commodities Fair. Af-

ter Jiang took office, however, she decided to develop new designs. At the time, though, the factory had no trained designers, she took the lead to learn design techniques on her own one or two hours each day. She also tried her best to collect all sorts of designs, including stamps, wrapping papers for sweets and students' textbooks, and consult veteran folk artists and professional designers. Two years later, she had essentially mastered the skill of drawing and mixing colours; she organized the design of more than 50 new samples which brought in 1.3 million yuan worth of orders at a Guangzhou export commodities fair.

Jiang later sent five employees to study at an art college and dispatched seven technicians to study abroad. These efforts have greatly improved the factory's products. Not satisfied with her success, Jiang continued to take every opportunity to learn the latest fashions in foreign countries by which she and her colleagues were able to develop one exquisite design after another. When she was appointed director of the factory in the early 1980s, she was able to guide the workers in sample production based on her own ideas. After she returned from a visit to Japan in 1984, she designed 14 new samples to cater to the tastes of the Japanese consumer for light coloured and delicate styles. When she learned from a Hong Kong businessman that Americans consider the owl as a symbol of wisdom and good luck, she imme-



Photos by LU YUN

Jiang Shuqing discusses basket weaving techniques with young technicians.

diately produced cushions with an owl pattern. The cushions, all exported to the United States via Hong Kong, earned 400,000 yuan.

Jiang often asks visiting foreign business people to offer criticisms and suggestions and sends people on fact-finding tours in Japan, France, Italy, Australia, the United States and Canada. The factory now has some 8,000 designs. Jiang's own 800 designs have brought in more than 10 million yuan. A carpet, chiefly designed by Jiang, captured a prize at a national competition of arts and crafts.

Jiang's care in her work is also clear in the close attention she pays to product quality and to the punctual delivery of goods. She has introduced an all-round quality control system in her factory and strengthened technical instruction and quality examination of products processed outside her factory. This ensures that 100 percent of the factory's products are up to standard of quality expected from her factory. Such care has brought results. The factory's corn-skin products series won a silver cup, the top reward for woven articles, at the 4th National Arts and Crafts Competition. Her Japanese and American clients say that Haiyang's woven products are better than any other sample they've examined. To date, Haiyang factory's products are sold in 56 countries and regions throughout the world, sales which the factory has delivered on time for many years. If an order comes in for a rush job, Jiang always directly supervises the work, putting in her time alongside the workers day and night. One time, when a special circumstance arose, she and her colleagues helped an import and export company complete the tasks which other factories were unable to do.

To improve her factory's adap-

tation to the world market, Jiang began to attract overseas funds and import equipment and technology in 1986. As of now, the factory has added three new projects—hand bags, embroidered products and cotton thread carpet—with a total investment of 5 million yuan. Jiang has played a decisive role in the design and construction of these projects, in the installation of machines and

### Yi Weili: A Keen Sense of Competition

Slightly built, delicate in appearance and grey hair about his temples, Yi Weili, 48, a machine tool manufacturing expert, is currently factory director and chief engineer of the Jinan No. 1 Machine Tool Plant. He is also a national model worker.

Yi graduated from the mechanical department of Xian Jiaotong University in 1964. In 1978, he independently designed three special machine tools and, in 1979, was placed in charge of technical work for the production of machine tools in co-operation with a Japanese business at the plant. In just three months, nearly 10,000 components and parts in 1,600 varieties were processed, and the trial-manufacture of the high-speed, precision MAZAK machine was also completed one month ahead of schedule. The work was called a "miracle" by the Japanese experts involved. During a bleak period on the international machine tool market in the 1980s, Yi overcame four technical problems, making the quality of his factory's products surpass Japanese standard. As a result, the Japanese side suggested that the product be exempt from customs inspection.

In the course of manufacturing the MAZAK machine, Yi also devoted himself to the study of modern machine tool theories. He not only studied the harm

technical training. Only 107 days to complete an 18,000-square metre factory building. The Cases and Bags Co., managed jointly by the Haiyang factory and a Japanese business, formally began operation in March last year; all the hand bags produced are exported to Japan. This project alone is expected to yield 2 million yuan in profit by the end of this year.

caused by the noise of machines to human body, but also developed a method of examining the internal quality of machine tools through diagnosing different noises. He has also ascended his study of the reduction of the sound pressure to the level of acoustic fidelity. His achievements in the field earned him the first-class prize for technological progress by the Ministry of the Machine-Building Industry. His paper won the prize for technological results by the ministry. In co-operation with his colleagues, he invented a noise positioner of the machine tool gear. These achievements of advanced world level were rated a symbol of the "creative spirit of worldwide significance" by foreign experts.

To keep abreast of the structural readjustment to the world machine tool industry, Yi put forward in 1984 the suggestion that the factory make three changes—change from low-quality products to high-precision and highly efficient numerically-controlled machine tools, change from the machine tool series to machining centres, and change from a focus on the domestic to the international market. He implemented the technical renovation project designed by Japanese experts, which enhanced the factory's production and the quality of its products to the world level. In co-operation with technicians





Yi Weili explains to visitors how his factory's machine tools are distributed and exported.

from Japan, the Federal Republic of Germany and the United States, he designed and produced two numerical-controlled machine tools and one machining centre. With an eye to jointly developing new products, he went to the United States in 1988 and, in accordance with a request of US experts, he presented a design plan for the MJ-50CNC numerical-controlled machine tool within seven days. He was known as the "resourceful Chinese." The products, meanwhile, began to enjoy brisk sales on the world market.

In June 1988, Yi was promoted to factory director after holding the position of deputy director for seven years. Sun Baojun, the former director, had managed to bring the plant's output value, profit, and foreign exchange earnings up by an average rate of 30 percent a year since China introduced the policy of reform and opening up. In 1988, the amount of

the factory's foreign exchange earned through the export of its products totalled US\$4.17 million. In 1989, the year China faced the grim task of improving the economic environment and rectifying the economic order, the 8,000 workers and staff members of the plant under Yi's leadership scored their best results in production and management since the founding of the plant 40 years earlier. They had an output valued at 150 million yuan, handed in 31.29 million yuan in profit and tax to the state and earned US\$10.02 million through the export of products, showing increases of 25 percent, 4.5 percent and 140 percent respectively over the previous year. The factory's products found their way to the United States, Japan, Australia, the Federal Republic of Germany, Italy and Canada. It leads all the enterprises in the country's machine tool industry in output value, amount of

foreign exchange earned through exports, product quality, the amount of profits and foreign exchange earned by each employee.

Yi is known for his ability to handle affairs in a decisive way, for his conscientious work and for his efficiency. In enterprise management, he is concerned for the lives of his employees. They, consequently, "value the prosperity of the plant as highly as their own honour and feel its decline with a sense of shame." When the plant encountered its most difficult time last year, many workers and staff members, on their own initiative, worked extra hours.

Yi knows very well that the competition on the international market is a competition of quality, price, after-sales service and date of delivery. With regard to product quality, apart from implementing international standards, the plant has formulated its own internal standards (tougher than those demanded internationally), and established seven quality guarantee systems. At the same time, the plant is beefing up its training of qualified personnel to improve after-sales service for foreign customers.

This year, the plant plans to yield 165 million yuan in its total output value and earn US\$23 million through exports. It will thus fulfil its plan to export two-thirds of its products ten years ahead of schedule. Not surprisingly, Yi is optimistic that the factory's difficult annual plan will also be fulfilled smoothly. ■

# Utilizing the Resources of the Yellow River

by Our Staff Reporter Li Rongxia

*After 40 years of effort to bring the once intractable Yellow River, China's second longest, under control, the North China Plain is now a promised land. But some sections of the river have been polluted and need to be cleaned up at once.—Ed.*

People in the lower reaches of the Huanghe River often say, "A good harvest depends on Yellow River water." The dry year of 1989 provides one example. Shandong Province, the largest among nine provinces and autonomous

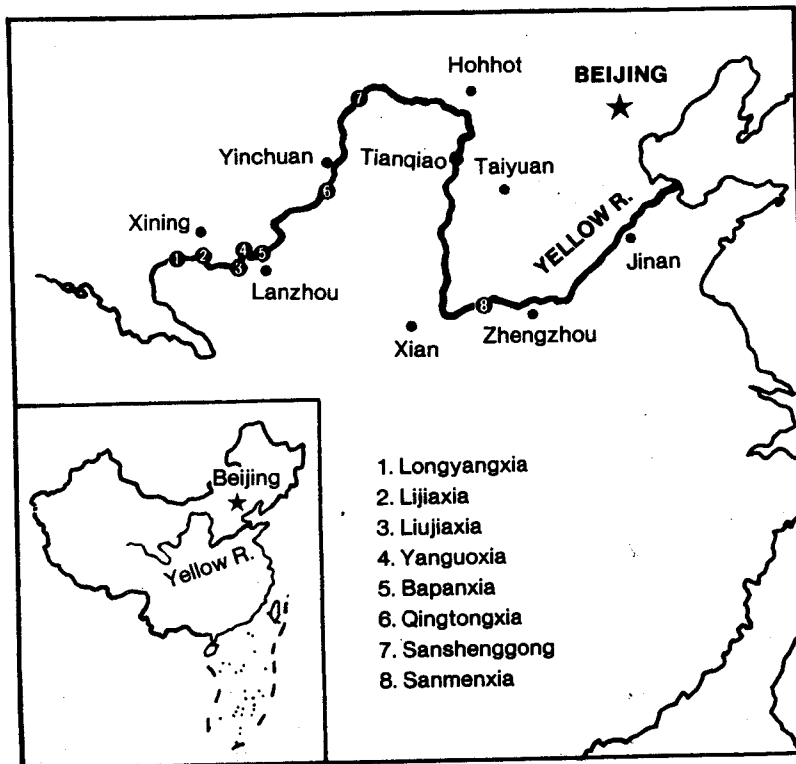
regions irrigated by the Yellow River, diverted 12.3 billion cubic metres of water into the fields during the year. The result was a bumper harvest. Statistics released by five prefectures and cities located along the river indicate that the total

grain output reached a record high of 11.32 million tons, 14.12 percent more than in 1988.

The Yellow River, the leading water resource of northwest and north China, has an average annual flow of 57.4 billion cubic metres, 40 percent of the total in the water system of north China (the Yellow River, the Huaihe River and the Haihe River). Such a rich water resource has the potential to provide annually some 117 billion kwh of electricity.

Before the founding of the People's Republic of China in 1949, however, the water resources of the Yellow River could not be tapped. The river brought a large amount of silt to the riverbed in the lower reaches and, when dykes burst, many fields were inundated, leaving houses destroyed, people drowned and thousands upon thousands of others homeless. The Yellow River was difficult to harness and the rulers of feudal dynasties saw no way to solve the problem.

After liberation, the people's government began to study how best to use the Yellow River by eliminating the problems and



building up water conservancy facilities. Forty years of effort have paid off. As of now, eight big hydroelectric power projects including Longyangxia, Lujiaxia, Yanguoxia, Bapanxia, Qingtongxia, Sanshenggong, Tianqiao and Sanmenxia have been completed, in addition to the many water conservancy facilities on the river's tributaries. In the Yellow River valley, there are now 174 large and medium-sized reservoirs with a total water storage capacity of 31.5 billion cubic metres; 80 hydroelectric power stations with a total generating capacity of 3.5 million kw; and a total of 5.33 million hectares of fields brought under irrigation.

### Channel Water to the Fields

The fields irrigated with the Yellow River water are mainly in the Hetao Plain (in Inner Mongolia and Ningxia), the Fenhe River and Weihe River (tributaries of the Yellow River in Shanxi and Shaanxi provinces) basins and the lower reaches of the Yellow River.

Although diverting Yellow River water into the fields of the Hetao Plain is nothing new, the supply of water was not guaran-

teed because most diversion works were simple and crude. Since 1949, in addition to rebuilding the old channel systems, two large irrigation projects at Qingtongxia and Sanshenggong have been completed. As a result, the irrigated area has increased from 330,000 hectares to more than 1 million hectares. At present, the grain output of the area irrigated by the Yellow River water amounts to 70 percent of the total in the Ningxia Hui Autonomous Region; the irrigated area has thus become the region's commodity grain base. The supply of grain in the Inner Mongolian Autonomous Region comes mainly from farmland irrigated with the Huanghe River water.

Both the Fenhe River and Weihe River basins are the earliest irrigated areas in China. For the past 40 years, the local governments have built more than 30 big and medium-sized reservoirs, some 40 irrigated areas each covering 3,000 hectares, and three large areas of irrigation—the Baojixia Weihe River Irrigated Area, the Dongfanghong Irrigated Area and the Jinghe River People's Irrigated Area—each with more than 70,000 hectares. The total irri-

gated areas in the two basins have gone up from 40,000 hectares in 1949 to about 1.5 million hectares.

Water diversion works have developed rapidly in the lower reaches of the Yellow River.

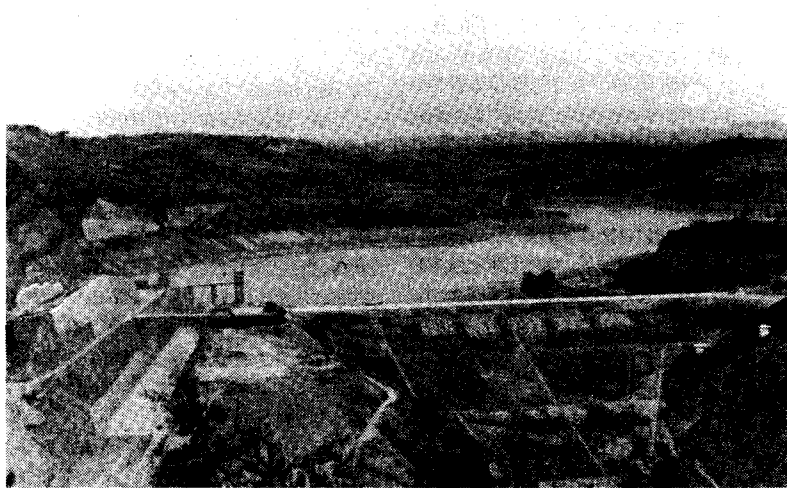
Diverting Yellow River water into the fields of the lower reaches began in 1952 with the completion of the Renmin Shengliqu (People's Victory Ditch) in Wuzhi County, Henan Province. This irrigation ditch, which can divert 50 cubic metres of Yellow River water per second and cover an irrigated area of 40,000 hectares in six counties and cities, was a good example of how to divert the Yellow River.

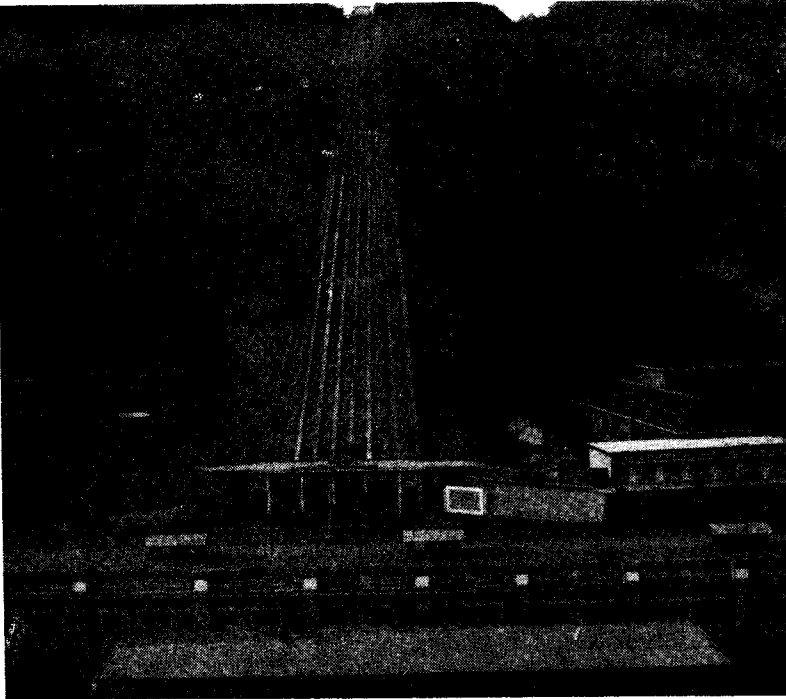
Since then, work has progressed rapidly. Currently, there are 76 culvert gates, 55 siphon projects and 68 pumping stations which cover an irrigated area of more than 2 million hectares. Shandong Province, for example, has built 14 large irrigation areas totalling some 1.33 million hectares, about one-fourth of the total irrigated area in the Yellow River valley.

These diversion works have not only brought great advances to farm production in the lower reaches of the Yellow River but also transformed many sandy wastelands and saline-alkali lands into high-yield wheat and rice fields. The entire irrigation area along the Yellow River and its tributaries have reaped bumper harvests for ten years running despite the dry weather conditions.

The residents of Yuanwu Town of Yuanyang County in Henan Province, for instance, located in a saline-alkali area, previously lived in dire poverty. Since 1980, the town has devoted major effort to developing diversion works, efforts which have brought a sharp increase in grain output for seven years

The Taoqupo Reservoir located on the middle reaches of the Yellow River.





**The Mangshan pumping station supplies Zhengzhou with water enough to meet 80 percent of its household use.**

running.

The northwestern region of Shandong Province, the province's poorest area, has also achieved good results in transforming saline, alkali and low-lying lands with diversion works. The total area of low fertility land has dropped from 802,000 to 266,000 hectares and the region is now an important grain production base in the province.

### **Hydroelectric Power**

The water resources of the Yellow River valley account for two-thirds of the total available for development in the nine northwest and north China provinces and autonomous regions. It is also an important national energy resource of hydroelectric power mainly developed on the middle and upper reaches of the Yellow River.

The large-scale construction of hydroelectric power projects began in 1955 in accordance with a Yellow River comprehensive utilization plan. As of now, eight large and medium-sized hydroelectric power stations

with an installed capacity of 3.5 million kw have been completed. Their yearly electric output amounts to 18 billion kwh, or 50 percent of the total generated by all of northwest China's power grids, three times greater than the national total in 1949. In addition, preparations for the construction of the large Laxiwa and Liji Xia hydroelectric power stations are now under way.

Of the eight completed stations, the Sanmenxia and the Liujiaxia are the biggest. The Sanmenxia Hydroelectric Power Station, construction for which began in 1957 and which went into operation in 1973, is an important part of the Central Plain power grid. Construction of the Liujiaxia Hydroelectric Power Station began in 1958 and electrical generation in 1969. A high volume of electricity, using 220,000-volt and 330,000-volt lines, is supplied to Lanzhou, Tianshui, Xining and Guanzhong, giving strong support to their industrial and agricultural production.

The Liujiaxia, Yanguoxia, Bapanxia, Qingtongxia and Longyangxia hydroelectric power sta-

tions have boosted the share of hydroelectric power in the total power supply in Gansu and Ningxia to 70 percent and 50 percent respectively. They have played an important role in forming the petrochemical and metallurgical industrial bases in Lanzhou and in developing high-lift pumping stations along the upper reaches of the Yellow River.

The Yellow River valley is rich in nonferrous metal resources such as aluminium ore, copper ore and antimony ore, which are vital to developing the national economy.

The installed electrical generating capacity of the entire Yellow River valley may reach 28 million kw. So far, however, only 15 percent of this capacity is available.

### **Water for Urban Areas**

In summer 1989, when the reservoirs in Qingdao, Shandong Province dried up, the Dagu River went dry and the level of groundwater dropped, all of Qingdao faced the prospect of a cutoff of the water supply. At the critical time, the project of diverting Yellow River water to Qingdao was completed and a daily water supply of 200,000 tons (exceeding the original daily supply) was made available in November. The supply brought about a great advance in Qingdao's industrial production.

The diversion project channels water to four cities and prefectures and ten counties, most of which are coastal saltwater and land-locked high fluorine regions. Years of drought in some areas resulted in an insufficient supply of water for people and animals. The completion of the project has not only eased the water crisis in Qingdao, but also offered clean water for 710,000 people and provided an

irrigation resource for other areas.

In addition, many towns along the Yellow River have successfully met their water needs for industrial and household use by means of the Yellow River. For instance, of Kaifeng's daily demand for 260,000 tons of water, 250,000 tons are from the Yellow River. Also, water for oil refining and household use in the Shengli Oilfield depends on the Yellow River and, since 1980, the Shengli Oilfield has been supplied annually with 200-300 million cubic metres. In Tianjin, between 1972 and 1982, there were often water crises, a situation which has been alleviated. Henan's Renmin Shengliqu (People's Victory Ditch) and Shandong's Weishan and Panzhuang diversion projects have supplied a total 1.8 billion cubic metres of water and have, thus, played a great role in bringing a secure life to the people and guaranteeing industrial production.

### Pollution Control

Although the Yellow River is the most important water source in northwest and north China, its annual flow is only one-twentieth of the Yangtze River. It ranks fourth among China's seven big rivers and amounts to only 2.2 percent of the rivers' total flow volume. Starting from Henan Province's Huayuankou all the way up to areas within the Yellow River valley, the per-capita and per-hectare shares of water are 800 cubic metres and 4,500 cubic metres respectively, 29 percent and 18 percent of the nation's average. It is thus clear that the Yellow River valley is not abundant in water surface resources. Moreover, most regions in the Yellow River valley are arid and, because 60-70 percent of annual precipitation fall

in the months of July, August and September, so a large amount of rain water cannot be effectively utilized.

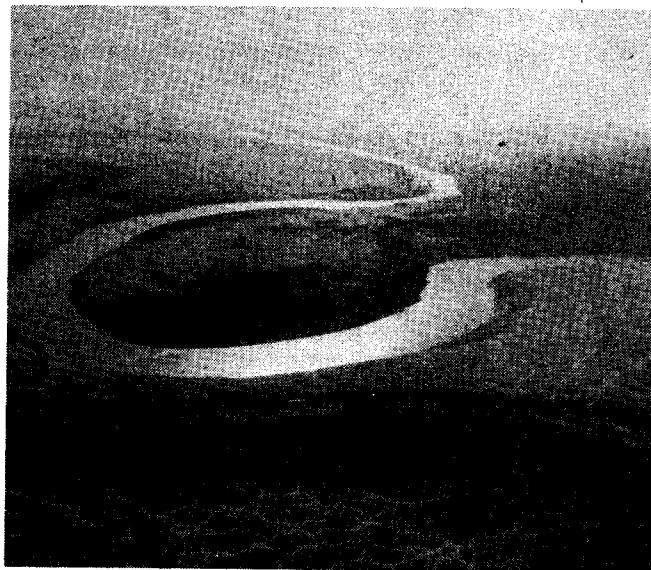
In areas of drought along the Yellow River valley, the irrigated land accounts for some 35 percent of the total acreage, much lower than the nation's average level of 48.5 percent. In order to meet the needs of farm production, the water storage projects and diversion works will remain important tasks in the Yellow River valley.

There are also man-made problems. Owing to some shortcomings in project designs and to poor management, waste of water resources has become very serious. In some irrigated areas, the per-hectare demand for water amounts to some 1,500 cubic metres. In other areas, the demand for water for industrial use has increased sharply. The demand for water for Taiyuan industries in 1978, for example, was 59 times greater than in 1950.

Each year, because of the development of industrial and agricultural production and the continuing increase in the urban population, some 1.8 billion cubic metres of foul water, 82 percent from enterprises, has drained into the Yellow River and its tributaries. The result is serious pollution. Lanzhou, Taiyuan and Xian are unfortunate examples. Polluted water made up 36.8 percent of the total drained from the area. The extensive utilization of chemicals

in farm production<sup>4</sup> is a prime reason for water pollution.

Water pollution has greatly damaged the ecological balance. The Lanzhou section of the Yellow River originally had 18 kinds of fish shoals, but eight are now extinct. Rare Luohe River carps and Yihe River triangular breams in the Henan section have also disappeared. The control of pollution and



The Yellow River cuts through the Tengger Desert.

protection of water resources have thus become important tasks.

The large-scale harnessing of the Yellow River has been hampered by the shortage of funds. According to statistics of the Yellow River Administrative Committee, the state's annual investment in recent years was only 160 million yuan, enough only to meet the demand of the Henan section of the river. Given the present economic difficulties, it is necessary to pool more money from all walks of life. It's clear, however, that under whatever circumstances, the efforts by China to harness the Yellow River will continue for a long time to come. ■

## Sino-Soviet Trade on Steady Course

Sino-Soviet trade has been developing rapidly in recent years along with normalization in the relations between the two countries. Total trade volume reached 4.83 billion Swiss francs in 1989. This represents an increase of 18 percent over that in 1988, and is expected to grow by a big margin this year. Thus the total for the five years from 1986 to 1990 will amount to 22 billion Swiss francs, or double that for the decade of the 1970s, according to official sources from the Ministry of Foreign Economic Relations and Trade.

At present the Soviet Union, as China's trade partner, occupies a position only next to Hong Kong, Macao, Japan, the United States and the Federal Republic of Germany.

The two countries exchanged commodities in accordance with mutual needs and the capacity of both sides. Raw materials and primary products account for 50 percent of the exported goods of both sides, while the remainder are light industrial and textile products, machinery and electronic products.

According to statistics, during the period of 1981 to 1989, China imported from the Soviet Union about 7.8 million tons of rolled steel and pig iron, 17 million cubic metres of lumber and pulp wood, 3.7 million tons of urea, and nonferrous metals and precious metals worth 1.19 billion Swiss francs as well as 119,000 automobiles and 57 planes.

In return, China exported to the Soviet Union some 600,000 tons of meat and canned meat, 630,000 tons of fruit, 8,000 tons of filament, 970 million Swiss francs worth of nonferrous metals and minerals, and 3 billion

Swiss francs worth of soybeans, corn and peanuts as well as a big volume of light industrial and textile products. For recent years, China's top quality machinery, hand tools, automobile storage batteries, bearings and spare parts for automobiles and railway freight cars also have entered Soviet markets.

The two countries' border trade and local trade have increased in recent years. In 1983, the border trade of Heilongjiang Province and the Inner Mongolia Autonomous Region only registered 22 million Swiss francs in value. However, up to 1988, the total combined trade volume to the USSR of the two provinces of Heilongjiang and Jilin and two autonomous regions of Xinjiang and Inner Mongolia had surpassed 800 million of Swiss francs in value.

In addition, China's Liaoning and Shandong provinces as well as some cities in inner region have established local economic trade relations with some Soviet cities. In 1989, their trade volume recorded 8 million Swiss Franc in value.

Currently Sino-Soviet economic relations and trade are changing over from simple barter trade to diversified forms of exchange. Many popular international co-operative methods have been gradually adopted, such as joint ventures, contracted projects and labour co-operation. The first group of labour contingent has been sent from Heilongjiang Province to the Far East area of the Soviet Union to plant fruit trees and vegetables; while personnel from the Soviet Union are participating in cocoa production on Hainan Island. Up

to the end of 1989, China and the Soviet Union have signed 95 labour-service contracts and 44 joint investment contracts totalling US\$240 million in value. Currently China's Ministry of Commerce and All-China Federation of Supply and Marketing Co-operatives have resumed exchange services in consumer goods, while China's Ministry of Agriculture has undertaken co-operation in fishery and aquatic products industries, with their Soviet counterparts.

Among the economic and technological co-operative agreements signed by the two governments, there are 33 items which relate to building and transforming Chinese industry. Of these, 13 items for which the conditions are inadequate will be changed or cancelled, while contracts on 12 other items have been signed, including two 500,000V transformer-transmission lines, the Harbin Flax Plant in Heilongjiang Province, the No. 3 Blast Furnace of the Wuhan Iron and Steel Co., Hubei Province, the No. 11 Blast Furnace of Anshan Steel and Iron Co., Liaoning Province, and the Luoyang Bearings Factory, Henan Province. Other contract items will be signed soon.

The two credit agreements signed by the two countries in 1988 include: the Soviet Union's credit to China in form of commodities for the construction of Usu-Alstaw Pass Railway in Xinjiang Autonomous Region, and China's purchase of thermal power plant equipment from the Soviet Union using commercial credit. Both are now being smoothly implemented.

by Yao Jianguo

## First-Rate Cultural Relics Exhibition

China's first rate cultural relics exhibition, sponsored by the State Cultural Relics Administration and the State Travel and Tourism Administration, recently opened in the Palace Museum in Beijing.

Some 245 pieces (or sets) of precious cultural relics were on display representing China's long history and splendid civilization. The exhibits divided into more than 20 categories showing the historical transition from primitive ages to periods of high civilization. On display are ancient ape-man skull fossil, pottery and porcelain products, stone implements, bronze ware, gold and silver ware, lacquerware, ivory and bone carvings, embroidery, inscriptions on bones or tortoise shells, bamboo slips, royal seal, sculpture, fresco, the four treasures of study and *Tangka* (a particular wall painting) with very prominent historical, scientific and art values. Some rare artifacts were publicly shown for the first time.

Exhibited in five stages according to the development of Chinese history, the earliest exhibit is the ancient ape-man skull fossil unearthed in Yuanmo, Yunnan Province. The fossil, unearthed in 1988, is about 4 million years old and is more closely related to modern humankind than other ancient fossils.

The bone flute, unearthed in Wuyang County, Henan Province dates back 7,000 years. Made from bone of beasts, with seven tone holes and one hole for tuning, was found to have seven tones and is known as one of the earliest musical instruments in China.

During China's Shan and Zhou dynasties (17th century-256 BC), the technology used to produce bronze ware was already

known throughout the world. A bronze carriage, used for animal farming by a man who had his feet cut off, of the Western Zhou Dynasty (11th-770 BC), was unearthed in Wenxi County, Shanxi Province in 1989. This relic has very high historical, scientific and cultural value. The carriage, 9.1 cm high and 13.7 cm long, is decorated with patterns of birds and beasts, symbolizing husbandry farming during that time. Facts from the history book of the Western Zhou Dynasty state that sentenced criminals had to suffer a punishment of having their feet cut off to prevent them from escaping and had to watch over the animal farm. The carriage, ingeniously designed and finely cast, is a piece of very high achievement having 15 movable parts. The wheels can rotate, the cover and door can be opened and closed, and the door can bolt and unbolt. What is more, the four little birds, ingeniously designed on the cover, can spin when the wind blows. Other exhibits will also capture the interest of the audience.

The exhibition is expected to close at the end of the year.

by Han Baocheng

## Daxing County's Watermelon Show

Beijing in June and July is a special outlet for the sale of watermelons. One reason is that Daxing County, renowned for its high quality watermelons throughout Beijing, holds an annual watermelon festival. This year the festival was from June 28 to July 2.

Daxing County is about 40 kilometres south of Beijing. Various kinds of activities in addition to the Daxing watermelon

market took place at the festival and attracted not only tens of thousands of Beijing residents, but also thousands of overseas tourists who arrived by buses provided by travel services for sightseeing.

This year's third watermelon festival was larger than the two previous watermelon festivals during which the buying and tasting of watermelons is the main activity. Along the two sides of the 5,000-metre-long street, watermelon vendors set up numerous watermelon stalls where some 10 to 20 varieties of high quality watermelons on display stirred great interest among tourists. Several Japanese travellers this year made it a point to go directly to the watermelon field and pick watermelons with the farmers.

Savouring watermelons during the festival is by no means the one and only activity. About 100 kinds of China's traditional local snacks are provided on a food street. On an amusement street, several dozen traditional folk performances were on stage. The climax of the festival was the lantern gathering and fireworks display.

During the festival, many people were attracted to nearby David's Deer Park and Tuanhe Xinggong Palace, and to the shooting range in Weishan Village, according to director Li of the Watermelon Festival Office of Daxing County. David's deer, a rare wild animal, are fed and preserved in the David's Deer Park. The Tuanhe Xinggong Palace is a place where the emperors of the Qin Dynasty once lived during their stay there on hunting trips between the 17th to 19th century. The Shooting Range in Weishan Village is used to practise the use of all kinds of firearms.

by Han Guojian

## Preserving Beijing's Ancient Trees

**T**wo lofty ginkgo trees stand in front of the main building of the National Library of China in western Beijing. A small card on one of them says, "Ginkgo biloba L., an ancient botanical species of the Fourth Ice Age, 500 to 600 years old."

Similar cards, either red or green, can be seen on other old trees in Beijing's parks, at historical sites and in ordinary lanes and side-streets. The green card designates trees that are more than 100 years old; trees with a red card are at least 300 years old.

The cards are the result of a general survey conducted by the Beijing Bureau of Parks and

**The "Marquis of Shade" in Beijing's Tuancheng (Circular City) is 800 years old.**

Woods. The survey registered 23,000 trees that are more than 100 years old and divided them into different classes for protection; trees with red cards are in the highest category.

In downtown Beijing's Tuancheng (Circular City), which is about the size of a soccer field, several trees have red or green cards but two in particular stand out.

One is a Chinese pine planted 800 years ago during the Jin Dynasty. This tree is now more than 20 metres high and the trunk is so thick that four adults cannot encircle it with linked arms. Its luxuriant foliage is like a huge umbrella.

According to historical records, Emperor Qianlong of the Qing Dynasty once rested under the pine during a hot summer day and was so refreshed that he granted it the title "Marquis of Shade." Iron rods now support the Marquis' heavy boughs, a lightning rod has been affixed

and an iron fence surrounds it for protection.

The other tree, a lacebark pine that is 600 to 700 years old, was granted the title "General of the White Robe." The lacebark pine is a special species in northern China.

Cong Sheng, a senior engineer at the Bureau of Parks and Woods, is one of the people responsible for the protection of these ancient trees. Cong said that in the Circular City and nearby Beihai Park there are more than 40,000 trees, of which 300 have red cards and 1,200 green.

During the more than ten years they have been working with these old trees, Cong and his colleagues have gained valuable experience, using new materials and new technology as well as traditional methods to preserve these living treasures. One of their theses on this subject won an award from the Beijing municipal government. Cong said that he regarded the ancient trees as more important than his own life.

Among the problems that afflict old trees are holes that form

**This ancient ginkgo tree grows in a new apartment district on the western outskirts of Beijing.**

*Photos by TAN BOQLIAN*





in the trunk and become the home of harmful insects. These holes used to be filled with concrete or lime but Cong and his colleagues used new materials to save a 500-year-old pine and 200-year-old Yulan magnolia (*magnolia denudata*).

Traditional methods were employed to revive a Ming Dynasty pine in Tiantan (Temple of Heaven) Park. This tree, known as the Nine-Dragon Pine because nine root shoots twist around its trunk, has been a big tourist attraction. But in 1980 it began to wither and the size of its crown decreased sharply.

Li Jinling, a senior engineer at the Bureau of Parks and Woods, and his research group were entrusted with the task of working out an approach to save the tree. After a detailed analysis of the water supply and condition of the roots, they discovered that a large number of root hairs were dead. This meant the tree's intake of water and nutrients was reduced. The direct cause was the hardened, impermeable earth tramped down by the huge number of visitors.

Using a traditional method discovered accidentally in treating trees in the Circular City, they covered the root area with tapered bricks to create an air pocket. Lime and fertilizer were placed between the bricks and the soil where they could mix with water and air. The tree was saved and the method added to the bureau's records.

These records include 20 articles and 57 theses concerning the protection of ancient trees. The documents were drafted mainly by Cong Sheng, who has rich practical and theoretical experience.

"We hope to exchange experiences with our counterparts around the world so as to find more effective ways to protect ancient trees," Cong said. ■



ZHANG SHUXIN

## Indian Dance Troupe in China

Invited by China's Ministry of Culture, the Indian Manipuri Jagoi Marup Dance Troupe recently gave a performance to celebrate the 40th anniversary of the establishment of Sino-Indian diplomatic relations. ■

The picture shows a scene from an Indian folk dance called Ga-laam (crab dance). An Indian legend says that an ancient prophet once invited all of the earth's animals to dance. The Ga-laam imitates the actions and movements of the crab. ■

## Ancient Bronze Musical Instruments Found

Archaeologists working in northwest China's Shaanxi Province have unearthed a group of bronze bell-type instruments dating back to the Western Zhou Dynasty (1066-771 BC).

Experts said the three *bos* and 15 pieces of a chime found in Meixian County are the oldest such instruments yet discovered, predating earlier discoveries by hundreds of years. The *bos* are considered to be the most important relics yet unearthed for the study of Western Zhou music.

The excavation site 1.5 kilometres northwest the Majiazhen Railway Station had earlier yielded other precious relics of the period, including bronze *dings* (three- or four-legged cauldrons).

The site was discovered in August of 1985 when local workers were digging clay for brick making. The latest find occurred about two metres beneath the surface, where archaeologists came across the 15 pieces of a chime and three *bos* arranged in order of size. Their weight ranged from five to 50 kilogrammes with their height from 30 to 80 centimetres.

Four pieces of the chime carry inscriptions, three of which tell the same story of a minister who, due to the protection of his grandfather and father, won the favour of the emperor and was in charge of the forestry and fishery administration.

Experts are more interested in the three *bos*. One common feature of the *bo* is a knob on top, sometimes decorated with an animal design. The knobs of all three *bos* found at Meixian are shaped like two birds facing each other. The bodies of the bells are decorated with four tigers and other exquisite patterns and designs.

Textual research indicates they date to the reigns of the emperors Yi Wang and Li Wang of the middle period of Western Zhou, which makes them older

than a similar *bo* in the Shanghai Museum and refutes the theory that grouped *bos* began to be played only during late Western Zhou.

The ancient music research office headed by Li Chunyi of the Ministry of Culture examined the instruments and found they still give off clear beautiful tones.

Unfortunately, according to the local cultural relics departments, five pieces of the chime were stolen at the excavation site and are said to have been carried abroad. It is hoped that the relevant foreign agencies can help find and return them to China so that this unique set of cultural relics will survive intact. ■

## Tibetans Related to Northern Chinese

A genetic study of a random sample of 233 ethnic Tibetans from Lhasa and Xigaze supports the theory that the Tibetan people are inseparable members of the Chinese family.

The test by the Beijing Paediatrics Institute involved an examination of a component of the Tibetans' white blood cells. This component, the antigen, is useful in determining hereditary relationships.

The researchers found that the Tibetans are descendants of people from southern Gansu and Qinghai provinces who moved south to the Himalayas.

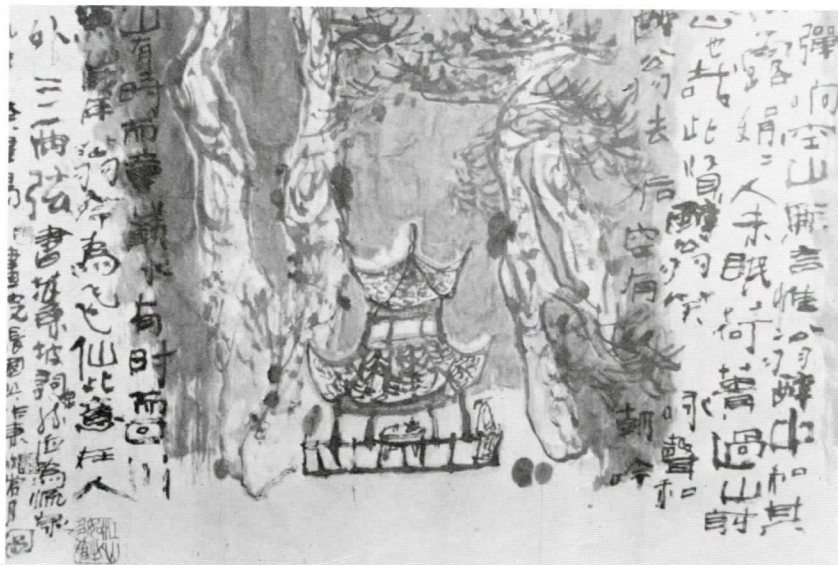
Because Tibetans differ from the Han and other Chinese nationalities in customs, language and

dress, controversy has existed over their origin.

Although convincing evidence exists to verify that Tibet is an inalienable part of China, a handful of separatists insist that Tibet is an independent territory and that Tibetans have no blood relationship with the Hans.

The institute compared the genetic features of the antigen in the Tibetan sample with people from the rest of China as well as Nepal and India. It found that the Tibetans' antigen was closest to that of the northern Chinese and far different from that of the Nepalese and Indians.

The origin of the Tibetan nationality was thus revealed by means of genetics. ■



Pines and Pavilion.

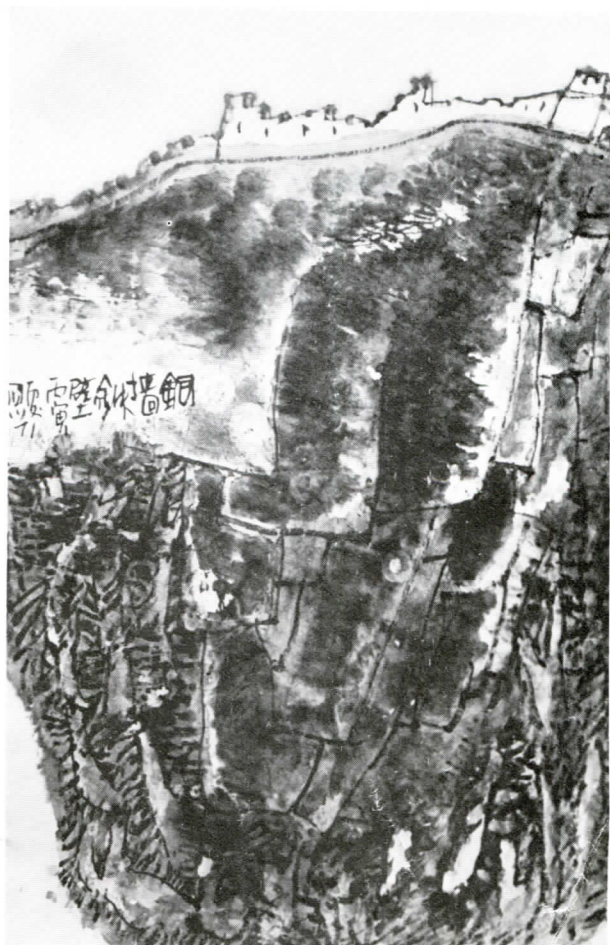
## Chinese Paintings by Zhang Guoxing

Zhang Guoxing was born in Qinhuangdao City, Hebei Province in 1950. A painter with the Qinhuangdao Studio of Art and Calligraphy, he specializes in Chinese landscape paintings.

### ART PAGE



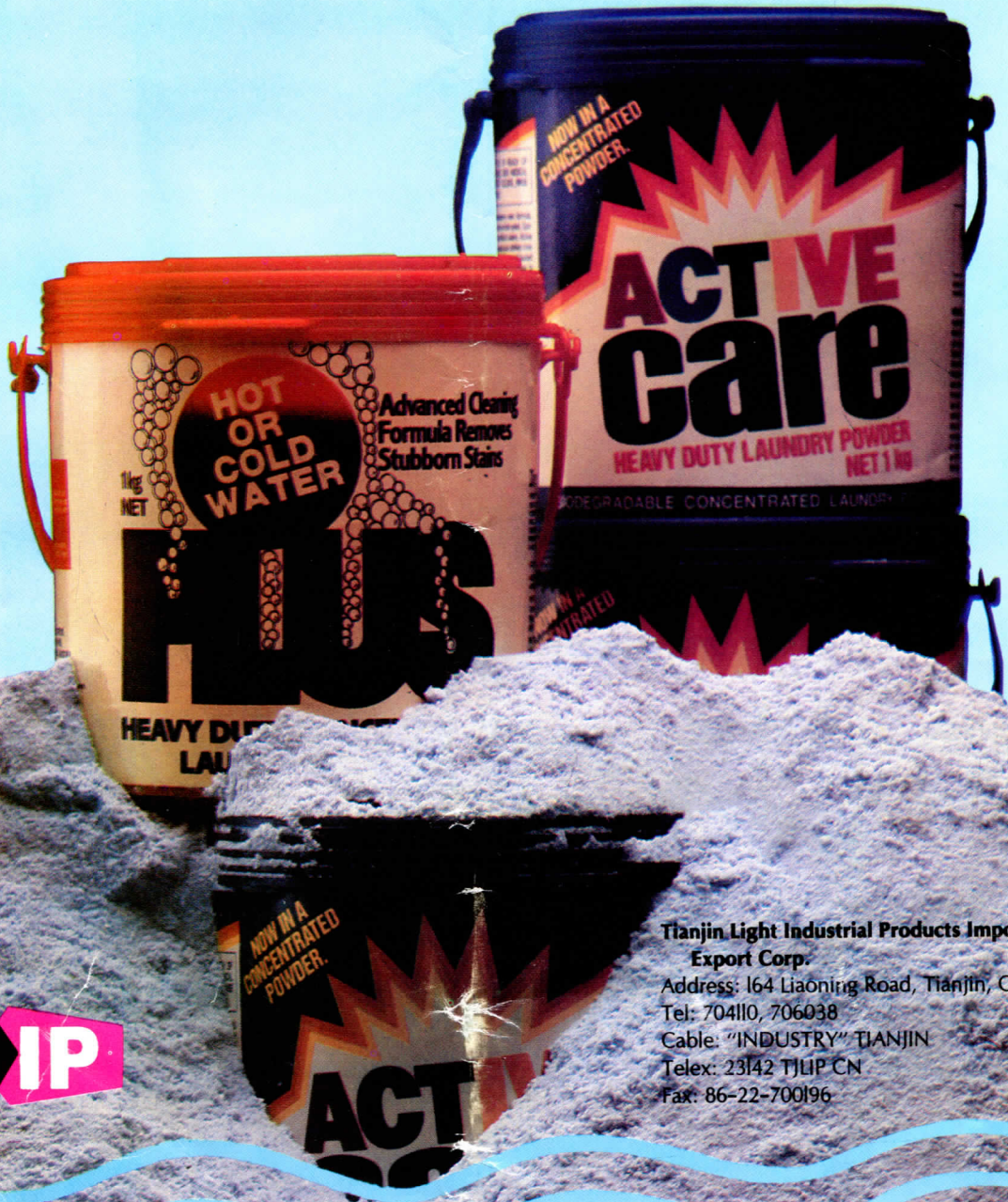
A Snow Scene on Yanshan Mountains.



The Great Wall.

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