A CONCISE GEOGRAPHY OF CHINA

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JEN YU-TI

FOREIGN LANGUAGES PRESS PEKING A book of general information, this geography contains two parts. Part I gives an overall description of China's land, people, topography, mineral resources, climate, vegetation, rivers, lakes, seas, and distribution of agriculture, industry and communications. Part II, on regional geography, describes the natural surroundings, economic features, principal cities, places of historical interest, native and special products of each province and autonomous region.

With maps and photo illustrations.

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Printed in the People's Republic of China Distributed by Guozi Shudian (China Publications Centre), P.O. Box 399, Peking

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A SIMPLE MAP OF CHINA



LEGEND

★ National capital
 Capital of province, autonomous region, or city directly under the central government
 Important city
 National boundary
 Regional boundary
 Regional boundary

## PART I GENERAL DESCRIPTION

## Chapter One

#### **POSITION AND AREA**

China stands on the eastern part of Asia and its east coast is washed by the waters of the Pacific. With the exception of a small part in the South which is tropical, the country lies in the temperate zone with marked differences between the four seasons. This favourable geographical position allows the moist maritime air-masses to penetrate the inland areas, a factor contributing to China's agricultural development. It also facilitates contacts with other countries.

With a total area of 9.6 million square kilometres, China is one of the largest countries in the world. From east to west, China's territory measures some 5,000 kilometres, covering 62 degrees in longitude from the meeting point of the Heilungkiang (Amur) and Ussuri Rivers to the Pamirs. In the easternmost region the sun rises more than four hours earlier than in the westernmost. While the Ussuri is basking in the early morning sunshine, the Tienshan Mountains and the Pamirs are still wrapped in darkness.

The distance from north to south is about 5,500 kilometres, extending over 49 degrees in latitude from the middle of the Heilungkiang River

around Moho to the neighbourhood of the Tsengmu Reef at latitude 4° N. When spring ploughing is under way in southern China, snowflakes are still dancing in the northern regions.

China's land border is more than 20,000 kilometres long. It marches with those of the Soviet Union and the Mongolian People's Republic in the north, the Korean Democratic People's Republic in the northeast, the Democratic Republic of Viet Nam in the south, and Afghanistan, Pakistan, India, Nepal, Sikkim, Bhutan, Burma and Laos in the west and southwest. To the east and southeast, China faces Japan, the Philippines and Indonesia across the seas.

Off the eastern and southern coasts stretch the Pohai, the Yellow, the East China and the South China Seas which join the Pacific. Over 5,000 islands dot these seas. The islands in the South China Sea, the Hainan Island, Taiwan, the Penghu Islands and the Choushan Archipelago, of which Taiwan and Hainan are the biggest, are strung out like a bow off the southeastern coast, forming a maritime "Great Wall". The mainland coastline extends 14,000 kilometres, and longer if the island coasts are included.

The Chinese government has declared the breadth of China's territorial sea as 12 nautical miles. This provision applies to all territories of China, including the Chinese mainland and the coastal islands. It also applies to Taiwan and its surrounding islands, the Penghu, Tungsha, Sisha, Chungsha, Nansha and all other islands belonging to China which are separated from the mainland or its coastal islands by high seas. The entire Pohai Sea and Chiungchow Straits are China's inland seas. At present, the biggest island of China, Taiwan, as well as scores of islands near it, including the Penghu Islands, and the islands of Quemoy and Matsu of Fukien Province are still forcibly occupied by U.S. imperialism. As these islands are integral parts of China's territory, the Chinese people are determined to liberate them in order to preserve the sovereignty and territorial integrity of their country.

#### **ADMINISTRATIVE DIVISIONS**

China is divided administratively into 22 provinces, 5 autonomous regions, and 2 cities directly under the central government. Below these divisions are more than 2,000 counties (including autonomous counties) and cities, which in turn are subdivided into people's communes.

Autonomous regions and autonomous counties are set up in areas where national minorities live in compact communities. All these autonomous areas are component parts of the People's Republic of China.

Peking, the capital of the People's Republic, is the political, cultural, communications and economic centre of the nation. Shanghai is the biggest industrial and commercial city and the biggest port in the country. Both cities are under the direct jurisdiction of the central government.

Changes are sometimes made in the administrative divisions to suit the needs of the nation's political and economic development.

### ADMINISTRATIVE DIVISIONS AND DISTRIBUTION OF POPULATION

(1957)

| Region       | Province, auton-<br>omous region, or<br>city directly under<br>central government | Capital   | Population         |
|--------------|---|-----------|--------------------|
| Northeast    | Heilungkiang<br>Province  | Harbin    | 14,860,000         |
|              | Kirin Province  | Changchun | 12,550,000         |
|              | Liaoning Province   | Shenyang  | 24,090,000         |
| Middle-Lower | Peking City   |           | 4 010 000          |
| Tellow River | Hopei Province*   | Tientsin  | 44.720.000         |
|              | Shantung Province   | Tsinan    | 54.030.000         |
|              | Honan Province  | Chengchow | 48.670.000         |
|              | Shansi Province   | Taivuan   | 15.960.000         |
|              | Shensi Province   | Sian      | 18,130,000         |
| Middle-Lower |   |           |                    |
| Yangtse      | Shanghai City   |           | <b>6,9</b> 00,000  |
|              | Kiangsu Province  | Nanking   | 45,230,000         |
|              | Anhwei Province   | Hofei     | 33,560,000         |
|              | Chekiang Province   | Hangchow  | 25,280,000         |
|              | Kiangsi Province  | Nanchang  | <b>18,610,0</b> 00 |
|              | Hunan Province  | Changsha  | <b>36,22</b> 0,000 |
|              | Hupeh Province  | Wuhan     | 30,790,000         |

| Region             | Province, auton-<br>omous region, or<br>city directly under<br>central government | Capital  | Population          |
|--------------------|---|----------|---------------------|
| South China        | Fukien Province   | Foochow  | 14,650,000          |
|                    | Taiwan Province   |          | 10,100,000          |
|                    | Kwangtung<br>Province   | Canton   | 37,960,000          |
|                    | Kwangsi Chuang<br>Autonomous<br>Region  | Nanning  | 19,390,000          |
| Southwest          | Szechuan Province   | Chengtu  | 72,160,000          |
|                    | Yunnan Province   | Kunming  | 1 <b>9</b> ,100,000 |
|                    | Kweichow Province   | Kweiyang | 16,890,000          |
| Chinghai-<br>Tibet | Chinghai Province   | Sining   | 2,050,000           |
| •                  | Tibetan Autonomous<br>Region  | Lhasa    | 1,270,000           |
| Inner<br>Mongolia- |   |          | ·                   |
| Sinkiang           | Kansu Province*   | Lanchow  | 12,800,000          |
|                    | Ningsia Hui Auton-<br>omous Region*   | Yinchuan | 1,810,000           |
|                    | Inner Mongolian<br>Autonomous<br>Region   | Huhehot  | <b>9,</b> 200,000   |
|                    | Sinkiang Uighur<br>Autonomous<br>Region   | Urumchi  | 5 <b>,6</b> 40,000  |

\*1958 figures.

China is the most populous country in the world. According to the statistics of 1957 it has a total population of 650 million and more, not including the figures for Hongkong and Macao and the overseas Chinese. This amounts to about one-fourth of the world's total, or more than 12 times the population of Britain and more than three times that of the United States.

China's big population is a great source of strength to the nation. The 650 million hard-working and courageous people, in addition to the leadership of the Chinese Communist Party, are also a decisive factor in building China into a great socialist country with a modern industry, a modern agriculture and a modern science and culture.

The population density averages 68 per square kilometre, a much lower average than that of Britain, Japan or India. Considering the natural conditions of China with its vast territory and rich resources, 650 million is not such a great number, and falls short of the manpower needed in the country's long-range, large-scale construction and development programmes.

The population is unevenly distributed. In the crowded eastern part of the country, the average density is over 100 persons to the square kilometre, and in a number of places over 400. The western part is thinly populated, with an average for most of the area of less than 10 persons to the square kilometre, and for some places less than one. Such a wide disparity in population is due, on the one

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hand, to the unfavourable natural conditions of this high, cold and dry area and, on the other hand, to the prolonged rule of the reactionary regime which combined with the imperialist aggression held back economic development over so long a period. Tibet's population, for example, far from going up in the last few centuries, went down. This drop in the population can be laid at the door of the cruel serf system. Since liberation, following the rapid progress in the country's socialist construction, continuous efforts have been devoted to the development of the western areas. The population of western China is now going up fast as a result of various projects to transform natural conditions, such as water conservancy work and erection of shelter belts, and the building of factories, cities, farms, forests and pastures.

Millions of overseas Chinese have made their homes in various parts of the world, mainly in Southeast Asia. Most of them are labouring people who for generations have worked side by side with the people of the countries of their residence, forming close ties and friendship with them, and making definite contributions to the local economic development. In recent years, large numbers of overseas Chinese have returned to China and have settled down with the ready help of the People's Government. They are now contributing their share to the country's socialist construction.

#### A GREAT FAMILY OF UNITY AND FRATERNITY

China is a unitary multi-national state. Of its total population, the Han nationality is the most numerous, accounting for 94 per cent. The remaining 6 per cent, or 40 million, are made up of more than fifty national minorities, including the Mongolians, Huis, Tibetans, Manchus, Chuangs, Uighurs, Miaos, Yis, Puyis, Koreans and Kaoshans.

The Hans figure predominantly in the distribution pattern of China's many nationalities, with the minority peoples mixed among them in communities of varying sizes. Scattered all over the country, the Hans are most concentrated in the eastern regions. The minority peoples are widely distributed; they are found in 50-60 per cent of the country's territory, mainly in the northwestern and southwestern regions.

Through the gradual development of economic ties and cultural contacts, the peoples of various nationalities within China's borders established a united nation long, long ago. But under the reactionary rulers who pursued a policy of national oppression, there was no equality between them. Foreign imperialist aggression aggravated their hardships. These conditions hampered their development and the realization of unity among them. In the last 100 years, all nationalities in China have waged common struggles against imperialism and feudalism. In the last 30-odd years they gradually came under the leadership of the Chinese Communist Party in their anti-imperialist and antifeudal struggles, and this bound them together with inseparable ties. The victory of the Chinese people's revolution which overthrew the rule of imperialism, feudalism and bureaucrat-capitalism and established the People's Republic of China has ended for ever the system of national oppression. Unity and equality between the different nationalities in China was attained and the relationships among them were placed on an entirely new footing. Thus, an era was opened for fraternal co-operation and common prosperity.

Since liberation the Chinese Communist Party and the People's Government have implemented their policy of unity and equality between nationalities. Regional autonomy for national minorities has been put into practice, with full rights for all minority groups. The people of all nationalities take part on an equal footing in the formulation of policy decisions on, and the administration of state affairs, and are the real masters of this great united country. All this has heightened their patriotism, strengthened their solidarity, given full scope to their initiative in their common efforts to build socialism and promoted the economic and cultural development in the national minority regions.

At the time of the founding of the People's Republic, about 30 million of China's minority peoples languished under the system of feudal landownership, over four million under feudal serfdom and one million under the slave system. Survivals of the clan system of primitive communism still existed in areas inhabited by some 600,000 minority people. The minority areas were extremely backward

economically and culturally. In some places, the primitive farming method of "slash and burn" was still in use, while many people remained hunters or nomads, and the production level was incredibly low. The Communist Party and the People's Government guided the minority peoples in carrying out social reforms. Most of them have shaken off the fetters of feudal or slave system, or have emerged from primitive communism, and are now forging towards socialism, skipping one or several stages of social development, With the active help of the government and the Han nationality, the minority peoples have, during the past decade and more, progressed by leaps and bounds in their political, economic and cultural development, and their living standards have been raised conspicuously.

#### Chapter Two

#### **TOPOGRAPHY AND MINERAL RESOURCES**

#### THREE-SECTION STAIRCASE

The relief map of China shows that its land mass is generally high in the west and low in the east. This west-east inclination is like a three-section staircase.

The first and the highest section is located in the southwest where the Chinghai-Tibet Plateau rises for the most part to over 4,000 metres above sea level, thus constituting the highest land mass in the world. Here are found the headstreams of most of China's major rivers flowing in an easterly or southeasterly direction.

Northwards across the Kunlun and Chilien Mountains on the northern fringe of the Chinghai-Tibet Plateau and eastwards across the Chiunglai and Taliang Mountains on its eastern fringe, the land slopes away to plateaus and basins on an altitude of 1,000-2,000 metres. This forms the second section which runs in an arc from the Tarim Basin in the northwest, across the Inner Mongolian Plateau, the Loess Plateau and the Szechuan Basin to the Yunnan-Kweichow Plateau in the southeast. Among these, the Szechuan Basin, at 500 metres above sea level, is relatively low-lying.



SECTION ACROSS CHINA AT LATITUDE 35° N.

From a line running from the high slopelands of the Greater Khingan Mountains in the northeast passing through the Taihang Mountains and on to the Wushan Mountains, the land descends eastwards to below 500 metres. This third and lowest section is made up of the Northeast Plain, the North China Plain, the Middle and Lower Yangtse Plain and the Southeastern Hills. Most of China's rivers follow this sloping contour from west to east, where they empty into the sea. As they rush down from a higher to a lower section, deep and treacherous gorges are formed, such as the Yangtse Gorges, and the Sanmen Gorge on the Yellow River. These gorges provide a potential source of immense hydro-electric power as well as favourable conditions for building reservoirs to control flood waters. The west-east incline allows the moist air current from the eastern seas to penetrate to inland areas and bestow abundant rain to vast regions in the Southeast. Apart from benefiting agriculture, this kind of topography facilitates contacts between the coastal and interior regions.

#### VARIED LAND-FORMS

China has diverse physical features. Imposing plateaus, broad plains, vast mountain ranges, rolling hills and typical basins combine to present an endless variety of landscape. Altitudes range from 8,882 metres on Mt. Jolmo Lungma, the world's highest peak which stands on the Chinese-Nepalese border, to 154 metres below sea level in the Turfan Depression.

These different physical characteristics give the country immensely rich and multifarious natural resources and provide excellent possibilities for developing industry, mining, agriculture, forestry and stock-raising.

Highlands make up about a third of the country's land space. A striking contrast is to be found between the western and eastern sides of an imaginary line drawn directly from Lanchow in Kansu Province to Kunming in Yunnan Province: on the west are high, steep ranges while on the east the land is generally lower, with gentle slopes.

West of this line there are, from north to south, the Altai, Tienshan, Chilien, Kunlun, Himalaya and Hengtuan Mountains. All of these, except the Hengtuan, run from east to west. The Hengtuan has a south-north orientation. The Himalayas on the southern fringe of the Chinghai-Tibet Plateau are the most spectacular. Formed of many parallel mountains, they extend in a great arc over an area 2,400 kilometres long and 200-300 kilometres wide. In May 1960, a team of Chinese mountaineers overcame many difficulties and succeeded in ascending the summit of Mt. Jolmo Lungma, the highest peak of the Himalayas, from its northern slope. This is the first time in history that Jolmo Lungma has been conquered from that direction.

The Chinling and Nanling Mountains further east run from east to west, the former dividing the drainage basins of the Yellow and Yangtse Rivers and the latter those of the Yangtse and Pearl. Another two groups of mountains run in a northeast to southwest direction. The first is made up of the Greater Khingan in the far north, and the Taihang and the Wushan further south. The second comprises the Changpai in the Northeast and the Wuyi in the Southeast. With the exception of Taiwan's Yushan chain and a few others, most highlands east of the Lanchow-Kunming line stand less than 3,000 metres above sea level. Many of them are intersected by plateaus, basins and hills. Plateaus claim as much as 26 per cent of the country's total area. Situated in the western and central regions, the principal ones are the Chinghai-Tibet, Yunnan-Kweichow, Inner Mongolian, and Loess Plateaus. Each of these has its own special features.

The Chinghai-Tibet Plateau in southwestern China is the world's most extensive tableland. It embraces the Tibet Autonomous Region, Chinghai Province and northwestern Szechuan. For the most part it stands 4,000 metres above sea level while in northern Tibet it is over 5,000 metres. Here are found endless snow-covered peaks, rich salt lakes, luxuriant pasturelands and relatively flat valleys suitable for farming, as well as abundant forest, water power and mineral resources.

The Inner Mongolian Plateau is bounded on the south by the Great Wall, on the east by the Greater Khingan Mountains and on the west by the Chilien Mountains. It covers the greater part of the Inner Mongolian Autonomous Region, the northern part of the Ningsia Hui Autonomous Region and the northwestern part of Kansu Province. It is broad and fairly flat and its eastern and southern steppes are ideal for stock-raising.

The Loess Plateau is bounded by the Great Wall on the north, the Chinling Mountains on the south, the Taihang Mountains in the east and the Wuhsiao Mountains to the northwest of Lanchow in the west. It includes northwestern Hopei, the entire province of Shansi, most of Shensi, southeastern Kansu and the southern part of the Ningsia Hui Autonomous Region. Averaging 1,000 metres or more in elevation, the plateau is covered with a thick layer of fertile loess. The sparseness of vegetation leaves the fine loess open to erosion by wind and water. Since liberation, the peasants have terraced a lot of the land and planted grass and trees on the plateau. This has checked the loss of water and soil, and brought about a marked development of farming in this locality.

Comprising eastern Yunnan and the whole of Kweichow Province, the Yunnan-Kweichow Plateau stands at an elevation of 1,000-2,000 metres. As a result of erosion by water, the plateau has a very undulating topography made up of sheer mountains, deep canyons, numerous limestone pinnacles, gaping sink-holes and caverns, as well as small fertile intermontane plains. Waterfalls are frequent. The peasants have terraced the slopes and made over the plains to paddies.

Hilly regions constitute about 10 per cent of the country's total area and are found mostly in the eastern coastal provinces. The more important are the Southeastern, the Shantung and the Liaotung Hills. Age-old erosion is responsible for the low elevations of these hills, most of which are under 500 metres. Their gentle slopes, interspersed by fluvial plains and small basins, make them ideal terrain for terracing and the cultivation of a wide variety of crops and trees of economic value. A few mountains of over 1,000 metres, like Huangshan in Anhwei, Lushan in Kiangsi and Taishan in Shantung, have become nationally known tourist centres.

The plains are also widespread, measuring over one million square kilometres, or 12 per cent of China's total area. The three most important are the Northeast, the North China, and the Middle and Lower Yangtse Plains, all roughly of the same size, that is, about 300,000 square kilometres. Extending north-south in one stretch, they form a broad, flat, low region in the eastern part of the country. They are endowed with rich soil and a warm, humid climate, and there are convenient means of irrigation. Through long years of cultivation they have become China's principal agricultural area.

The country's largest plain, the Northeast Plain, is made up of the Liaoho, Sungari-Nunkiang and Sankiang Plains. Most of it is less than 200 metres above sea level, the Sankiang Plain being the lowest with an elevation of under 50 metres. Its flat surface and fertile soil make it an ideal farming area. But under the past reactionary regimes, only its southern part was cultivated while its northern and northeastern parts were left to the weeds, earning for themselves the title of "Northern Wilderness". In recent years a great number of young people and demobilized soldiers have come here to reclaim the waste land, and have turned this "Northern Wilderness" into a prosperous farming area. It will, in time, become one of China's big granaries.

The North China Plain extends to the Taihang Mountains and the western Honan highlands in the west, the Pohai Sea in the east, the Yenshan Mountains in the north and the Tapieh Mountains in the south. It is known as the cradle of ancient Chinese culture. The whole region, especially the area along the banks of the Yellow River, is favoured with fertile soil and a thriving agriculture. It ranks as an important cotton and wheat production area.

Between Ichang in the west and the sea in the east, the Middle and Lower Yangtse Plain adjoins the North China Plain along the Huai River and Tapieh Mountains in the north. Its western and eastern parts are broader than the central part, and the whole plain may be subdivided into the Middle Yangtse Plain and the Lower Yangtse Plain. Centring on the Tungting and Poyang Lakes, the Middle Yangtse Plain is less than 50 metres above sea level. It is studded with lakes and surrounded by mountains and hills, the whole topography resembling a basin. The Lower Yangtse Plain takes in the plains along the Yangtse River in Anhwei and the Yangtse Delta between Kiangsu and Chekiang Provinces. It is very low in elevation, especially in the drainage area of the Taihu Lake where it is less than 10 metres. With a myriad of lakes and rivers, the plain is known as the "Water Country".

Besides the three major plains described above, there are many smaller ones along the southeastern coast south of the Hangchow Bay and in Taiwan and Hainan, the biggest being the Canton Delta.

Basins occupy about one-fifth of the total land area of China. The four largest are the Szechuan, Tarim, Dzungarian and Tsaidam Basins. Fringed by great mountains, the Szechuan Basin is a typical structure containing hills, low mountains and alluvial plains. It has rich soil, a humid climate, and numerous streams, and has long been known as the "Land of Abundance". The three other basins are located in the hinterland. Both the Dzungarian and Tarim Basins are in Sinkiang, one north of the Tienshan Mountains and the other south. The Tsaidam is in the northwestern part of Chinghai Province. As these three basins are far away from the sea, they have a dry climate and large tracts of grassland and desert. But the peasants make use of the melting snow from the high mountains to irrigate the fields. Cultivation is also carried on around the numerous fertile and picturesque oases. Hidden under these basins are rich mineral resources, of which oil is most important.

#### MINERAL RESOURCES

China is rich in mineral resources, distributed in large and small deposits all over the country.

The surveying that was done in China during the 30-odd years before liberation brought to light only a dozen or so minerals. During the decade following 1949 reconnaissance surveys were made in more than 80 kinds of minerals and thousands of deposits were located. It has now been established that China ranks as a country with large deposits of iron-ore, coal, copper, aluminium, tungsten, tin, molybdenum, manganese, lead, zinc and mercury.

Prospecting has confirmed that China has iron-ore deposits surpassing the combined total of the United States and Britain. These are widely distributed, with the biggest deposits centred around the Anshan, Tayeh, Paotow and Lungyen mines.

The iron-ore of Anshan in Liaoning Province was formed by sedimentation. Distributed in the vicinity of Anshan and Penki, it constitutes the main source of raw material needed by the Anshan Iron and Steel Works. The iron-ore in Tayeh, Hupeh Province, formed by the contact of magmatic rocks with limestone, is the principal source of supply for the Wuhan Iron and Steel Works. Paotow of the Inner Mongolian Autonomous Region possesses vast iron-ore reserves, and the Paotow Iron and Steel Works, China's third biggest, has been built in its vicinity. The Lungyen iron-ore in Lungkuan of Hsuanhua city, Hopei Province, consists of sedimentary rocks. It is from here that Peking's Shihchingshan Iron and Steel Works obtains most of its raw materials. Apart from these big workings, many iron deposits have been found in various parts of China since the național drive to develop iron and steel production in 1958.

China's manganese is mostly made up of sedimentary ores formed along the sea coast, on lake floors or in swamps of ancient times. Large manganese deposits are found in Liaoning, Hunan and Kwangsi.

Non-ferrous metals — copper, aluminium, tungsten, tin, molybdenum, lead, zinc and mercury — are widely distributed. Huge amounts of them have been discovered in the Tienshan, Chilien and Chinling Mountains and in areas south of the Chinling Mountains and the Yangtse River. The Nanling mountain region is particularly rich in these minerals.

Of the non-metallic minerals, China abounds in coal, oil and oil-shales.

In remote antiquity, what is northern China of today was covered with dense forests which were later buried underground. Long years of geological processes have transformed them into rich and widely distributed coal fields, such as those in Fushun and Fuhsin in Liaoning Province, Kailan in Hopei Province, Tatung in Shansi Province and Huainan in Anhwei Province. Some of the bourgeois scholars of pre-liberation days held that there were no coal fields south of the Yangtse. Recent findings have shown this theory to be baseless. The southern provinces, Kiangsi, Hunan and Kweichow in particular, have ample coal reserves. In the Northwest as a result of geological upheavals coalfields were formed in the well-forested mountain areas. Such coal-fields are found in the northern and southern foothills of the Tienshan Mountains in Sinkiang.

In pre-liberation days, in order to sell oil on the Chinese market for high profits, the imperialists claimed that China had very little oil. In fact China has excellent geological conditions for the formation of oilfields and the country has very rich oil reserves. Many of the oilfields in the Dzungarian and Tsaidam Basins, the Kansu Corridor and the Szechuan Basin are now being exploited on a large scale.

China also has extensive oil-shale deposits. Liaoning and Kwangtung are particularly rich in this important raw material for artificial petroleum.

Various other non-metallic minerals used in the building, chemical and other industries are also plentiful. Such fire-resistant minerals as refractory clay, quartz and dolomite are widely available. Almost all of China's iron and steel enterprises can obtain them from the neighbouring areas. There is also an abundance of phosphorus, sulphur, salt, gypsum and other chemical materials. Phosphorus is found chiefly in Omei in Szechuan Province, Kaiyang in Kweichow Province, Fengtai in Anhwei Province and Lienyunkang in Kiangsu Province; sulphur is found in Taiwan Province, Maanshan in Anhwei and Yingteh in Kwangtung Province. The coastal areas are producers of sea salt and the inland lakes in northwestern China contain huge quantities of lake salt, gypsum, sodium sulphate and natural soda.

# Chapter Three CLIMATE AND VEGETATION

#### TEMPERATURE AND SEASONS

With its vast territory and wide range of altitudes, China has some areas which enjoy perpetual spring, while others are covered in snow all the year round.

Generally speaking, January is the coldest month, and July is the hottest. The mean temperatures of these two months may be taken to describe the climatic differences in various parts of the country.

The average January temperature in the areas south of the Nanling Mountains and around the Yunnan-Kweichow Plateau is a little over  $8^{\circ}$  C. In the greater part of the Yangtse valley it is between zero and  $8^{\circ}$  C. In the Yellow River basin and the Chinghai-Tibet Plateau, it ranges from zero to  $-8^{\circ}$  C. In the Northeast, Northwest and Inner Mongolia, temperatures fall from  $8^{\circ}$  to  $20^{\circ}$  below zero (C). Thus, there is a difference of more than 33 degrees in winter temperatures between Canton in the south and Harbin in the north, with variations in the intermediate areas.

With the exception of the Chinghai-Tibet Plateau and some northern areas, the average temperature for July is above 20° C. There is only a difference of five degrees between the temperature of Canton and Harbin. The warm summer climate throughout the country is of great advantage to agriculture.

The length of seasons also varies. Some places have a long winter and practically no summer, others are warm all the year round and have no real winter. The summer in Kwangtung, Kwangsi, Fukien and Taiwan lasts from five to eight months, and the winter is extremely mild. Most of the Chinghai-Tibet Plateau and northern Heilungkiang Province have long winters. The other parts of the country have four distinct seasons. But even where the seasonal contrasts are clear, the length of the seasons differs. By and large, winters become longer and summers shorter as we move northwards; the reverse is true when we go towards the south.

China may be divided into six temperature zones: the equatorial, the tropical, the sub-tropical, the warm-temperate, the temperate, and the frigidtemperate. The Chinghai-Tibet Plateau forms a singular division because of its unique geographical features. Such great variety in temperature is a contributing factor to the country's diverse agricultural and forestry products.

The southern parts of Kwangtung, Kwangsi, Taiwan and Yunnan fall within the tropical zone. Veg-



etation extends throughout the year and rubber, sisal hemp and other tropical cash crops can be grown. The sub-tropical zone covers the areas south of the Chinling Mountains and the Huai River. Here two crops of rice can be grown each year, along with such special cash crops as tea, tea-oil and tung-oil. The warm-temperate zone embraces the middle and lower Yellow River basin and the Tarim Basin. It. has a winter temperature warm enough for the cultivation of winter wheat and hot summers suitable for the growth of cotton. The temperate zone includes the provinces and regions along the northern frontiers where wheat is generally sown in spring because it cannot stand the low winter temperature. The Chinghai-Tibet Plateau lies athwart a broad latitudinal region with a wide range of altitudes. Hence cumulative temperature varies greatly and crops of both sub-tropical and temperate zones are grown. The equatorial and frigid-temperate zones occupy only a small portion of the country.

#### PRECIPITATION PATTERN

In the coastal areas of China, a plentiful rainfall is taken for granted. In the western hinterland rain and snow are regarded as something rare and precious. This is because the atmospheric moisture comes mostly from the Pacific so that there is less and less rainfall as we travel from the southeast to the northwest. This air-mass movement from the Pacific is known as the summer monsoon.

So far as precipitation and evaporation are concerned, the country can be roughly divided into four zones: the humid, the semi-humid, the semi-arid, and the arid; the humid areas are about as large as the arid.

The humid zone is the most extensive, lying chiefly within southeastern China where the average annual precipitation is above 750 mm. In the semihumid zone which takes in the Northeast and North China Plains and the southeastern part of the Chinghai-Tibet Plateau, the average is 500 mm. In the semi-arid zone embracing most of the Inner Mongolian, Loess and Chinghai-Tibet Plateaus, it is 300 mm. Finally, in the arid zone, comprising Sinkiang, the western part of the Inner Mongolian Plateau and the northwestern part of the Chinghai-Tibet Plateau, the annual precipitation is less than 250 mm. Here the air is dry and vast deserts are present.

Within each of these zones the actual precipitation in any one locality may differ greatly from the average for the zone as a whole and also from one year to the next. The strength of the summer monsoon plays an important part in the annual precipitation of different areas.

China's rain comes mostly from the summer monsoon. Over 80 per cent of the annual precipitation occurs between May and October. In the semihumid and semi-arid zones, the heaviest rainfall occurs in July and August. The coincidence of the greatest precipitation with the highest temperature is beneficial to agriculture. The summer monsoon season is a period of luxuriant growth of plants.

In their socialist construction, the Chinese people have made good use of this climatic feature to increase agricultural output. The high cumulative temperature in many places is utilized to produce two crops a year instead of one. In the southern sub-tropics, three crops are being grown annually in districts where only one or two were the rule in the past. The coincidence of the heaviest rainfall with the highest temperature has also been utilized to increase the acreage of paddy rice and other highyielding crops.

#### COLD WAVES AND TYPHOONS

The climate also has certain disadvantageous aspects. Cold waves, typhoons and other disastrous phenomena wreak havoc in a number of places every year. Freakish weather often brings drought or flood to various parts of the country. The Chinese people are now tackling the important problem of devising measures to overcome these natural disasters. Their task will by no means be easy.

Strong cold air currents from the north sometimes cause the temperature to drop by 10 degrees or more within 24 hours. When the mercury drops to five degrees (C) or lower the resultant frost can do a lot of harm to agricultural crops and fruit orchards. These cold waves mostly originate in the Arctic Ocean. They move across Siberia and Mongolia and, in the drier areas of northwestern and northern China, generally give rise to windstorms which are not accompanied by sleet. But when they push into the humid regions south of the Chinling Mountains and the Huai River, the warm, moist air is forced to rise and sleet often follows.
Extensive areas are visited by these cold waves. With the exception of the Chinghai-Tibet Plateau, the Szechuan Basin and the Yunnan-Kweichow Plateau where their effect is insignificant, the rest of the country is easily penetrated. The danger to crops is particularly great at the time of the spring sowing or before the autumn harvest. Thanks to the many anti-frost measures adopted since liberation, the extent of the damage has been considerably reduced.

The typhoons result from mighty cyclones rising in the tropical seas. Those striking China occur mainly during the summer and autumn. The period between July and September is known the on southeastern coast as the typhoon season. On the average, typhoons hit the country three or four times a year, mostly landing at the coastal provinces of Kwangtung and Fukien and less frequently at Chekiang and Kiangsu. In some years they sweep northward to the lower reaches of the Yellow River and northeastern China. Taiwan is the worst sufferer as most typhoons pass through the island or exert a marginal influence on it.

While typhoons bring a certain measure of rainfall, it is usually in the form of storms which are extremely harmful to crops and cause great damage, and even loss of human life, in the coastal regions. In old China the reactionary regimes took no protective measures against typhoons nor did they do anything to relieve the stricken areas. When a typhoon hit the Swatow area of Kwangtung on August 2, 1922, over 70,000 persons were killed or injured, or died in the floods that followed in its trail. Things are different now. The People's Government, on receiving warnings from the meteorological stations, organizes the people to take all precautions against the approaching typhoons and carry out timely rehabilitation measures to restore production as soon as the storms are over. This has greatly reduced the damage and suffering arising from typhoons.

#### VEGETATION

The wide range of temperature and humidity prevailing from one part of the country to another and the great variation in altitude provide the conditions for a great variety of plant life.

In broad terms, the summer monsoon brings not only abundant rainfall but also a large amount of heat to the remote north and the vast interior. This explains why many plants which need a warm, humid climate are found far northward along the coast or westward along the rivers. Creepers and epiphytes of southern China can be found in the Changpai Mountains, while tea, citrus fruit, plantain and palm trees are grown in the Hanchung Basin of Shensi. Dense tropical forests rise in the river valleys of western Yunnan. The winter monsoon has a particularly great influence on plant life in southeastern China. Here, tropical and sub-tropical evergreens are interspersed with deciduous trees of the northern variety. A distinct difference in the type of vegetation can be distinguished between the windward and leeward slopes of a mountain range, and between the southern slopes facing the sun and

the northern slopes. The Chinling range, for instance, not only has several vegetation belts spread vertically; its vegetal cover consists of vastly different plants, the southern slopes being covered with plants of southern origin and the northern slopes bearing those of northern origin.

China boasts more than 30,000 varieties of exogens, or seed-bearing plants. Of these, over 5,000 are woody, nearly 1,000 being timber trees of excellent quality and high value. Szechuan Province alone has upwards of 10,000 different plants. Many plants are peculiar to China, like the highly prized maidenhair trees and *Metasequoia glyptostroboides*, which as a legacy from the pre-glacial period are called "Living Fossils".

Most of the crops known in other parts of the world can be grown in China. Among the food crops paddy rice, which needs much light, heat and water, is cultivated as well as wheat, which prefers a dry climate. Both are produced in great quantities. There are also more than 20 lesser staples including maize, kaoliang and sweet potatoes. Cash crops are grown in great variety and quantity. They include those used as raw materials in the textile, oil-pressing, sugar-refining, tobacco-making and other industries.

Since liberation, the People's Government has introduced new species of trees of economic value and farm crops from abroad and has popularized the good strains of seed with a view to obtaining a still greater yield from the soil for the benefit of the people.

# Chapter Four RIVERS AND LAKES

#### RIVERS

China's exterior drainage basins, which cover some two-thirds of the surface of the country, roughly coincide with the humid, semi-humid and semiarid zones. The rivers in these basins flow into the Pacific, Indian and Arctic Oceans. The Pacific receives most of them, among others the Yangtse, the Yellow, the Pearl and the Lantsang (upper Mekong) Rivers. The Indian Ocean takes in the Nukiang (upper Salween) and the Yalutsangpo (upper Brahmaputra). With the exception of the Pearl, all these big rivers rise in the highest part of the country and carry immense volumes of water. The Irtysh, which flows through northern Sinkiang, winds its way across the Soviet Union and eventually empties itself into the Arctic Ocean.

The exterior rivers may be grouped according to the character of their drainage basins.

The first group consists of the rivers north of the Chinling Mountains and the Huai River, from the Yellow River in the south to the Heilungkiang in the north, including all those between them, such as the Haiho, the Liaoho and the Sungari. Each of these rivers forms an important irrigation system and possesses great water-power potential. Where they descend from the mountains to the plains, they provide favourable conditions for building reservoirs. The Haiho and the Sungari are also navigable. These rivers have the following features in common: (1) They are all located in the semi-humid and semi-arid zones and therefore their flow is relatively small. As precipitation is concentrated in the summer, the highest water level and biggest flow occur mostly in the months of July and August, the flood season being rather short. Winter precipitation is scarce and the water level is then low and the discharge even smaller. (2) With the exception of the Sungari valley, the forest cover is inadequate and the original vegetation cover has long since been destroyed under the reactionary regimes before liberation. Consequently, cloudbursts cause serious loss of the unprotected soil, and the silt content of the river water is high. (3) They all freeze in winter, the freezing period ranging from one month in the south to six months in the north.

The second group consists of the rivers south of the Chinling Mountains and the Huai River. They include the Yangtse, the Chientang, the Minkiang and the Pearl, the Yangtse being the longest. In contrast to the rivers in the first group, they have the following distinctive features: (1) They are situated in the humid zone and so carry heavy volumes of water; the water level is high in summer and the flow is considerable even in winter. The flood season is rather long, extending from April or May up to September. (2) They carry little sediment because of the rich vegetation in their basins. (3) Being in the tropical or sub-tropical zones, they are ice-free.

The third group consists of the rivers in the Hengtuan mountain area and its neighbourhood. Among the larger rivers in this group are the Lantsang, the Nukiang and the Yalutsangpo. They have their headwaters in the Chinghai-Tibet Plateau and flow across the border into Viet Nam, Burma and Pakistan and on into the sea. Within China, the greater length of the course of these rivers flows between great mountains; their drainage basins are not large and their tributaries are few. But since they pass through the humid and semi-humid zones, they have an enormous flow, offering an unlimited source of water-power. China ranks high among the countries of the world possessing a big water-power potential. The Hengtuan mountain area has the richest water resources.

The interior drainage basins roughly coincide with the arid zone where the rivers are chiefly fed by glaciers and melting snow from the high mountains. They are, therefore, mostly concentrated along the piedmont belts of the plateaus and basins. Their flow is greatest in summer when most of the mountain glaciers and snow are melting. But constant evaporation and seepage diminish the flow along the lower reaches until the rivers empty into other bodies of water or disappear in the deserts. The principal inland rivers are the Tarim in Sinkiang, the Joshui (Edsin Gol) in Kansu and Inner Mongolia, and the Tsaidam in Chinghai.

Apart from the natural waterways there are many canals, the longest of which is the Grand Canal, whose building began in the Spring and Autumn Period (770-475 B.C.). Starting from Peking and ending at Hangchow, it passes through four provinces — Hopei, Shantung, Kiangsu and Chekiang and links five great rivers: the Haiho, the Yellow, the Huai, the Yangtse and the Chientang. Over 1,700 kilometres in length, it is also the longest canal in the world.

Most of the rivers in the eastern part of the country flow from west to east. In ancient days, the lack of waterways created a big problem for communications between the north and the south. It was to solve this problem that the Grand Canal was dug. The canal played an important role right up until the Ching Dynasty (1644-1911) when a section of the canal in Shantung became choked with sediment. In later years, it fell more and more into disuse as further sections became unnavigable, owing to the consistent neglect of maintenance by the successive reactionary regimes. In 1958, New China began the gigantic undertaking of restoring and expanding the Grand Canal. When the project is completed, it will settle many problems of navigation, transport, irrigation, flood control, drainage, and water supply for domestic and industrial use along this artificial waterway.

#### LAKES AND UNDERGROUND WATER RESOURCES

Owing to the climatic and topographical influences, the lakes, like the rivers, fall into two categories. Those in the exterior drainage basins are generally connected with rivers and have drainage outlets. They are called drainage lakes, or fresh-water lakes. Lakes in the interior drainage basins are mostly termini of the inland rivers, having no outlet. They are known as non-drainage lakes, or salt lakes.

Most of the fresh-water lakes are scattered over the plains along the middle and lower Yangtse, the best-known being the Tungting, the Poyang, the Taihu and the Hungtse. Originally these lakes were much larger but centuries of deposits of silt from the rivers gradually reduced their size. Some were cut into a number of smaller lakes. This phenomenon is most obvious in the lakes of Hupeh Province. The fresh-water lakes are distinguished by flat bottoms and shallow waters, offering ideal conditions for fish-breeding. The two provinces of Heilungkiang and Yunnan also have some large fresh-water lakes. Formed from the natural drainage in a depression plain, the Hsingkai (Hanka) Lake on the upper Ussuri in Heilungkiang is shared by China and the Soviet Union. Yunnan's larger lakes such as the Tienchih and the Erhhai are deep, being formed by waters stored in places where a fault once occurred. Being on a high elevation and holding an enormous volume of water, these lakes possess a great waterpower potential at their outlets.

The salt lakes are found mainly on the Chinghai-Tibet Plateau and in the arid regions of Inner Mongolia and Sinkiang. Northern Tibet has the largest number of salt lakes. The 4,300-square-kilometre Chinghai Lake (Koko Nor) is the largest on the Chinghai-Tibet Plateau and the biggest salt lake in the country as a whole.

Underground water resources in China are as abundant as its surface waters. In the eastern plains and hilly regions where precipitation is high, subterranean waters are plentiful and close to the surface, making their exploitation easy. On the margins of the North China Plain which adjoin the mountainous terrain, water gushes out of the ground to form springs. Tsinan, the provincial capital of Shantung, is known as the "City of Springs".

On the Loess Plateau, which is covered with a thick layer of loose windlaid silt, precipitation is meagre while evaporation is rapid. Here underground water is limited and the water table is in general scores and even hundreds of metres below the surface. The river plains, such as the Weiho River Plain, have water tables ranging from a few metres to scores of metres below.

On the Yunnan-Kweichow Plateau, where the limestone has many fissures and sink-holes, seepage of surface water occurs. With the exception of river plains, the surface is generally dry. In the limestone caverns considerable sub-surface waters are present for irrigation or power generation.

Situated at the foot of such great mountains as the Tienshan and the Chilien, the arid regions of Sinkiang, Kansu and Chinghai are watered by melting glaciers and snow, and rich water resources are buried underground. Underground water in an arid region is of paramount importance for agriculture.

Subterranean waters, especially those lying deep underground, are the most reliable source of irrigation because they are free from the influence of droughts. In addition to the full utilization of surface waters, underground water resources must also be tapped for farm irrigation. Wells are one of the important means of irrigation measures in the semihumid and semi-arid regions of northern China. Preliminary statistics show that China has an annual average run-off of 2,680,000 million cubic metres flowing over its land surface. According to estimates, if only half this amount is captured for irrigation, there will be adequate water to guarantee a bountiful harvest of farm crops throughout the country. Moreover, China is a country with numerous waterways many of which are turbulent rivers. This accounts for its rich water-power potential which is estimated at 580 million kilowatts.

While water resources are abundant, precipitation in most areas comes from the summer monsoon. The annual rainfall is therefore concentrated in certain seasons, and this results in big variation in the water levels of rivers and lakes. If the waters are left uncontrolled, rainstorms will give rise to floods and lack of rainfall will result in droughts. The Chinese people have therefore set themselves the task of harnessing the rivers and lakes in the interest of socialist construction. Since liberation, rapid progress has been achieved in rural water conservancy. In the early post-liberation days 240 million  $mou^1$  of farmland were under irrigation. Between 1958 and 1960 the effectively irrigated area was increased by more than 300 million mou, a figure greater than the total area irrigated since ancient times.

In the past decade or more, the Chinese people have harnessed many medium-sized and small rivers, and have also begun the ambitious work of

<sup>&</sup>lt;sup>1</sup>0.0666 hectare, or 0.1647 acre.

harnessing and exploiting such great rivers as the Huai, the Yellow and the Yangtse.

Rising in southwestern Honan Province and flowing eastwards through the northern parts of Anhwei and Kiangsu Provinces, the Huai River has a main course of some 1,000 kilometres and a catchment area of 187,000 square kilometres. Originally the Huai was an easy-flowing waterway having its own outlet to the sea. But the Yellow River once usurped its course and choked its sea outlet with sediment. This forced the Huai to flow into the sea via the Grand Canal and the Yangtse.

Since the Huai's basin is flat and low-lying and subject to summer downpours, the choked-up outlet to the sea acted as a bottle-neck, causing floods. Governments in the past never troubled themselves with the harnessing of the river, with the result that floods and droughts brought untold sufferings to the people of the valley. During the 650 years between the 14th and 20th centuries, 935 floods and droughts were recorded in the Huai basin. There was an average of one serious flood or drought every 10 years. The year 1921 saw 44 million *mou* of crop land under flood; in 1931 inundation spread over 71 million *mou*. These severe calamities sent the local people fleeing to other regions as refugees, breaking up numerous homes.

Shortly after liberation, Chairman Mao Tse-tung issued the clarion call: "The Huai River must be harnessed!" Tens of thousands took part in dredging the main course and its various tributaries, digging irrigation channels, reinforcing and building embankments. These measures, combined with water and soil conservation, the construction of the Sanho Regulating Dam and the Paisha and Futseling Reservoirs, and the creation of a vast network of canals, have reduced the danger of flood and brought the river into service for irrigation, navigation and power generation.

With its source at the northern foot of the Bayan Kara Mountains in Chinghai Province, the 4,845kilometre Yellow River is the second longest in China after the Yangtse. Its 745,000-square-kilometre basin lies mostly in the semi-arid and semihumid zones; its flow is small, and it discharges only 4.5 per cent as much water into the sea as the Yangtse.

The Yellow River valley is known as the cradle of Chinese civilization. Under the reactionary regimes of the past, its forest cover and grasslands were destroyed, causing erosion and loss of soil and water on the Loess Plateau. As the water pours down from the plateau, it carries great quantities of silt with it. Most of this sediment is deposited on the bed of the river, especially on the lower reaches. Here, where the river flows across the plains, years of deposition of sediment raised the bed of the river higher than the ground outside the dykes. At flood season, the river used to burst through its dykes, change its course and inundate the country for miles around, causing tremendous loss of life and property. History records numerous such instances. In 1933 it breached its dykes in more than 50 places. Sixty-seven counties of Hopei, Shantung and Honan were submerged and 3.64 million people were affected. Over 18,000 perished. In 1938, the Chiang Kai-shek clique committed the heinous crime of deliberately breaking the Yellow River dykes at Huayuankow in Honan. In the resulting holocaust, 12.5 million people were rendered homeless and 890,000 perished.<sup>1</sup>

After liberation, the Chinese people strengthened the dykes for hundreds of kilometres along the Yellow River, and they have not been breached since. The People's Government then mapped out a multi-purpose plan for permanently controlling the Yellow River and exploiting its water resources. The plan includes the construction of scores of large reservoirs and a series of check dams on the river, together with measures for power-generation, irrigation, navigation, fish-breeding and flood control. The Chinese people are confident that they will realize their age-old dream of making the turbid Yellow River run clear.

With a total length of 5,800 kilometres, the Yangtse is the longest river in Asia. In its upper reaches, extending from its source in the Kokohsili Mountains of western Chinghai Province to Ipin in Szechuan, it is called the Chinsha River. Here it twists and turns through the high mountains and deep gorges of western Szechuan, eastern Tibet and Yunnan. Between Ipin and Tatung in Anhwei, in its middle reaches, it cuts through mountains on the

<sup>&</sup>lt;sup>1</sup> During the War of Resistance Against Japan, the Chiang Kai-shek clique followed a policy of actively opposing the Communists while passively resisting Japan. At the battlefront its troops always retreated in face of the enemy. In 1938 when the Japanese invaded central China, Chiang Kai-shek's troops broke the dykes in a desperate attempt to make their escape and block the enemy's advance.

Szechuan-Hupeh border to form the famous Three Gorges (also known as the Yangtse Gorges), namely, the Chutang, Wuchia and Hsiling. Here the rapid flow offers a rich source of hydro-electric power. Eastward from Tatung are the lower reaches and below Chenkiang of Kiangsu, the rich alluvial Yangtse Delta. In all, the Yangtse valley embraces about 1.8 million square kilometres, nearly one-fifth of China's total area.

Lying for the most part in the humid zone, the Yangtse valley has abundant water resources. Of the tributaries of the Yangtse, the Yalung, the Minkiang, the Chialing, the Hsiangkiang, the Hanshui and the Kankiang are the more important. Any one of these tributaries has a bigger discharge than the Yellow River.

Taken together, the Yangtse and its tributaries contain two-fifths of the country's total potential hydro-power resources. In recent years, large-scale reconnaissance surveys of the power potentials on the Yangtse system have been undertaken and a plan for their utilization is being worked out.

> Chapter Five SEAS

#### THE SEAS AND ISLANDS

The eastern part of Taiwan Province is washed by the Pacific Ocean while the mainland coast borders on the Pohai, the Yellow, the East China and the South China Seas, each with its different depth and water temperature. The Pohai, the Yellow and the East China Seas are collectively known as the Eastern China Seas. They are all part of the Pacific.

Sailing from Tientsin, the traveller first sees the Pohai which is not very deep. This inland sea of China is hemmed in by the Liaotung and Shantung Peninsulas. East of the 80-kilometre-wide Pohai Bay, the water surface broadens out abruptly and its depth increases. This is the Yellow Sea, which extends from this point to the mouth of the Yalu River in the north and the estuary of the Yangtse in the south. Continuing south from the Yangtse outlet, the wider and deeper waters of the East China Sea are reached. Passing through the Taiwan Straits and crossing the Tropic of Cancer, the traveller comes to the South China Sea, the deepest and largest of the four.

Most of China's continental coast is erosional mountain coast (formerly the term "rocky coast" was used), while the rest is depositional plain coast (formerly the term "sandy coast" was used). The former is indented, and gives onto deep water containing a multitude of offshore islands. Excellent natural harbours are found in this section. The latter is rather even, with shallow water, no good natural harbours and very few offshore islands, but possesses large sand bars suitable for opening salt fields, and also the right conditions for building artificial harbours.

Of the 5,000 islands of varying sizes along the coast 4,500 lie off Chekiang, Fukien and Kwangtung



CHINA'S SEAS AND SEACOASTS

Provinces. Apart from Taiwan and Hainan, the two biggest, the major islands comprise the Changshan Islands east of the Liaotung Peninsula, the Miaotao Islands at the entrance to the Pohai Sea, Chungming Island at the Yangtse estuary, the Choushan Archipelago and Penghu Islands in the East China Sea, the South China Sea island groups, as well as the Lanyu and Huoshao Islands in the Pacific to the southeast of Taiwan. Skirting the Chinese coast, they are of great strategic importance to China's national defence. They are also the centres of excellent fishing grounds. Lighthouses and other navigation aids have been installed on many of these islands.

#### MARINE PRODUCTS AND SALT FIELDS

Like its land surface, China's sea floors slant from west to east, forming a northwest-southeast descent. For the most part this slope is gentle and the seas are less than 200 metres deep and make good fishing grounds.

The seas off the China coast contain over 1,500 varieties of marine fishes. Roughly speaking, the northern waters abound in cold-water fish such as cod, the southern seas in warm-water fish including small and large yellow croakers and hairtails, and the South China Sea in tropical fish. The croakers, hairtails and cuttlefish are the most important marine products of China. The small yellow croakers thrive in the Pohai, Yellow and East China Seas, and the hairtails and cuttlefish in both the north and the south. With the seasonal changes in the temperature of the sea waters, many marine fishes migrate to other waters to find food and spawning beds. The important fishing grounds are found in areas which are visited by these migrations and the fishing seasons coincide with the movement of the shoals. The Choushan Archipelago of Chekiang, visited by both the cold and warm currents, is rich in fishes of coldand warm-water origin which come in search of the nutritious food washed down by the Yangtse and Chientang waters. Choushan is now China's biggest fishing ground.

The shallow seas off the coast, especially those not so greatly affected by tidal movements, are most suitable for marine products culture. With about 10,000 square kilometres of such ideal shore waters, China has, in the past few years, registered rapid increases in the output of marine products, principally kelps, seaslugs, mussels and oysters. Many fishery bases have been set up, the larger ones being in Shanghai, Lushun-Talien, Tsingtao, Yentai and Canton, complete with shipyards and factories for processing marine products.

Of the abundance of salt produced in the country, sea salt accounts for some four-fifths of the total output.

This is because the coastal waters have a heavy salt content, mostly over 30 per mil, which hastens crystallization. Secondly, besides the long sandy shores there are many flat sand banks off the rocky coasts. Most of these areas can be made into salt fields. Thirdly, in areas where there is a big variation between high and low tide levels the cost of salt making can be reduced by allowing the sea-water to flow into the fields at high tide. Fourthly, situated as they are in the monsoon belt, the coastal regions have dry seasons with considerable insolation, which facilitates evaporation.

All the seaboard provinces have salt fields. The major ones are found in Lushun-Talien in Liaoning; Changlu in Hopei; Tsingtao in Shantung; Huaipei in Kiangsu; and Yingko in Kwangtung. There are also many smaller works, including those run by the people's communes along the coast.

#### Chapter Six

### AGRICULTURE, INDUSTRY AND TRANSPORT

#### AGRICULTURAL REGIONS

Of China's immense territory of 9.6 million square kilometres, 1.07 million is farm land, 967,000 is forest, 2.67 million is pasture, and 1.13 million is wasteland that can be reclaimed.

The farm land is made up of many kinds of soil, principally chernozems (black earths), brown soil, red loam, saline-alkaline soil and rice paddy soil. The black earths are found chiefly in the northern part of the Northeast Plain, the brown soils in the North China Plain, the red loams in the hilly regions east of the Chinghai-Tibet Plateau and south of the Chinling Mountains and the Huai River, the saline-alkaline soils in the coastal regions and the arid districts in the Northwest, and rice paddy soils in the Middle and Lower Yangtse Plain, the Szechuan Basin and the Canton Delta.

About 40 per cent of the total cultivated area consists of poor soils, namely, red loam, saline-alkaline soil and some of the rice paddy soils. A certain amount of preliminary improvement has been carried out on 300 million *mou*, that is, about half of this poor soil, during the past decade or more. Of the total cultivated land, per capita average is less than 2.5 *mou*. In addition to the measures taken to raise the per unit-area yield, a lot of wasteland has been reclaimed. Possibilities for further reclamation exist in every part of the country, especially in Heilungkiang and Sinkiang.

During the past ten years and more, over 2,000 state farms and stock-breeding centres have been set up, mostly in the wastelands in the border, coastal, lakeside and hilly regions. The indomitable pioneers who founded these farms have reclaimed millions of *mou* for agricultural production. They have extended the wheat, soya bean and sugar-beet area in Heilungkiang, opened up new cotton fields in Sinkiang and the Hohsi Corridor (Kansu Corridor), established state farms in the Tsaidam Basin of Chinghai Province, planted tropical cash crops in Kwangtung and southern Yunnan, such as sisal hemp and oil palm, and developed a diversified economy in the mountain districts of the old revolutionary bases in Kiangsi and Hunan.

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In general terms, China's food crops are grown in three main regions:

1. The paddy rice, coarse grain and winter wheat region of southern China. Embracing the areas south of the Chinling Mountains and the Huai River, this region is favoured with heavy precipitation, high temperatures and a long growing period. Here paddy rice occupies an extremely important place, claiming over 90 per cent of the country's land under this crop. Not only are the plains dotted with rice fields, the gradual slopes in the hilly areas are also widely terraced to grow rice. The Middle and Lower Yangtse Plain, the Szechuan Basin and the Canton Delta are all big rice producers.

Coarse grains too are extensively cultivated in this region. They fall largely into two categories: first, autumn crops like maize and sweet potatoes, which are raised in mountain areas unsuited to paddy rice; second, winter crops such as broad beans and peas which are sown to the rice or cotton fields after harvesting. As winters in this region are relatively cold and dry, winter wheat is grown in large areas in the Yangtse valley.

2. The winter wheat and coarse grain region of the Yellow River valley. Covering the areas north of the Chinling Mountains and the Huai River and south of the Great Wall, this region is the premier winter wheat and coarse grain belt, embracing over 57 per cent of the country's total wheat area. The North China and Weiho River Plains and the Fenho River valley are the nation's biggest producers of winter wheat. Maize, millet and kaoliang are grown throughout the region, sweet potatoes mainly in the North China Plain where the summer temperature is high, and Irish potatoes in the northern parts of Hopei and Shansi where the summers are comparatively cool.

3. The coarse grain and spring wheat region of northern China. The important crops of this region, which includes the areas north of the Great Wall and the Chinghai-Tibet Plateau, are made up of the lesser staples. Here wide tracts of land are planted to maize, kaoliang, millet and Irish potatoes, and it is the country's main producer of spring wheat. The winter wheat area is being steadily expanded. In the past few years, northern Sinkiang, the Ningsia Plain and the Kansu Corridor have grown more winter wheat than ever before.

Apart from these three main food crop regions, there is the coarse grain belt of the Chinghai-Tibet Plateau, with highland barley as its main product. Chinghai raises spring wheat over a large area.

Cotton heads the list of China's industrial crops. Though it is grown in practically every part of the country, the three main cotton regions are the Yellow River basin, the Yangtse valley and the Northwest.

The Yellow River basin has hot summers with considerable solar insolation, favouring the growth of the cotton plants; its dry and cool autumns are ideal for the opening of the fully developed bolls. Local farmers are well experienced in growing cotton. Since liberation, the rapid development of irrigation in this region has enlarged the cotton area to about half of the country's total. The most important cotton centre, the North China Plain, is in this region.

In the Yangtse valley, the growing period is very long and the crop is allowed sufficient time to grow and ripen before the frost sets in. This region is also a traditional cotton producer, and possesses over a third of the country's cotton acreage, second only to the Yellow River basin. It has such important cotton centres as the Yangtse-Huai Plain in northern Kiangsu and the Yangtse-Hanshui Plain in central Hupeh.

The inland cotton region of northwestern China is a new and promising cotton region. Including Sinkiang and the Kansu Corridor, this region receives adequate insolation and heat in most places and also has ample wasteland to be turned into cotton fields. Developments in irrigation and modern transport facilities since liberation have resulted in the speedy expansion of the area devoted to cotton.

Besides these three main regions, there are cotton areas in the Liaoho River valley and southern China.

#### THE DISTRIBUTION OF INDUSTRY

A rational geographical distribution of industry is a vital question in China's socialist construction. The proper solution of this question will enable the country to exploit more fully its rich natural resources and excellent physical features and make full use of its huge manpower to promote the economic advance of all areas and bring about a more fruitful integration of industry and agriculture, town and country.

In old China industry was concentrated in the eastern part of the country. Nearly all the iron and steel enterprises were set up in the cities of Anshan, Penki, Talien, Tientsin and Shanghai, within 100 kilometres of the sea. Since liberation, large-scale industrial construction has forged ahead in the interior regions. At the same time, the existing enterprises and favourable conditions in the coastal regions have been turned to full account in the development of industries needed to reinforce the industrial build-up in the interior and quicken the pace of national industrialization. Many big enterprises serving as the backbone of economic construction have sprung up, and there are also a large number of small and medium-sized establishments in smaller cities, towns and mining districts.

All this has brought about a conspicuous change in the distribution of China's industry.

Since liberation, phenomenal progress has been made in developing heavy industry. In addition to the three major iron and steel bases of Anshan, Wuhan and Paotow, modern iron and steel plants of varying sizes have been built in various parts of the country. In provinces like Hunan, Chekiang, Kwangtung, Honan, Kweichow and Kirin, where such plants were once unknown, you will now find medium-sized and small iron and steel industries. A small modern iron-smelting plant has also been constructed in Lhasa, Tibet, which before liberation knew no modern industry whatever.

Old China's machinery plants mainly engaged in repair work and assembling machine parts imported from the imperialist countries. A few factories could make some small and simple machines by copying foreign products. Today, China is turning out machines and equipment of many kinds, including heavy, precision and most up-to-date types. Many items whose manufacture was inconceivable in the past are now coming off the assembly line. The engineering industries of Shanghai, Shenyang and Tientsin have many specialized branches. The hinterland cities of Harbin, Taiyuan, Loyang, Wuhan, Chungking, Kunming and Sian, too, are now important machine-makers. Since 1958, medium-sized and small engineering works and machine repair and assembly plants have been built in the various special administrative regions of sub-provincial levels and in the numerous counties. Many people's communes have also established small factories for making and repairing farm tools.

China pays particular attention to developing its chemical industry which not only serves various branches of its national economy and national defence but makes the multi-purpose use of its rich resources possible. In this industry swift advance has been made in the manufacture of both consumer and producer goods, particularly chemical fertilizers. The existing chemical works in Shanghai, Nanking, Tientsin, and Lushun-Talien have been improved or expanded while new large works have been set up in Kirin, Taiyuan, Lanchow and other cities in the interior. Medium-sized and small chemical fertilizer plants have sprung up over wide areas.

In the coal industry, the principal coal-fields of Fushun, Kailan, Tatung and Huainan have been expanded. In the interior, the coal-mines at Hokang (Heilungkiang), Pingtingshan (Honan), Tungchuan (Shensi) and Chungliangshan (Szechuan) have been rapidly developed. In the electric power industry, a multitude of hydro-power stations of various sizes have been built. Many cities and towns have their own power plants. In certain areas, power transmission networks are supplying electricity to the vast countryside.

China's light industry depends on farm products for over 80 per cent of its raw materials. To bring light industry close to the raw material sources and the largest number of consumers, it is, therefore, necessary to build factories, preferably of moderate size in the smaller cities and towns and the wide rural areas.

Like its heavy industry, old China's light industry also suffered from a lopsided distribution. Most of the factories were concentrated in the major coastal cities, far removed from the sources of raw materials and the bulk of the consumers. Shanghai, for instance, had about a half of the country's cottonmilling equipment, but the locally produced cotton fell far short of its needs. On the other hand, the main cotton province of Honan had only two small cotton mills. Regions which grew such cash crops as sugar-cane, sugar-beet, tobacco and oilseeds were also short of modern processing facilities and processing was mainly done by hand.

Since the founding of the People's Republic, the rapid development of light industry has been accompanied by a change in the balance of its distribution. Take cotton textiles, the most important branch of the consumer industry. In addition to the existing cotton mills in the Yangtse Delta centred upon Shanghai and in the seaboard cities of Tientsin, Tsingtao and Lushun-Talien, new mills have been built in the cotton-producing districts of the North China Plain as well as the many cities along the railway between Peking and Wuhan. Cotton mills have also appeared in Sian, the centre of a cotton area in the Weiho Plain, and in Urumchi, Sinkiang's rising cotton production centre.

Equally swift expansion has been recorded in the sugar-refining, cigarette-making and animal products processing industries. Here again, the factories have been sited near the raw material sources.

#### PRINCIPAL RAILWAYS AND INLAND SHIPPING ROUTES

Over the last decade improvements and additions to the existing communications have given shape to a transport network in China. With the principal railways and the major rivers — the Yangtse, the Pearl and the Sungari — as the arteries, the network is supplemented by highways, lesser rivers and airlines, with roads and canals built by the local administrations fanning out in all directions.

The biggest role in China's modern transport is played by railway freight traffic. The principal railways running north-south are the Peking-Canton line, the Tientsin-Pukow and Shanghai-Nanking lines, and the Changchun-Harbin and Changchun-Talien lines. Starting from the capital, the Peking-Canton line goes south through the North China and Middle Yangtse Plains. After crossing the Yellow River by the bridge at Chengchow and the Yangtse Bridge at Wuhan, it passes through the Tungting Basin and the Nanling mountain area, finally reaching Canton in the Canton Delta. Totalling more than 2,300 kilometres, it cuts across the five basins drained by the Haiho, Yellow, Huai, Yangtse and Pearl Rivers.

The Tientsin-Pukow and Shanghai-Nanking lines link the two principal industrial cities of Tientsin and Shanghai. These two railways with a total length of 1,300 kilometres run through Hopei, Shantung, Kiangsu and Anhwei. Together with the Peking-Shanhaikuan and Shenyang-Shanhaikuan lines, they connect the regions north and south of the Great Wall.

The Changchun-Harbin and Changchun-Talien lines, totalling 900 kilometres, join the Harbin-Manchouli and Harbin-Suifenho Railways to form a T-shaped rail framework in the Northeast. The latter two lines link with the railways of the Soviet Union, facilitating transport between the two countries.

The main east-west railways are the Lunghai and Lanchow-Sinkiang lines, the Peking-Paotow and Paotow-Lanchow lines, and the Chekiang-Kiangsi and Hunan-Kwangsi lines.

The Lunghai and Lanchow-Sinkiang trunk lines link the eastern and western parts of the country. Over 1,700 kilometres long, the Lunghai runs between Lienyunkang on the sea coast and Lanchow in Kansu. The Lanchow-Sinkiang line, now under construction, extends west from Lanchow to Sinkiang. Southward from Paoki, the Lunghai is connected with the Southwest by the Paoki-Chengtu and Chengtu-Chungking lines. Both the Lunghai and the Lanchow-Sinkiang lines are of prime importance for the development of western China.

The Peking-Paotow and Paotow-Lanchow lines, with a total length of over 1,800 kilometres, provide a vital link between the nation's capital and the Inner Mongolian Autonomous Region and the two rising industrial cities of Paotow and Lanchow. These two lines play an important role in speeding up the agricultural and industrial development of western Inner Mongolia and the Northwest.

The Chekiang-Kiangsi line starts from Hangchow in Chekiang and ends at Chuchow in Hunan on the Peking-Canton Railway; the Hunan-Kwangsi line starts from Hengyang in Hunan, also on the Peking-Canton line, and ends at Munankuan in Kwangsi. Totalling 1,900 kilometres in length, the two lines cut across the Southeast, linking up many areas in the Southeastern Hills.

The navigable waterways play a useful role in providing a cheap means of transport, especially for bulky freight. In 1959, there were 160,000 kilometres of navigable waterways in various parts of the country, of which 40,000 kilometres were accessible to river-going steamers. These waterways are particularly useful to factories situated in the vicinity in the transport of raw materials and finished products and the supply of water.

The Yangtse and its tributaries offer excellent shipping facilities, their total navigable length accounting for about two-fifths of the aggregate length of China's inland shipping routes. Along the main



# **RAILWAY TRUNK LINES**

course of the Yangtse, the 2,800 kilometres between its estuary and Ipin are open to steamers. In the high-water season, sea-going vessels can sail upstream for 1,000 kilometres to Wuhan.

Coastwise shipping extends from Shanghai northwards to Tsingtao, Tientsin and Talien and southwards to Amoy, Canton and Chankiang (Tsamkong).

Made up of its three tributaries, the Tungkiang, Sikiang and Peikiang, the Pearl River is second only to the Yangtse in terms of water-borne traffic. The Tungkiang and Peikiang are the main waterways linking Canton with eastern and northern Kwangtung, while the Sikiang with its many tributaries is the main river transport route between Kwangtung and Kwangsi.

The biggest tributary of the Heilungkiang River, the Sungari, flows through the northern and eastern parts of the rich Northeast Plain. It has a rather long freezing period but carries a heavy load of traffic during the seven months between spring and autumn.

# PART II PROVINCIAL GEOGRAPHY

 $\mathbf{F}^{OR}$  administrative purposes the country is divided into 22 provinces, 5 autonomous regions and 2 cities directly under the central government. Below this level are more than 2,000 counties (or autonomous counties) and cities.

The provinces, autonomous regions, and cities directly under the central government may be divided into seven regions based on their geographical proximity and similarities in other respects, as follows:

1. The Middle and Lower Yellow River Region: the city of Peking and the provinces of Hopei, Shantung, Honan, Shansi and Shensi;

2. The Northeast Region: the provinces of Heilungkiang, Kirin and Liaoning;

3. The Middle and Lower Yangtse Region: the city of Shanghai and the provinces of Kiangsu, Anhwei, Chekiang, Kiangsi, Hunan and Hupeh;

4. The South China Region: the provinces of Fukien, Taiwan and Kwangtung, and the Kwangsi Chuang Autonomous Region;

5. The Southwest Region: the provinces of Szechuan, Kweichow and Yunnan;

6. The Chinghai-Tibet Region: the Tibet Autonomous Region and Chinghai Province;

7. The Inner Mongolia-Sinkiang Region: Kansu Province, the Ningsia Hui Autonomous Region, the Inner Mongolian Autonomous Region and the Sinkiang Uighur Autonomous Region.

#### Chapter Seven

# THE MIDDLE AND LOWER YELLOW RIVER REGION

Comprising the city of Peking and the prov-Hopei, inces of Shantung. Honan, Shansi and Shensi, the Middle and Lower Yellow River Region is situated slightly to the north of the eastern part of China. As the cradle of ancient



Chinese civilization, it has many cities which were in ancient days the political centres of the nation.

The western portion of this region belongs chiefly to the Loess Plateau. Most of its eastern half falls within the North China Plain while its easternmost margins are known as the Shantung Hills. The region's biggest waterway is the Yellow River, to the north of which flows the Haiho and to the south, the Huai.

Lying mostly in the warm-temperate zone and the semi-humid area, the region has hot summers with plenty of rain and pleasant autumns with clear skies, a climate favourable to agriculture. Long years of cultivation has turned it into China's most important
producer of wheat and cotton. Soya beans, peanuts and tobacco are also raised in large quantities, and peaches, pears and dates are among the well-known temperate fruits grown locally.

Both the city of Peking and all the provinces in this region possess rich coal deposits, occupying an important place in China's coal-mining industry. Iron-ore reserves are also present in big quantities and most of the ore mines are in the vicinity of coalfields, a factor contributing to the growth of the iron and steel industry. The iron and steel and the machine-building industries occupy an important position in the country. Of the light industries, cotton milling in the cotton-growing areas is by far the most developed branch.

#### THE CITY OF PEKING

With an area of more than 17,000 square kilometres and a population of more than 7.3 million,<sup>1</sup> Peking is one of the biggest cities in China. Its main topographical features consist in that it is shielded by mountain barriers on the north, overlooks a stretch of plain on the south and faces the sea to the east.

Nestling on the alluvial fan of the Yungting River along the northern fringe of the North China Plain, Peking borders on the Yenshan Mountains in the north and the Hsishan Mountains in the west. A vast, open plain lies to the southeast, and the

<sup>&</sup>lt;sup>1</sup> In 1957 the population of Peking was about 4,000,000. After the enlargement of the city area in 1958, it was over 7,300,000.

western shores of the Pohai Bay are 183 kilometres to the east. With the completion of the Hsinkang Harbour at Tientsin, Peking has a convenient outlet to the sea.

As the nation's capital and its political, economic and cultural centre, Peking is connected with the other parts of the country by a vast network of railways, airlines and highways radiating from it, the trunk railways being the Peking-Canton, Peking-Paotow, Peking-Shanhaikuan and Peking-Chengteh lines. The city is also served by convenient international transport by rail and air.

Peking houses the offices of the Standing Committee of the National People's Congress, the State Council and the Central Committee of the Chinese Communist Party. It plays host to delegates of many important international conferences and gatherings.

## AN ANCIENT AND BEAUTIFUL CITY

Peking is an ancient city of fame, having been a seat of government off and on for more than eight hundred years. The foundations of its present site were laid during the Yuan Dynasty (1271-1368). The city was rebuilt during the Ming Dynasty (1368-1644) and expanded during the Ching Dynasty (1644-1911), and in time became a most outstanding example of the architectural art characteristic of the feudal imperial capitals in Chinese history. The victory of the Chinese people's revolution turned the majestic palaces over to the people and lent the ancient capital a new lease of life. With more than a decade of large-scale expansion and reconstruction, it has become even more beautiful.

The Tien An Men (Gate of Heavenly Peace), a glowing piece of architecture with red walls and glazed tiles, stands in the centre of Peking. It was from here that Chairman Mao Tse-tung proclaimed the founding of the People's Republic of China on October 1, 1949. In the central part of the broad Tien An Men Square is the Monument to the People's Heroes. On the west side of the square is the new and magnificent Great Hall of the People, and on the east side, the Museum of Chinese History and the Museum of the Chinese Revolution. In front of the Tien An Men runs the broad Chang An Chieh, and behind it are the old Imperial Palaces whose red walls enclose many colourful halls and pavilions.

In the past dozen years, new buildings with a combined floor space greater than the total built in the past hundreds of years have appeared in Peking. The municipal area has been growing while houses and streets have rapidly multiplied in the outskirts. Among the more splendid structures are the Museum of the Chinese Revolution, the Museum of Chinese History, the Great Hall of the People, the Cultural Palace of the Nationalities, Peking Railway Station, the Military Museum of the Chinese People's Revolution, the Workers' Stadium, Peking Airport and the Sanatorium for Asian and African Students.

Parks and places of historical interest form a beautiful part of the Peking landscape. Chungshan Park with its ancient cypresses, Peihai Park with its spacious lake and white dagoba, Tien Tan (Temple of Heaven) with its blue-roofed Chi Nien Tien (Hall of Prayer for Good Harvests), the Peking Zoo with its fine collection of animals and birds, and the Summer Palace with its glorious lake and hill — all these offer the citizen a wide choice for outdoor recreation. In the more distant outskirts are many other favourite spots for outings, such as Hsiang Shan (Fragrance Hill), the Eight Big Temples, and the Great Wall at Chuyungkuan Pass.

# GLORIOUS REVOLUTIONARY TRADITIONS

Peking has played a very important role in the history of the Chinese people's revolution.

In 1900 when the joint forces of the eight imperialist countries — the United States, Britain, France, Germany, tsarist Russia, Japan, Austria and Italy — invaded China, the warriors of the Yi Ho Tuan, holding high the banner of anti-imperialism and patriotism, waged an unswerving struggle in Peking against the foreign invaders.

In 1919, Peking witnessed the outbreak of the May 4th Movement. This anti-imperialist and antifeudal movement wrote an even more glorious chapter in the history of the Chinese revolution and constituted the turning point from the old-democratic to the new-democratic revolution in China.

In 1935, the well-known December 9th Student Movement was launched in Peking. Rallying to the call of the Communist Party, the city's students came out to demonstrate on the streets, shouting "Down with Japanese Imperialism!" and demanding the organization of an anti-Japanese national united front and the cessation of civil war to realize a concerted resistance to the alien aggressors. This event brought about a new upsurge in the nationwide resist-Japan-and-save-China movement. On July 7, 1937, when the Japanese invaders precipitated the Lukouchiao Incident in the southwest of Peking in their futile attempt to annex the whole of China, the Chinese troops resisted the attack, raising the curtain on the national War of Resistance Against Japan (1937-45).

After the close of the anti-Japanese war, the Peking students continued to fight heroically against the U.S. imperialists and their henchmen, the Kuomintang reactionaries. They launched a series of mass movements until the liberation of Peking in 1949.

# A CITY OF LEARNING

Peking is the cultural centre of China, a city of higher learning. Here are the Chinese Academy of Sciences, the nation's leading scientific research body, as well as many other research institutes, national academic societies, the Peking Planetarium, and laboratories specializing in various fields.

Among the more than 50 institutes of higher education in Peking are the long-established Peking and Tsinghua Universities, the Central Institute for Nationalities which prepares personnel to serve the national minorities, and a host of other colleges and universities turning out technical personnel in many lines.

The Peking Library is the largest of its kind in the country. Among the several million volumes on its shelves are many rare copies collected over the years, and numerous Marxist-Leninist works and publications on science and technology.

The Palace Museum contains the largest collection of cultural and artistic objects in the country. Choukoutien to the southwest of the city is the home of the Peking Man (*Sinanthropus Pekinensis*) who lived 500,000 years ago. Excavations undertaken since liberation have added further valuable finds to the original skull unearthed there in 1929.

# TOWARDS A MODERN INDUSTRIAL CITY

Before liberation, Peking had practically no modern industry to speak of, though it had a large number of handicraft manufactories and workshops. The few factories and mines that existed at that time were of low productive capacity. The Shihchingshan Iron and Steel Works could smelt iron but could not make steel. At the Mentoukou Colliery mining was done largely by manual labour. The Chingho Woollen Mill produced rugs of inferior quality.

Since liberation, Peking has made remarkable progress in industry. Many large modern factories were built during the First Five-Year Plan period (1953-57), and capital construction has been carried out on an even greater scale since 1958, thus laying the groundwork for further industrial development.

Peking's traditional handicraft specialities, such as cloisonné, carved lacquer, ivory carving and jade working, are known all over the world. They embody artistic skills accumulated through the ages. Liberation has brought better living conditions to the handicraft artists and their creative genius has found far greater scope than ever in the past.

### WATER CONSERVANCY AND SUBURBAN AGRICULTURE

The principal waterways around Peking are the Yungting, the Chaopai, and the northern section of the Grand Canal. Both the rivers and the canal are subject to great seasonal variations in their water level, and this created big problems for the local peasants in pre-liberation years. In one season, the crops suffered from drought, in another from waterlogging. Since liberation, the People's Government has built the Kuanting Reservoir and various water diversion projects on the Yungting River, the Ming Tombs Reservoir on the tributary of the Wenyu River which is the upper course of the Northern Grand Canal, and the big Miyun Reservoir on the Chaopai. Afforestation, conservation of water and soil and soil improvement on a gigantic scale have yielded conspicuous results in combating drought, waterlogging and sandstorms and providing better conditions for the growth of agriculture, forestry, animal husbandry, side-occupations and fishery.

Market-gardening is the main occupation in the near suburbs, while grain production predominates in the more distant areas. Market-gardening has developed rapidly, and many suburban people's communes grow vegetables in hot-houses so that fresh greens are available to the city-dwellers all the year round. Among the staples, wheat and maize are abundant, while cotton and peanuts are the chief cash crops. With the expansion of water conservancy and soil improvement, the per unitarea yield has steadily increased. Progress has also been recorded in animal husbandry and poultry farming. The famous Peking Ducks are a local specialty. Fresh-water fish breeding has been developed in a big way in the rivers, lakes and reservoirs in and around Peking.

### HOPEI PROVINCE

Situated north of the lower Yellow River, Hopei<sup>\*</sup> Province is made up in fairly equal proportions of mountain regions and plains. On the north the province touches the Inner Mongolian Plateau and takes in the northern Hopei mountain area consisting of hills and basins. The Taihang Mountains, with an east-west descent, sprawl along the west while the boundless North China Plain unfolds to the south and east. Faults are common where a mountain region and a plain meet, forming a clearly defined staircase between the two.

The Yenshan Mountains, which form part of the northern Hopei mountain area, straddle the northern part of the province. Here the eastern section of the world-famous Great Wall snakes along the mountain ridges. This section is made of stone slabs and huge bricks, and the zigzag structure that follows the rise and fall of the mountains presents a wonderful spectacle. The Great Wall starts from the eastern tip of the Yenshan Mountains, at a place where the mountain chain joins the Pohai Sea.

<sup>\*</sup> Meaning "North of the River".

#### THE HAIHO RIVER AND ITS HARNESSING

Since the Hopei plains slope gradually from west to east, the rivers rising in the mountains in the north, west and south flow eastwards into the Pohai. Among these rivers, the Haiho is the biggest. It has five tributaries, namely, the Northern Grand Canal (and its headstream, the Northern Grand Canal (and its headstream, the Chaopai River), the Yungting, the Taching, the Tseya and the Southern Grand Canal (otherwise known as the Weiho), all converging at Tientsin. The Tientsin area includes nearly 6,700 square kilometres of land, most of it saline or alkaline, lying at 4-5 metres above sea level.

The Haiho valley embraces most of Hopei Province. After summer downpours, the tributaries bring down great quantities of silt into the main course, choking the waterway and often causing the floods that used to spell such disaster for the lowlying areas.

In recent years, various measures for water and soil conservation have been carried out on the upper reaches. Reservoirs have been constructed for flood detention and water storage. A new canal, the Tuliuchien, has been cut on the lower reaches south of Tientsin to divert part of the flood waters to the sea, thus easing the load on the main channel of the Haiho. Embankments were thrown up in the low-lying areas, dividing them into submerged land, water meadow and dry land. Salt-free river water was used to wash the saline and alkaline fields to transform them into paddy fields.

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Hopei as a whole has hot summers and sunny dry autumns. The average annual precipitation stands at 500 mm. in most places. These conditions favour the growth of cotton and wheat. Hopei is the biggest cotton area in the country, accounting for one-fifth of the overall cotton acreage and yielding over one-fourth of the total cotton output. The cotton area lies mostly in the central and southern parts of the province, with Shihchiachuang and Hantan as the biggest centres. With the expansion of water conservancy and irrigation, the cotton output is bound to rise still further.

Wheat flourishes on the plains of Hopei, and coarse grains are also important food crops. Maize and millet are grown both on the plains and in the mountain areas; sweet potatoes are grown on the plains and Irish potatoes in the mountainous regions. Among the oil crops, peanuts take pride of place, followed by sesame and linseed. Bast fibres hold an important place among the industrial crops.

The Yenshan and Taihang mountain areas grow an abundance of walnuts, chestnuts, apricots and persimmons, while the plains and hilly regions in the piedmont belt produce dates, pears, apples and grapes. Among the best known of these are the grapes of Hsuanhua, the chestnuts of Lianghsiang and the pears of Tientsin.

## RISING INDUSTRY

Pre-liberation Hopei had a certain amount of backward industry. The heavy industrial enterprises, such as iron and steel and machine-making, rested on a weak foundation. New construction, coupled with extensions and improvements to the old works, has brought about an impressive development in Hopei's light and heavy industries since liberation and a big rise in their output value.

The province has rich coal deposits in the piedmont belt of the Yenshan and Taihang Mountains, and is among the biggest coal producers in the country. Since liberation, practically all the major coal mines in Hopei have been mechanized, and output has been steadily rising.

Iron-ore is also fairly abundant and has a high iron content.

The steel plants in Tientsin and Tangshan have been expanded and have become important metallurgical centres. Hantan and other places have also set up iron and steel mills. The vigorous development of the iron and steel industry has stimulated the growth of other industries, such as the making of textile machinery, machine tools and farm machinery.

The past decade saw a big growth in Hopei's cotton textile industry. The Tientsin cotton-milling enterprises have been expanded and new mills have been built in the cotton-growing areas. Shihchiachuang, Hantan and a few other places have become new cotton-textile centres.

#### TIENTSIN

Situated at the confluence of the Haiho tributaries and facing the Pohai Sea to its east, the provincial capital of Tientsin ranks among China's biggest industrial and commercial cities.

As Tientsin began its industrial and commercial development after it was made a trade port in 1860, its economy was largely in the hands of the imperialists and bureaucrat-capitalists, and a strong semi-colonial therefore bore imprint. Liberation gave a great impetus to its industrial expansion. Various branches of heavy industry, especially steel-making, machine-building, chemical and electric power, have registered sharp increases in production and the proportion of heavy industry in the city's economy is growing. In light industry, which includes cotton textiles as the leading branch, as well as sodium carbonate, rubber and paper, output has steadily increased. As a major industrial base, Tientsin has made a big contribution to the country as a whole not only by its production of industrial and consumer goods, and the accumulation of funds, but also through the training of a large number of technical personnel for work in other places.

Tientsin's proximity to the Pohai facilitates the development of the fishery and salt industries. The well-known Changlu salt works produces a quarter of the country's sea salt. Yellow croakers, mackerels and prawns are well-known local products.

The city's favourable geographical position and convenient communications by land and water make it the principal clearing house for northern China's industrial and farm products, a hub in the interflow of commodities between town and country. Its outer port, Hsinkang, now one of the world's biggest artificial harbours, links the city by shipping with the major ports of many countries.

Chinwangtao with its good harbour is situated 200 kilometres northeast of Tientsin. Nearby is the summer resort of Peitaiho, and the historically famous Shanhaikuan.

#### SHANTUNG PROVINCE

The coastal province of Shantung lies to the southeast of Hopei. A large part of the province projects into the sea in the form of a peninsula washed by the Pohai Sea on the north and the Yellow Sea on the south. Its long coastline includes both erosional mountain coast and depositional plain coast, and is favourable to maritime enterprises. The extensive fishing grounds in the nearby seas are known for their giant prawns. Saltfields are also numerous, the biggest being in Tsingtao on the Kiaochow Bay.

Topographically, Shantung may be divided into hilly regions and plains. The hills occupy threefifths of the province's land surface, spreading over its central and eastern parts. The Central and Eastern Shantung Hills combine to form the Shantung Hills. The majestic 1,524-metre Taishan towering to the west of the Central Shantung Hills has been a famous beauty resort since ancient times. The Yuhuang Peak (Jade Emperor Peak), the highest on the mountain, commands a view of the boundless plain to the south and west and the lower ridges to the north and east. It is a wonderful experience to stand on the summit at the break of the day and watch the sunrise over the ever-changing landscape.

The Central Shantung Hills are surrounded by vast plains — the Chiaolai Plain between the Central and Eastern Shantung Hills and a part of the North China Plain to the north and west of the Central Shantung Hills. A ribbon-like group of lakes has been formed by the Yellow River where the southwestern part of the Central Shantung Hills adjoins the North China Plain.

#### WIDESPREAD AGRICULTURE

The cultivation of land has a long history in this densely populated province. Now with over half of its land under plough, it ranks among the provinces possessing a big arable area.

Shantung has a climate resembling that of the Hopei plains, with somewhat more rainfall. Its western plains are watered by the Yellow River which offers good irrigation facilities. Since liberation, many areas have been brought under irrigation by the Yellow River waters, and a number of reservoirs for flood control and irrigation have been built in the central and eastern hilly regions. These hilly regions have rich underground water resources and a lot has been done in the way of diverting these spring waters for irrigation.

Wheat, sweet potatoes and maize are the chief staples, while cotton, peanuts and tobacco are the principal cash crops. The output of all these occupies an important place in the country. Shantung is the biggest peanut grower of China. Most of them are grown on the Shantung Peninsula. The cotton-growing centres are on the northwestern plains, while the tobacco is found chiefly in the better-irrigated areas along the Tsingtao-Tsinan Railway, with Yitu as the centre.

Shantung also produces tussah silk and temperate fruits, with the Eastern Shantung Hills as the leading tussah-silk area and Feicheng, Laiyang and Yentai as the biggest growers of the famous Shantung peaches, pears and apples respectively. Vine-yards are widely distributed and extremely productive. A lot of the Shantung fruits are exported to other parts of the country but some are used locally for canning and wine-making. The Yentai brandy, vermouth and other wines are well known on the world market.

# THRIVING LIGHT AND HEAVY INDUSTRIES

Shantung's rich variety of farm produce provides an unlimited source of raw materials for the development of light industry. The flour-milling, textile, oil-pressing and cigarette-making industries are fairly advanced, and also widespread, with the principal centres along the Tsingtao-Tsinan Railway.

The hilly regions are rich in minerals, especially coal and iron-ore. The coal-fields are located largely in the piedmont belt of the Central Shantung Hills while the iron-ore deposits are found in scores of counties and cities. In many places the coal and iron deposits lie close to each other, providing favourable conditions for developing an iron and steel industry. The ancient city of Tsinan, slightly west of the centre of Shantung, is the capital of the province. It stands at the intersection of the Tsingtao-Tsinan and Tientsin-Pukow Railways, and its proximity to the Yellow and Hsiaoching Rivers opens up bright prospects for developing local navigation. Its favourable geographical position, good natural environment, convenient communications and industrial possibilities make it the political, economic and cultural centre of the province.

The industry of pre-liberation Tsinan consisted of a few cotton textile and flour mills. Its light industry has now developed considerably and it also has such heavy industrial enterprises as iron and steel and machine-building plants. The Diesel engines and machine tools made in Tsinan are known for their excellent quality.

Tsinan, because of its location on the northwestern rim of the Central Shantung Hills, an area rich in natural springs, is known as the "City of Springs". These numerous springs join to make the Taming Lake whose water flows into the Hsiaoching River.

Lying on the eastern tip of the Kiaochow Bay, Tsingtao is the largest port in Shantung. It also possesses one of China's best harbours, where ocean-going vessels can enter and leave at all tides. With a well-developed textile and machine-making industry, the city is Shantung's most important industrial centre. The moderating influence of the cold ocean current from the north keeps the summer temperatures lower than they otherwise would

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be. Tsingtao's excellent beaches and the beautiful scenery of the Laoshan Mountain, rising 1,133 metres by the sea, have made it a favourite summer resort.

North of Tsingtao over the Lantsun-Yentai Railway built after liberation is Yentai, Shantung's second largest port. Nestling on the northern edge of the Shantung Peninsula, the port faces Lushun-Talien across the Pohai Straits and is served by convenient land and water traffic. Besides being a hub of communications where the produce of the province is collected for shipment to other ports, and where incoming commodities are channelled for distribution, Yentai is the home port of one of China's well-known fishing grounds. Chufu, the birthplace of Confucius (551-479 B.C.), lies about 10 kilometres to the east of Tseyang on the Tientsin-Pukow Railway. The Confucius Temple, with its imposing halls, pavilions, stone tablets and ancient pines, is a place of dignified splendour. The People's Government has repaired the historical relics and restored much of the original grandeur. The Chufu Teachers' College, a large educational institution, is located here.

#### HONAN PROVINCE

The name Honan, meaning "South of the River", comes from the fact that the greater part of the province lies south of the Yellow River. The province is bisected from north to south by the Peking-Canton Railway, which is flanked on the west by the Western Honan Hills, and on the east by the Huang-Huai Plain.

In the west of the province, the easternmost arm of the Chinling Mountains extends into the Western Honan Hills. Consisting of the Waifang, Funiu and other mountains, it forms lofty ranges exceeding 2,000 metres above sea level before gradually fanning out towards the east.

The Huang-Huai Plain is part of the North China Plain. Its northern section is a product of alluvial deposition of the Yellow and Haiho Rivers at an elevation of less than 100 metres. The southern section, formed by the alluvium chiefly of the Yellow and Huai Rivers, is even more lowlying.

### CHINA'S BIGGEST WHEAT PRODUCER

Honan is China's biggest producer of wheat, tobacco and sesame. It is also an important producer of cotton and oil crops. The wheat is grown mostly on the Huang-Huai Plain, and also in the Nanyang Basin in southwestern Honan. A number of projects have been completed on the Huang-Huai Plain during the post-liberation years, using the waters of the Yellow River for irrigating large tracts of land. This has resulted in a bigger per unit-area yield of wheat in the newly irrigated areas.

Cotton belts are extensive, the largest being the area southeast of the Taihang Mountains in northern Honan. A cotton textile industry has grown up in the leading cities of Chengchow, Loyang, Hsinhsiang and Anyang in the cottonproducing areas. Honan's big cotton output and central location favour the development of this industry and the easy marketing of its products.

Although tobacco holds the first place in the country in terms of sown area and output, it ranks second in importance to cotton locally. Its cultivation is centred on the Hsuchang Special Administrative Region.

Sesame is grown mostly in areas south of the Yellow River in eastern Honan. Peanuts, another oil-bearer, thrive on the sandy soils along the Yellow River and its old course, all in the eastern part of the province. In Chengchow, Kaifeng and Shangchiu new mechanized oil presses have been set up.

In the past the recurrent overflowing of the Yellow River and the frequent changes of its course led to frequent floods, while lack of rainfall brought drought. Farm production was never stable. Since liberation, the flood menace has been markedly reduced with the construction of the Paisha and other reservoirs in the mountainous areas along the upper reaches of the Huai and a network of canals across the plains in the middle reaches. Shelter belts and orchards have been planted in the sandy and other waste areas along the Yellow River's abandoned courses, which have now become a fruit-producing centre.

## YOUNG AND GROWING INDUSTRIES

Honan's coal deposits, most of which were discovered after liberation, are scattered chiefly along the foot of the Taihang Mountains and in the Western Honan Hills. Abundant high-quality coal is present in the Pingtingshan mine where the Western Honan Hills meet the Huang-Huai Plain. The Hopi mine in the Taihang piedmont to the north is a major coal base built in recent years. The old Chiaotso mine at the southern foot of the Taihang has grown into a big mining centre. Most of the numerous small and medium-sized coal mines are found in the Western Honan Hills.

Honan is equally rich in iron-ore resources, though little iron and no steel at all was produced in pre-liberation days. The big leap forward in 1958 opened a new chapter in the provincial iron and steel industry. Apart from the Anyang Iron and Steel Company, the first new mediumsized iron and steel complex, many small enterprises have been built.

## CHENGCHOW, LOYANG AND KAIFENG

Chengchow, the provincial capital, is an important junction of the two trunk railways, the Peking-Canton and the Lunghai. A little way to the north, a new bridge has been thrown up over the Yellow River.

The Chengchow region is famous for its cotton and wheat. Among the many modern factories that have been built in the city are several sizable cotton mills. It is the biggest cotton textile centre in Honan and one of the most important in the country as a whole. Alongside the growth of the cotton textile industry, a textile machinery plant has also appeared in Chengchow.

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Chengchow was the scene of the well-known "February 7th" Strike of 1923, when the workers of the Peking-Hankow Railway under the leadership of the Chinese Communist Party carried forward the dauntless struggle of the Chinese working class against the reactionary regime.

The ancient city of Loyang stands on the northern bank of the lower Loho River in western Honan. With the Sungshan Mountain in the east and the Yaoshan Mountain and Hanku Pass in the west, it was long known as a city of strategic importance. It was the national capital during the Eastern Chou (770-249 B.C.), Eastern Han (25-220) and Northern Wei (386-534) Dynasties. Places of historical interest include the Lungmen Grottoes and the White Horse Monastery.

Loyang is now the site of China's first tractor plant and many other machinery works built in recent years. The city is growing into a modern industrial centre chiefly engaged in machine-making.

For long years, Honan was ancient China's political centre and the heart of China. In the course of the large-scale capital construction in Loyang and other old cities, many interesting historical relics have been unearthed. Among these finds, mostly from ancient tombs, are samples of rice and kaoliang of the Han Dynasty.

Kaifeng, one-time provincial capital, lies on the Lunghai Railway on the south bank of the Yellow River in eastern Honan. It was the national capital during the Five Dynasties (907-960) and the Northern Sung Dynasty (960-1127). The Dragon Pavilion and the Iron Pagoda are two of its outstanding

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historical monuments. Its position on the Lunghai Railway enables it to serve as the collecting and distributing centre for eastern Honan's farm products. It has a highly developed handicraft industry and farm machinery, chemical and other enterprises.

### SHANSI PROVINCE

Shansi (West of the Mountain) derives its name from the fact that it lies to the west of the Taihang Mountains. The greater part of the province stands 1,000 metres or more above sea level. The Shansi Plateau is dissected by mountain ridges and valleys. With a thick layer of loess covering most of the valley lands and mountain slopes, it forms part of the Loess Plateau. The Shansi Plateau may be divided into three clearly defined regions according to local terrain. The eastern part is a mountain region embracing, from north to south, the Hengshan, Wutai and Taihang ranges, with the Taihang predominating. It is dotted with loess hills and intermontane basins. The western part is made up of tablelands and mountain areas with the Luliang Mountains as the main range. Here the ground is under thick loess and is cut into numerous gullies by a maze of streams. Where the Yellow River crashes through the Lungmen Mountains, an arm of the Luliang, it has formed some famous canyons and the Hukou Waterfall. The central part of the Shansi Plateau comprises a string of basins of varying elevation, all formed by fault depression. The major ones are, from north to south, the Tatung, Taiyuan and Linfen Basins.

Shansi's biggest river is the Fenho rising in the northern part of the province. Flowing southwards into the Yellow River, it drains one-fourth of Shansi's total area. Its rich valley lands are flat and are covered with an intricate network of streams and riverlets. The local people have been farming here for thousands of years.

#### WATER AND SOIL CONSERVATION AND AGRICULTURE

Loess hills occupy a considerable portion of Shansi. Under the reactionary regime of earlier years, most of the mountain area was denuded of its forest cover and pasturelands. As a result, the summer and autumn downpours carried away the soil, forming countless deep gullies and sharp cliffs. This soil erosion and loss of water was particularly serious in western and northern Shansi. Every year much of the precious top-soil was carried into the Yellow River, leaving the land barren and rugged, with disastrous effects upon agriculture. After liberation, the People's Government took vigorous measures to conserve the water and soil by planting trees and grass, terracing fields on hillsides, digging irrigation canals and banking cultivated plots. This has reversed the downward trend in agriculture.

The vast tablelands and mountain areas of eastern and western Shansi offer great prospects for developing a diversified economy of farming, forestry and animal husbandry. Terraced fields have been opened for cultivation in most hilly regions which have become principal producers of millet, maize and other lesser grains. The basins of central Shansi, with their rich soil and good irrigation, are the main agricultural centres with a fairly high proportion of farm land and population.

The climate varies greatly between the north and the south of the province. These are reflected in agriculture. Central and southern Shansi grow cotton and winter wheat, raising two crops a year, or three every two years. Spring wheat, but no cotton, is raised in northern Shansi where one crop a year is the rule. Millet, kaoliang and maize are widely grown, especially in the basins north of Taiyuan. The Linfen Basin and the areas south of it are the biggest wheat and cotton growers. Apart from filling the needs of the Taiyuan and Yutse cotton mills, Linfen and other cotton areas export part of their output to other provinces.

## INDUSTRY AND CITIES

Shansi was listed as one of the key provinces for industrial construction under the First Five-Year Plan, and now has many industrial enterprises. Nature has generously endowed it with coal resources so that it ranks among China's most important coalmining bases. The mineral is distributed over wide areas and in large quantities; it is of good quality and most of it can be used for coking. Shansi also has fairly developed iron and steel, machine-making and chemical industries.

Situated on the northern fringe of the Taiyuan Basin, Shansi's capital Taiyuan occupies a central position in the province. Surrounded by mountains on three sides, with the south side giving onto open country, the city stands on the historically famous road from the Shansi hinterland to Inner Mongolia via the Yenmen Pass in the north. With Yutse, the junction of the Tatung-Puchow and Shihchiachuang-Taiyuan Railways, nearby, Taiyuan has easy access to other areas in and without the province.

Taiyuan enjoys favourable conditions for industrial development in that it has on hand big coal and iron-ore deposits. With advanced iron and steel, machine-building, chemical and electric power industries, Taiyuan has taken its place among China's important industrial cities.

As one of the nation's ancient cities of fame, Taiyuan boasts a history dating back over 2,400 years. Outstanding among its many places of historical interest is the Shansi Temple, on whose grounds stands a cypress tree planted in the Chou Dynasty over two thousand years ago.

Tatung, in the Tatung Basin of northern Shansi, is the junction of the Tatung-Puchow and Peking-Paotow Railways. With its big and highly mechanized coal-mines, it is a modern industrial city mainly engaged in mining. It was the capital of the Northern Wei (386-534) in the Southern and Northern Dynasties. To the west of the city are the Yunkang Grottoes containing over a hundred thousand Buddhist stone sculptures carved in the rock. These ancient sculptures took more than 40 years and the labour of thousands of sculptors and others to complete. Shensi Province lies to the west of Shansi and Honan. Its northern part is made up of the Shensi Plateau, its central part of the Weiho Plain and its southern part of the Chinling-Tapa mountain area.

At an elevation of 800-1,200 metres, the Shensi Plateau forms part of the Loess Plateau. Along most of the large rivers are strips of alluvial land known locally as "brimming granaries". The Shensi Plateau produces millet and broom-corn millet as its chief food crops.

Northern Shensi has many pasturelands and a vast number of livestock farms. Most of the local peasants, too, go in for animal husbandry as a sideline. Since liberation much has been done in water and soil conservation, afforestation and planting of fodder grass. By combining farming, forestry and animal husbandry, the conditions for developing stock-raising have become more favourable.

The Weiho Plain presents a totally different picture. It is densely populated, with many towns and villages. The plain stretches over 300 kilometres, from Tungkuan in the east to Paoki in the west. East of Sian, it is broad. In the neighbourhood.of Paoki, it narrows to a matter of a few kilometres. Both the northern and southern parts of the Weiho Plain gradually slope towards the bed of the Weiho River. A number of irrigation canals like the Weihui, Chinghui and Lohui have been dug to irrigate the wheat and cotton fields.

South of the Weiho Plain tower the Chinling Mountains, standing for the most part at 2,000 metres or more above sea level. Further to the south lies the valley of the Hanshui River and the Tapa Mountains. The area as a whole is known as the Chinling-Tapa mountain area. With the Chinling serving as a barrier against the cold currents from the north, the area has a warm and humid climate. Maize and paddy rice are the chief farm crops in the Hanshui valley which, as China's northernmost grower of sub-tropical crops, also produces sugarcane, tea and citrus fruit.

North of the Chinling, on the fringe of the Weiho Plain, the 2,000-metre-high Huashan rises sheer out of the plain. Noted for the beauty of its rugged scenery, it is known as the Western Sacred Mountain, one of the five sacred mountains of Chinese folklore.

# THE "BLACK BELT"

Shensi has abundant coal deposits spread over large areas. Particularly coal-rich is the southern part of the Shensi Plateau, and the areas adjoining the Weiho Plain, together known as the "Black Belt". The province as a whole has many medium-sized and small coal-mines; of the large ones the Tungchuan is the best known.

Rich oil resources lie buried under the Shensi Plateau. One of the first oilfields opened up is at Yenchang which also has machine-making as an important industry.

In light industry, cotton milling has been developed on a large scale, and includes spinning, weaving, dyeing and printing. The mills are concentrated mainly in Sian and Hsienyang on the Weiho Plain, one of China's major cotton-growing areas. The location of the mills in these cities has the great advantage of providing the finished products with an easy outlet to the neighbouring northwestern provinces and regions. This is in striking contrast to the situation before liberation. In those days Shensi was already an important cotton grower, but its cotton textile industry failed to develop. Cotton output was much smaller than it is now, and over 80 per cent of it had to be shipped to the textile mills at Shanghai.

# YENAN - HEART OF THE REVOLUTION

Yenan lies on the Yenho River in the centre of the Shensi Plateau. It is a beautiful city set in a landscape of loess hills and river.

Yenan has a glorious history as the heart of the Chinese people's revolution. In October 1934, the heroic Chinese Workers' and Peasants' Red Army, in the face of brutal massacres and blockade by the reactionary Kuomintang army, set out from Kiangsi and Fukien on its historic 25,000-li Long March. After crossing the turbulent Chinsha and Tatu Rivers, steep, snow-capped mountains, and vast, uninhabited grasslands, it finally reached northern Shensi in October 1935 where it joined forces with the local Red Army units.

From that time on, Yenan played a great role as the headquarters of the Chinese revolution. It was from here that the Chinese Communist Party directed the eight-year War of Resistance Against Japan and the War of Liberation (1946-49), thus paving the way for the nation-wide revolutionary victory. Yenan attracts many visitors and tourists. Places of interest include Yangchialing where the Central Committee of the Chinese Communist Party had its office, the Date Garden where Chairman Mao Tse-tung once lived, and the rows upon rows of caves, many of which served as the dwellings of the leaders of the Party, dug into the sides of the loess hills.

Yenan is now the economic and cultural centre of northern Shensi. With the construction of many factories, the imposing Yenho Bridge and Yenan University, it is becoming ever more prosperous and beautiful.

#### SIAN

Situated in the central part of the Weiho Plain, Sian faces the Chinling Mountains to the south and is skirted by the Weiho River on the north. It commands the overland routes eastward to Honan through Tungkuan and westward to Kansu through the valley of the Weiho River. This historical eastwest route is now covered by the Lunghai Railway.

Sian was called Changan (Long Peace) in ancient China when it was the nation's political, economic and cultural centre. It was the capital of the Western Chou (11th century B.C.-771 B.C.), Western Han (206 B.C.-24 A.D.), Sui (581-618) and Tang (618-907) Dynasties. As Sian served as the capital of ancient China for a longer period than all other old cities (off and on for 900 years), it has many historical relics, such as the archaeologically important stone tablets, the Wild Goose Pagoda where the monk Hsuan-tsang worked translating the Buddhist scriptures into Chinese, and Panpo Village, the site of neolithic culture. Beauty spots include the Lienhu Lake and Revolutionary Park within the city, the Chungnan and Tsuihua Mountains to the south, and the Lishan Mountain to the east.

Pre-liberation Sian had practically no modern industry to speak of. Now its light and heavy industries can draw upon the coal, cotton and other raw materials produced in the outlying areas. The output of the various industries has risen considerably during the past decade. The machine-building and cotton textile industries are operated on a large scale.

This ancient city has also experienced a swift expansion in the cultural and educational fields. Many higher educational institutes for training personnel for national construction have appeared in the new cultural district south of the city.

## Chapter Eight

# THE NORTHEAST REGION

Comprising the provinces of Heilungkiang, Kirin and Liaoning, the Northeast Region is bounded by the Greater and Lesser Khingan Mountains in the northeast and the Changpai Mountains in the southeast. It borders on the Soviet Union along the Heilungkiang and Ussuri Rivers, and the Korean Democratic People's Republic along the Yalu River. The Northeast Plain, which cuts through the three provinces diagonally, is watered by the Sungari flowing River northwards and the Liaoho River flows which south. The mountain areas contain China's richest timber reserves while the plains rank among the regions with the largest area of



virgin land in the country.

All three provinces have long, hard winters and a short growing season, so that most of their land yields only one crop a year. Summer temperatures are high, the rainfall is abundant and there is plenty of sun. This, combined with a vast area of plains and a fertile soil, offers favourable conditions for agricultural development. Soya bean, sugar-beet and flax are important products. The western part of the Northeast Plain is rather arid and suffers from devastating sandstorms. A shelter belt planted during the past decade is beginning to prove its worth.

Liberated earlier than the regions south of the Great Wall, the northeastern provinces possess an older industry than other regions. Their iron and steel and machine-building industries are well developed and industrial and agricultural development is facilitated by the densest rail network of the country, which hinges upon Harbin, Changchun and Shenyang.

### HEILUNGKIANG PROVINCE

Standing on the northeastern tip of China, Heilungkiang Province is named after its great river.

Southern Heilungkiang is in the temperate zone while the northern part of the Greater Khingan Mountains is in the frigid-temperate zone and is the coldest place in China. Here winter temperatures fall as low as 28° C below zero, and the ground is frozen for many months of the year. Most parts of the province have protracted winters and short hot summers. The thaw comes in March or April, and frost and snow return around September or October.

In the heart of the winter, Heilungkiang is snowbound, and its rivers and lakes are frozen, presenting a landscape of glittering silver. While birds and animals become inactive, human activities continue. Fishermen dig into the ice for a catch, hunters visit the snow-covered forests to bag the precious furbearing animals and lumberjacks are busy transporting timber along the ice slides. For hunting and lumbering, winter is the golden season.

## A SEA OF TIMBER

Heilungkiang has extensive plains and mountain areas. Together with the northern section of the Changpai Mountains, the Greater and Lesser Khingan Mountains form an arc extending from the northwest to the southeast of the province. These mountain areas are generally under 1,000 metres in elevation, with rounded hills and broad, flat-bottomed valleys.

The hills are covered by dense forests stretching in some places over a hundred kilometres. The climatic and topographical differences in various areas have produced a wide variety of trees. In the cold air of the Greater and Lesser Khingan Mountains, conifers are common and the hardy Khingan larches which need much light also grow in profusion. Deciduous and broad-leaf forests dominate the warm and humid Changpai slopes below 500 metres. Between 500 and 1,000 metres mixed forests of conifers and deciduous, broad-leafed trees prevail; the higher the elevation, the more numerous the conifers. Of the coniferous trees, red pines are the most common, while the deciduous, broad-leafed trees include Mongolian oak, aspen and white birch. All of these provide excellent material for building and paper-making.

When the Japanese invaders and their puppets occupied this region, the forests suffered great damage as a result of indiscriminate felling. Thanks to the setting up of a proper forestry administration after liberation, and the introduction of certain measures such as cordoning off the mountains to allow for natural afforestation, and controlling lumbering operations, the forest area has been gradually restored and extended. Railways and towns have been built in the lumbering areas. The town of Ichun, at the southern foot of the Lesser Khingans, is one of the best known of these new settlements.

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Heilungkiang is China's biggest timber producer. A common sight is the trainloads of timber constantly passing through the province on their way to other parts of the country to meet the needs of construction.

#### THE HEILUNGKIANG RIVER ON THE SINO-SOVIET BORDER

Heilungkiang Province forms part of the valley of the Heilungkiang (or Amur) River, which ranks among the long rivers in Asia. Over 4,500 kilometres long, the river has as its headstream the Shilka-Onon rising in the Mongolian People's Republic. Its main course skirts the northern border of the province while its lower reaches flow into the Soviet Union, eventually emptying into the Sea of Okhotsk. It has many tributaries, the largest being the Sungari. The Sungari-Nunkiang Plain is formed by the alluvium of the Sungari and its tributary the Nunkiang. The stretch of lowland where the Sungari and the Ussuri converge on the Heilungkiang is known as the Sankiang (Three-River) Plain or Lowlands. During rainy and flood seasons, these vast tracts of land become swamps and marshes.

The bulk of the Heilungkiang valley is made up of mountain areas that enjoy adequate rain and snow and have luxuriant forests. With an abundant flow and little silt content, the rivers are easily navigable. The Heilungkiang has a gently sloping bed, a varied width and many gorges interspersed with basins. These features offer good conditions for the construction of reservoirs and check dams for irrigation and power generation. Although the rivers freeze during winter, their frozen surface offers a good runway for sleds and lorries.

## BOUNTIFUL AGRICULTURE

The greater part of the province has a growing season of 4-5 months, adequate for one crop. Plants grow rapidly during the hot, sunny summer days. Autumn is warmer than spring, and brings generous rainfall and plenty of sunshine to help the growth of sugar-beet and other crops.

Heilungkiang's large area and extensive arable land facilitate the establishment of many mechanized state farms. Notwithstanding the shortness of the season, the output of grain and cash crops is Maize, kaoliang, millet and Irish potaplentiful. toes are the chief food crops. In recent years spring wheat and paddy rice have also been planted over steadily expanding areas. Soya bean, sugar-beet and flax are important cash crops. Centred on the Sungari-Nunkiang and Sankiang Plains, soya bean cultivation has a long history. The yield is abundant and of good quality. Sugar-beet growing is also an age-old pursuit, albeit on a limited scale. Great progress has been reported since liberation and Heilungkiang now ranks as China's largest sugar-beet producer. The province is also the country's biggest grower of flax, the most important raw material for the local textile industry.

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Before liberation, the Nunkiang and Heilungkiang valleys and the Sankiang Plain had between them 80,000 square kilometres of potentially fertile land known as the "Northern Wilderness". It was a vast stretch of rich steppelands dotted with swamps and overgrown with grass which decomposed in the course of time to produce a thick cover of fertile black earth rich in humus. In spring and summer, the place was a billowing sea of lush grass taller than a man. The hills on the fringes of the steppelands were covered with forests. Wild animals roamed the forests and steppes. The rivers and lakes teemed with fish. Under the past reactionary regimes, this rich land was never explored, and was practically without human habitation for a hundred kilometres at a stretch.

In recent years, ex-servicemen, young workers, peasants and students have flocked to the "Northern Wilderness" to bring the productive soil under cultivation. They have waged a stubborn battle against the inhospitable nature of the vast steppelands, conquering the swamps and marshes and putting up many farms and factories. The erstwhile bleak landscape in Mishan, Chihsien and many other places has given way to a scene of rolling waves of golden wheat and flowering soya bean plants.

## RISING INDUSTRY

Nature has endowed Heilungkiang with rich coal, iron-ore and gold deposits, as well as agricultural and forest resources. In the past, however, these
were plundered by the imperialists. Under the Japanese occupation, industry, especially heavy industry, was almost nil. The light industrial enterprises, as primitive as handicraft shops, could be counted on one hand. Post-liberation years have witnessed the swift development of Heilungkiang's light industry. The appearance of many new factories has radically altered its backward industrial outlook.

The city of Harbin has grown into one of China's leading industrial centres. There are big coal-mines at Chinhsi and Hokang and big paper mills in Kiamusze and Mutankiang in the neighbourhood of forestry areas. Kiamusze has also recently built a multi-purpose wood-working plant.

## HARBIN

Heilungkiang's provincial capital of Harbin on the southern bank of the Sungari is the main rail and water junction of the northern part of the Northeast Region.

In the Manchu language, "Harbin" means "a place for sunning fishing nets". Sixty years ago it was a small fishing village. Under the Japanese occupation, it became an important military base from which the Japanese imperialists directed the seizure of raw material resources. The factories which were set up in Harbin were limited to those connected with war industry and for processing farm produce. The city's liberation in 1946 brought about a sweeping change in this situation. It is now an industrial city specializing in machine-building. Many new factories have been built, the most important being the power-generating equipment works. Harbin is the biggest clearing house for the farm products of the northern part of the Northeast Region, as well as its timber. The products of the local flour, oil-pressing, sugar, linen and lumber mills occupy an important place in the Northeast.

Harbin is also the scientific and cultural centre of Heilungkiang. Outstanding among the many higher educational institutions are the Harbin Polytechnical Institute, the Northeast Agricultural College and the Northeast Forestry College.

## **KIRIN PROVINCE**

Kirin lies between Heilungkiang in the north and Liaoning in the south. Its southeastern section has the Korean Democratic People's Republic as its neighbour across the Tumen and Yalu Rivers and the Changpai Mountains. Its Yenpien district and Changpai mountain area are inhabited by Koreans, the chief minority people in the province.

## THE CHANGPAI MOUNTAIN AREA AND THE SUNGARI

Kirin's topography falls into two major sections, the southeastern and the northwestern. The southeastern section is taken up by the Changpai mountain area, much of it hill country, but also rising to numerous rippling ridges and lofty peaks. The northwestern section consists of the central part of the immense Northeast Plain.

The Changpai mountain area is a collective term for many mountain ranges, principally the Changkuangtsai, the Wanta and the Changpai systems. With its northern arm curving into Heilungkiang and its southern extending as far as Liaoning, this mountain area is mostly over 1,000 metres above sea level. It has a thick forest cover and, like the Khingan mountain area of Heilungkiang, is one of the country's major forest areas.

The section of the Northeast Plain in the vicinity of Changchun and Kungchuling is 200-250 metres above sea level and forms the divide between the Sungari and Liaoho River systems. As Kirin's longest waterway, the Sungari runs some 800 kilometres within the province. Many tributaries converge at its headstream. It has an abundant and swift flow with sharp gradients, offering excellent conditions for power generation. On the upper course is the large Fengman Reservoir, also known as the Sungari Lake. This project plays an important role in flood prevention and irrigation in the plains along the lower course. The Fengman Hydro-electric Station is the largest of its kind in the Northeast Region, and is linked on a grid system with the thermal power stations in the region's other industrial cities.

#### CHIEF FARM CROPS, MOUNTAIN AND FOREST PRODUCTS

Kirin has severe, snow-bound winters and hot, rainy summers. The spring thaw moistens the soil for ploughing and sowing, while the high temperatures and frequent rainfall of summer favour plant growth. But the northwestern part of the province that adjoins Inner Mongolia is relatively dry and suffers from sandstorms. A shelter-belt project has been initiated in this area to protect crop cultivation and stock-breeding. The province grows a wide range of farm crops, its leading food grains being paddy rice, maize, kaoliang and millet. Rice cultivation, formerly concentrated in the Yenpien Korean Autonomous *Chou*<sup>1</sup> in the Changpai mountain area, has in recent years been extended to the northwestern plains. Kirin is a nationally known producer of soya beans which account for some one-fifth of its total sown area. Sugar-beet is also planted widely.

The Changpai mountain area is known for its mountain and forest specialties as well as for its timber. The extensive snow-wrapped forests yield three treasures: ginseng, antlers in the velvet, and sable. Ginseng roots and deer antlers are precious medicinals, and sable holds great value on the world market. The mountain inhabitants are now developing these three products on a large scale. Many farms have been set up for breeding sables and spotted deer and supplying pedigree stock to farms elsewhere. Both of these animals multiply rapidly in captivity. Ginseng is now cultivated on plantations.

## MACHINERY, CHEMICAL AND PAPER-MAKING INDUSTRIES

Kirin is rich in coal, iron-ore, oil-shale, copper and gold deposits, forest resources and hydro-electric potential. But industry has made marked progress only since liberation, with machinery and chemical industries in the lead. Changchun is the site of China's first modern motor works.

<sup>&</sup>lt;sup>1</sup> An autonomous *chou* is the administrative unit between the province (autonomous region) and the county (autonomous county).

The fertilizer, dyestuff and calcium carbide factories built in recent years send large quantities of their products to reinforce the industrial and agricultural development in other parts of the country. The big state-owned chemical works are supplemented by a host of smaller ones run by the people's communes.

The province's paper-making industry occupies an important position in the country. Big paper mills are located near the lumber centres — Kirin city, Yenki and Wangching. The bulrush that grows in profusion in the low-lying swamp areas of the northwestern plains is the main source of raw material in the paper mills in Paicheng and other places.

# CHANGCHUN — THE MOTOR CITY

Changchun, capital of Kirin, lies in the centre of the Northeast Plain. As the meeting point of the Changchun-Harbin, Changchun-Talien and Changchun-Tumen Railways, it links the northern and southern parts of the Northeast Region.

Changchun is one of China's major industrial cities. Southwest of it is the country's first motor works. It is a large modern factory, whose product, the "Liberation" lorry, is seen all over the country. Changchun also has many machine-building factories and recently it has erected a fairly sizable cotton mill.

As the provincial cultural centre, Changchun has many higher educational institutions, secondary schools, scientific research institutes and a film studio. The city's neat, broad streets are lined with trees. With its beautiful South Lake Park and tall buildings and factory chimneys shrouded in greenery, it is rightly called a garden city.

#### LIAONING PROVINCE

Liaoning lies south of Kirin and adjoins the Korean Democratic People's Republic in the southeast. The Liaotung Peninsula in the south is flanked by the Yellow and Pohai Seas, and faces the Shantung Peninsula across the Pohai Straits.

## HILLS, PLAINS AND RIVERS

Hilly terrain predominates in the eastern and western sections of the province. The eastern hills, mostly made up of the southern arm of the Changpai mountain area and the Chienshan system, have few peaks exceeding 1,000 metres. The Chienshan system extends into the Liaotung Peninsula, whose coastline is largely rugged and rocky, providing many inlets and harbours. The western hills are on the fringe of the Inner Mongolian Plateau. The land generally slants towards the Pohai Sea and the Northeast Plain. A long narrow plain, 10 kilometres wide in most parts, lies along the Pohai coast. This is the Liaohsi (Western Liaoning) Corridor, known in ancient times as an important passage through the Great Wall. Central Liaoning embraces the Liaoho Plain which is part of the Northeast Plain, formed mainly by the alluvial deposits of the Liaoho River.

The Liaoho, Liaoning's largest waterway, rises on the Inner Mongolian Plateau and empties into the Pohai at Yingkow. Of its total course of 1,400 kilometres, 540 kilometres flows through the province. Dry weather along its upper reaches and the destruction of the forest and grass cover under the past reactionary regimes are responsible for its heavy silt content and the heavy sedimentation on its lower reaches. As dykes were the only means of bridling the flood waters of the Liaoho where it winds across the alluvial plain, inundation was common. Now much has been done to strengthen the embankments along its main course and tributaries, to conserve water and soil in the mountain regions along the upper reaches, and plant shelter belts on the western Liaoho Plain. These measures have reduced the flood menace and helped to develop farm production

# A STRONG BASE FOR HEAVY INDUSTRY

Among the wide variety of mineral resources in Liaoning, iron-ore is present chiefly around Anshan, and coal in Fushun, Fuhsin and Penki, with deposits of manganese, limestone and refractory materials nearby. The close proximity of these raw materials provides favourable conditions for the growth of the iron and steel industry. Equally abundant are such non-ferrous minerals as copper, lead, zinc and magnesium, which are exploited for the province's machine-building industry.

During the Japanese occupation of the Northeast (1931-45), the Japanese imperialists were mainly interested in developing the ore-mining industry in

Liaoning. The metallurgical and machine-building industries also experienced a certain growth as suppliers of arms, but their foundation was weak and their equipment was poor. On the eve of liberation, the Kuomintang perpetrated such damage on industrial buildings and equipment that many factories and mines lay in ruins and production came almost to a complete standstill. These industries were rapidly restored after liberation, and since then a great number of important factories and mining enterprises have been built or reconstructed.

Liaoning has now, in the main, built up its industrial base with the Anshan Iron and Steel Works, the biggest iron and steel base in the country as a whole, as the core. The development of the iron and steel works has stimulated the growth of other industries, including ferrous and non-ferrous metallurgy, machine-building, coal-mining and chemicals. Penki, Lushun-Talien and Shenyang also have iron and steel plants.

Liaoning's machine-building industry is operated on a big scale. The city of Fushun is China's biggest coal centre as well as its biggest producer of artificial petroleum. Fuhsin too possesses rich coal reserves and has a large open-cut mine. Today, Liaoning contributes large quantities of machinery and rolled steel to the nation's industrial construction, together with a good number of technicians.

# AGRICULTURE AND LIGHT INDUSTRY

Liaoning has a developed agriculture which feeds its industrial population and provides raw materials for its industry. Giving onto the sea in the south, the province is favoured with a warmer climate than that of Heilungkiang and Kirin. A considerable portion of its territory is made up of hills and plains, the latter endowed with a fertile soil and washed by the Liaoho and other rivers. All these offer wide prospects for local agricultural development.

Maize, the prominent food crop, covers about onefifth of the area under grain and is grown mainly in the Liaotung Peninsula. Kaoliang flourishes in the northern and western plains. Water conservancy work has been undertaken on a large scale in recent years in the Liaoho Plain, noticeably enlarging the area under paddy rice and bringing about a rapid increase in its output.

Liaoning is the only cotton-producing province in the Northeast, with the crop distributed chiefly in the valley of the Taling River and along the lower Liaoho where temperatures are higher and the frostfree period is longer. The Liaotung Hills produce apples and tussah silk in great quantities.

A large cotton mill has been established in Chinhsien County and a silk mill in Antung, using local cotton and tussah silk as raw materials. A welldeveloped paper industry using the pulp produced in the three northeastern provinces has appeared in Antung, Shenyang and Yingkow. Talien serves as an important outlet for soya beans and soya-bean oil, and possesses an advanced oil-pressing industry.

## SHENYANG AND LUSHUN-TALIEN

Situated on the right bank of the Hunho River, a tributary of the Liaoho, Shenyang is the provincial

capital of Liaoning and the main railway junction in the southern part of the Northeast Region. It is the biggest industrial city of the region, and one of the most important machine-making centres in the whole country. With supplies of coal, iron and steel from Fushun, Penki and Anshan, plus locallyprocessed non-ferrous metals, Shenyang's machinery industry rests on a solid foundation.

Shenyang is also one of Liaoning's cultural centres, having many institutions of higher learning and scientific research.

North of the city is Peiling, the burial ground of some of the Ching emperors. Graced by tall pines as well as magnificent halls and pavilions, it was formerly marked off as an imperial preserve, but is now a popular tourist resort and a place for rest and convalescence for the working people.

At the southernmost tip of Liaoning, Lushun-Talien is an important industrial city embracing Talien, Lushun and several outlying counties.

Sheltered by the Talien Bay on the southern rim of the Liaotung Peninsula, the port of Talien has a wide and deep harbour that can accommodate large ocean-going vessels. It is ice-free all the year round. The port figures prominently in the water-borne traffic between the Northeast and the lower Yangtse and southeastern coastal areas. Talien is also one of China's major seaports for foreign trade.

As a well-known tourist and health resort, Talien has pleasant bathing beaches, such as the Tiger Beach and Hsinghai Park along the Yellow Sea and Hsiachiaho on the Pohai coast.

#### Chapter Nine

# THE MIDDLE AND LOWER YANGTSE REGION



This region is made up of the city of Shanghai and the provinces of Kiangsu, Anhwei, Chekiang, Kiangsi, Hunan and Hupeh. It has plains and hills. The plains the comprise bigger part of the Middle and Lower Yangtse Plain. They are

interspersed with the hills and criss-crossed by rivers and lakes. The hills are part of the Southeastern Hills. With the exception of Chekiang all the provinces in this region are drained by the Yangtse.

Lying for the most part south of the Chinling Mountains and the Huai River, this region has a sub-tropical humid climate. There is continual rain between spring and summer. Rice is the most important grain crop. With an abundance of rice, fish, shrimp and other aquatic products, the plains are called the "Land of Rice and Fish". The hilly areas are covered with sub-tropical forests of economic value, such as cedar and bamboo, and also produce tea and tung-oil in great quantities. The region holds an important place in the nation's farming, forestry and fresh-water fishery.

The pre-liberation industry was concentrated mainly in Shanghai and its few neighbouring cities. The industrial structure was far from complete and heavy industry was especially weak. A decade and more of industrial construction has brought about significant advances in all places, particularly in the inland areas.

The main course of the Yangtse is an excellent shipping route and its many tributaries are navigable, making this region the most developed in inland navigation.

## THE CITY OF SHANGHAI

Situated at the estuary of the Yangtse River and in the middle of the mainland coastline, Shanghai is the most flourishing city in China and one where industrial and commercial enterprises are concentrated. With an area of about 5,800 square kilometres and a population of about 10 million,<sup>1</sup> it is one of the biggest cities in the world.

## A HISTORY OF GLORIOUS STRUGGLES

The town of Shanghai was established 800 years ago. After the Opium War of 1840, it came under the iron heel of imperialism. Because of its favourable location, the imperialists chose it as a

<sup>&</sup>lt;sup>1</sup> In 1957 the population of Shanghai was 6,900,000. After the enlargement of the city area in 1958, it was about 10,000,000.

jumping-off point for further inroads into other parts of China. It was here that they forcibly set up foreign concessions, stationed troops, seized the Chinese maritime customs, and established banks and business firms. In collusion with Chinese feudal landlords and bureaucrat-capitalists, they engaged in speculative and criminal activities, lorded it over the Chinese people and ruthlessly fleeced them. Old Shanghai was also infested with a multitude of exploiters and parasites who looked upon this crimeridden port as an adventurers' paradise. To the labouring people, however, Shanghai was a hell on earth. Thousands were faced with insecurity and the constant threat of unemployment, and thousands had to struggle along on the verge of starvation.

During the long years of humiliation imposed upon it by the foreign imperialists and the reactionary rulers at home, Shanghai never bowed its head. It is the city with the greatest concentration of industrial workers. As one of the centres of China's revolutionary activities in the last century, it has a glorious revolutionary history.

On July 1, 1921 the great Chinese Communist Party was founded in Shanghai, and for a period its Central Committee had its headquarters here. From that time on, Shanghai's workers, students and the broad masses, led by the Party, waged incessant struggles against imperialism and domestic reaction. In 1925 the people of Shanghai launched the May 30th Movement against imperialist aggression and in protest against the killing of Chinese workers by Japanese imperialists. In 1926-27, co-ordinating with the Northern Expedition, Shanghai's workers, under the Communist Party's leadership, started three armed uprisings, dealing severe blows at the imperialist aggressors and Chinese warlords' forces. During the War of Resistance Against Japan and in the fight against U.S. imperialism and its lackeys, the Kuomintang reactionaries, the labouring people of this great city waged long and valiant struggles.

# A POWERFUL INDUSTRIAL BASE

Shanghai, with its forest of factories, is one of the most important industrial bases in China. Both heavy and light industries are well developed.

The industries of old Shanghai were semi-colonial in character. They were unevenly developed, and practically all the larger factories were owned by the imperialists or bureaucrat-capitalists. Industrial raw materials were mostly imported from abroad. Light industry producing consumer goods was by far larger than heavy industry. The handful of machinery plants simply served as assembling plants for machinery imported by the imperialists from abroad. They could not make complete sets of machinery.

Following liberation, with the expulsion of the imperialists, the confiscation of the bureaucratcapitalist enterprises and the socialist transformation of private industry and commerce, Shanghai's industries forged ahead.

Innovations and new construction of the last decade have brought about remarkable changes in Shanghai's industrial outlook. A dozen industrial districts, such as Minhang, Woosung and Pengpu, which have been built up or extended, have done much to remedy the inadequacies and overconcentration of the past. The ratio between heavy and light industries has also changed, with heavy industry now accounting for a far bigger portion of the total industrial output value than before. The technological level has risen rapidly. Many high-quality products, including precision instruments, are now made in Shanghai.

Shanghai's heavy industry today includes iron and steel, machine-building, non-ferrous, power generating and chemical enterprises. Iron and steel output has been raised quickly while rolled steel of various specifications has appeared. Machine-building plants turn out ocean-going steamships, motor vehicles, various types of machine tools and precision instruments. In light industry, Shanghai is known throughout the country for the quantity, quality and variety of its products. Its cotton, woollen and silk textiles, fountain pens and sewing machines enjoy a good reputation on the world market.

The local agricultural produce consists mainly of food grain, vegetables, poultry, meat and aquatic products. Cotton and oil-bearing crops are grown in profusion. In the last decade agriculture and its side-lines in the ten counties on Shanghai's outskirts have made big advances.

In the cultural, educational and scientific fields, there has been speedy progress. Many well-known institutes of higher learning and scientific research are located in Shanghai. Closely integrated with socialist construction, Shanghai's scientific research occupies an important place in the country as a whole.

As the junction of the south-north shipping route and with its favourable geographic position at the Yangtse estuary, Shanghai ranks first among China's ports in both domestic and foreign trade. During the 100 years the imperialists were entrenched in Shanghai, they controlled customs and pilotage. They grabbed raw materials, dumped their commodities and plundered the Chinese people, thus turning Shanghai into a port with the greatest import surplus in China. The victory of the Chinese people's revolution brought this humiliating situation to a close. Control of the customs was completely restored to the people and harbour administration was thoroughly overhauled. New China's pilots have taken up the duties which belong to the nation by right, skilfully guiding ships from all parts of the world into the Whangpoo River.

Alongside the advance of socialist construction and as Shanghai's industry looks towards the hinterland, its domestic trade has come to occupy **a** much bigger slice of the total trade turnover. The city has become an important clearing house for commodities from all parts of the country.

Foreign trade has also shown a steady increase. The character of its foreign trade has undergone a radical change, as is evidenced by the fact that its long-standing import surplus has been reversed. In the total volume of foreign trade, that with the socialist countries has increased, and industrial products constitute a far bigger proportion of the exports than before.

#### **KIANGSU PROVINCE**

Kiangsu lies on the coast between Shantung in the north and Chekiang in the south. It is situated on the lower reaches of the Yangtse and Huai Rivers and intersected by the Grand Canal from north to south. The greater part of the province is low-lying land composed of the Middle and Lower Huai Plain in the north and the Yangtse Delta in the south.

## FAMOUS "WATER COUNTRY"

This vast plain is dotted by lakes and criss-crossed by rivers. Here, in this famous "Water Country", travellers come across a canal or river every quarter kilometre. It is a province with the best developed inland navigation.

The network of waterways is made up in part by the new channels cut by the Yangtse and Huai Rivers as their old courses became partially silted up but mostly by canals dug by the local people as tributaries to connect natural rivers. Many new canals have been dug in the course of the large-scale conservancy projects undertaken since liberation.

The well-known Taihu Lake, 2,213 square kilometres in size, is located within Kiangsu Province. In many parts of its basin, a canal or river can be found every hundred metres.

These numerous waterways offer many advantages for navigation, irrigation, drainage, fishery, growing water-chestnuts and lotus-roots and as a source of sludge. The climate is temperate and humid with clearcut seasonal changes. Vegetation lasts from eight to nine months, yielding two crops a year. The soil is fertile, and much of it is suitable for rice-planting. The network of waterways is a great help to farming.

Rice, wheat, silk, cotton and rape-seed are the main farm products. The densely populated Taihu Lake basin with its beautifully farmed land is nationally famous for its rice and silk. It produces three or four crops of silkworms every year with Wusih and Soochow as the main silk-producing centres. In the Huai River Plain the area of paddy fields has multiplied rapidly since the river was harnessed and a series of water conservancy projects were built. This great project which was put under way soon after liberation has transformed this area whose farm production was once far below that of the Taihu basin. Dry land which mainly yielded wheat and coarse grain has given way to paddyfields and cotton plantations. In the past cottongrowing was chiefly concentrated along the Yangtse. With the development of irrigation, it is now grown over wide areas on the alkaline soil north of the Huai River and along the sea coast, supplying raw materials to the textile industry in Shanghai, Wusih and Nantung.

## WELL-DEVELOPED INDUSTRY

Light industry was fairly well developed in Kiangsu, even before liberation. Chinese capitalists had established a number of textile and foodprocessing enterprises in Wusih, Changchow, Soochow, Nantung and other cities fringing Shanghai. But these industries had a hard struggle to keep their heads above water under the pressure of imperialism and bureaucrat-capital. Since liberation they have been reorganized and expanded and many new factories have been set up. In accordance with local needs, cotton mills have been built in Yencheng, a new cotton-growing area, and oil-extracting plants in Huaiying and Hsuchow where oil-bearing crops are abundant. The geographical distribution of light industrial establishments has undergone a marked change.

Heavy industry has made big strides. Plants producing chemical fertilizer, acid and soda make use of the phosphates from Lienyunkang and the salt from the Huaipei salt works. The biggest chemical works, located in Nanking, sends nitrogenous and phosphate fertilizers to all parts of the country. In the machine-building industry, heavy machinery, steam turbine, tractor and motor vehicle plants have been built in and around Nanking and Wusih.

Kiangsu handicrafts, such as the pottery of Ihsing, and the clay figures of Wusih, brocade of Nanking, embroidery of Soochow and lace of many towns find a brisk demand both at home and abroad.

## NANKING

Kiangsu is a densely populated province, with a fairly developed industry and commerce. It is also a province with the biggest concentration of cities and towns. A traveller by train from Shanghai to Nanking will see a fairly large town every hour along the railway.

Nanking, the provincial capital, is the meeting point of three railways — Tientsin-Pukow, Shanghai-Nanking and Nanking-Wuhu. It is also an important port on the lower Yangtse, trains being ferried across here.

Before liberation, the city was the centre of the Kuomintang reactionary rule. Yuhuatai, on the southern outskirts, was the scene of the execution of over a hundred thousand revolutionaries. Now this execution ground has been turned into a cemetery for the martyrs of the revolution, a lasting memorial to the heroes who sacrificed their lives to bring the Chinese people the happiness they know today.

A decade of construction has changed Nanking from a consumer city into a flourishing city of production, with iron and steel, machine-building and the chemical industry making big headway.

Among the many places of historical interest in this old city are the Hsuanwu Lake, the Yentsechi, the Ming Tombs and the ruins of the palaces of the Taiping Heavenly Kingdom. At the southern foot of Tsechin Hill stands the Mausoleum of Sun Yatsen, China's great democratic revolutionary.

Nanking has many institutes of scientific research and higher education. The observatory on Tsechin Hill is one of the largest in the country. Near the Mausoleum of Sun Yat-sen is a botanical garden, established by the Chinese Academy of Sciences. Soochow, the historically famed city south of the Yangtse, lies in a beautiful landscape of hills and rivers. Overlooking the Taihu Lake, this garden city is known as "Paradise on Earth". Among the highpoints of architectural and scenic beauty are the pagoda on Huchiu Hill, the bells in the Hanshan Temple, the rainbow-like Paotai Bridge, the misty Shihhu Lake, the Chocheng Garden, the Lion Forest and the Tsanglang Pavilion.

Soochow is not only a tourist centre. It is now a city where both light and heavy industries are fairly well developed — particularly silk textiles.

Wusih is on the northern bank of the Taihu Lake. The Grand Canal cuts through its city district. It is the key point of water transport in the Taihu basin. It has both heavy and light industries, second only to Nanking in size.

The Taihu Lake south of Wusih is well known for its scenery. The 60-arch Paochieh Bridge spans the entrance to the lake, on whose shores now stand many trade union and state-run sanatoria for the use of the working people.

Hsuchow, a city in northwestern Kiangsu, at the junction of the Tientsin-Pukow and Lunghai Railways, commands the communication routes of Kiangsu, Shantung, Honan and Anhwei Provinces. On the basis of its coal industry, it has established iron and steel and machine-building enterprises, and has become an important industrial city.

#### **ANHWEI PROVINCE**

#### HUAIPEI, HUAINAN AND WANNAN

The Yangtse and Huai Rivers cut through Anhwei, dividing it into three areas from north to south— Huaipei, Huainan and Wannan.

The greater part of Huaipei, the area north of the Huai, consists of plain less than 50 metres above sea level. In the past it was almost all dry land, growing mainly wheat and sweet potatoes. With the basic completion of the Huai River harnessing project, particularly the extensive building of the irrigation canal networks, some of the dry land has been transformed into paddies.

Huainan, between the Yangtse and the Huai, is largely hilly with a small section of plain. The Tapieh Mountains in the west straddle the Anhwei-Honan and Anhwei-Hupeh borders. With many of their peaks rising to 500 metres above sea level, they offer excellent sites for reservoirs. On their slopes are produced bamboo, tea --- the Liuan green tea is especially well known — and oriental oak. These mountains were one of the old revolutionary bases where the Chinese Communist Party led the armed people in sustained struggles during the Second and Third Revolutionary Civil Wars (1927-37 and 1945-49). The greater part of the hilly area in eastern Anhwei is about 200 metres above sea level, interspersed with plains and valleys. Huainan abounds in lakes, the largest of which is the Chaohu. Minor waterways criss-cross the Chaohu Plain and irrigate this rice-growing area.

South of the Yangtse is Wannan, composed largely of hills on a higher elevation than those of Huainan. They range mostly from 600 to 900 metres above sea level, the summit of Huangshan, a mountain of granite, rising to 1,841 metres. Huangshan's majestic scenery has been a favourite theme of poets since ancient times. Wannan has a temperate climate with plenty of rainfall, which provides fine conditions for the development of agriculture and the growth of sub-tropical forests of economic value. The fairly large plain in the Chingyi River basin is an important rice-growing district. Chimen and Tunhsi are well known for their tea.

## COAL, AND IRON AND STEEL INDUSTRIES

Anhwei is rich in coal and iron-ore. Huainan has a large coal-field while Wannan and Huaipei have abundant mineral resources. Wannan's Maanshan is the centre of iron-ore deposits and iron pyrites.

The backward industry of pre-liberation years did not call for any serious exploitation of the mineral resources. The Huainan coal-mine which was among the first to be opened up had poor equipment and a low production capacity. Energetic reorganization and expansion after liberation turned it into one of the biggest collieries in the country. It now supplies Shanghai, Kiangsu and Chekiang, relieving northern China of much of the burden of shipping coal south.

For the last ten years and more, iron and steel and machine-building enterprises have been established in Maanshan, Huainan, Hofei, Wuhu, Pengpu and other cities. The Maanshan Iron and Steel Works near Nanking is an important iron and steel base on the lower Yangtse.

With local sources for their raw materials Anhwei's light industries, such as textiles, tea and cigarette-making, have made big strides. Chinghsien County has increased its production of the famous *hsuan* paper that is so sought after by artists of traditional Chinese painting.

## HOFEI AND PENGPU

The one-time shabby town of Hofei in the centre of the province, with its single-storey buildings and nothing much in the way of industry barring a couple of smithies, a bit of hand weaving, some oil extracting and a few other handicrafts, is now the capital of Anhwei Province, its political, economic and cultural centre. New industries have come into being, including iron and steel, mining equipment, generators, machine tools and cotton textiles. Well-equipped institutes of higher learning have appeared, together with well-paved streets lined with new houses.

Pengpu stands at a convenient point for water and land transport routes, where the Huai River meets the Tientsin-Pukow Railway. The agricultural and side-line products of the Huai River basin are channelled through Pengpu for other parts of the country. Light industry using farm products as raw materials is fairly well developed.

#### CHEKIANG PROVINCE

Chekiang is a relatively small province on China's southeastern coast. It has a rugged coastline with many offshore islands and good harbours.

## THE CHIENTANG RIVER AND ITS BORE

The 410-kilometre Chientang River is the longest waterway in the province. It rises as the Hsinan River on the border of Chekiang and Anhwei, flowing south and then turning northeast. The winding course gives rise to the name *Chihkiang* (Zigzag River) from which is derived *Chekiang*. The section of the river passing through Fuyang County is called the Fuchun. This section, together with the Chililung, the upriver in Tunglu County, is one of the most beautiful, with clear waters flowing between green hills. From Hangchow on it is known as the Chientang. The largest of its tributaries is the picturesque Sinankiang River from southern Anhwei.

The rivers of Chekiang, although not very long, carry a good flow. Hydro-power constitutes a large part of the total electric power produced in the province.

The estuary of the Chientang is shallow, and widens out as it flows into Hangchow Bay. The incoming tide therefore rises to a great height. The white waves present a grand sight as they roll up the estuary. This is the famous Chientang bore; the difference between high and low tides may be as much as nine metres. The bore also offers big possibilities for the development of water power. Chekiang is divided into western and eastern sections by the Chientang River. There are some geographical differences between the two. The western section is relatively low-lying, with large areas of plain, and few islands off its short sea coast. The eastern is largely uplands and the coastline is long, with a great many offshore islands.

Travelling southwest by train from Shanghai, one crosses the Kiangsu-Chekiang border into the northernmost part of western Chekiang. From the town of Kashing south to Hangchow and west to Huchow lies a triangular fertile plain criss-crossed by rivers, which is known as the Hangchow-Kashing-Huchow Plain. Like the Southern Kiangsu Plain, it belongs to the Taihu Lake basin. With extensive rice and rape fields, and prolific plantations of mulberry, hemp and cotton, it is the most important farming area in the province. The plain is densely populated, with many cities and towns, of which Hangchow, Kashing and Huchow are the biggest.

Besides making use of every bit of land, the peasants of the Hangchow-Kashing-Huchow Plain make full use of all the other rural resources. Ponds and lakes are stocked with fish, grass from the wayside and old mulberry leaves go for sheep and cattle fodder; sheep and cow dung is fed to fish, and sludge from the ponds and lakes goes to manure the soil. The "lake sheep", with their valuable soft white wool, are a native breed of the lake district here.

West of the plain the land rises gradually. The Tienmu and Mokan Mountains are both famous for their thick forests, tall bamboos and big output of tea. The Mokan Mountain, 60 kilometres from Hangchow, is a well-known summer resort.

To the east of the Chientang River Bridge across Hangchow is Shaohsing, home town of Lu Hsun, modern China's great writer. Further east is Ningpo, the largest city in eastern Chekiang. The long, narrow plain between Shaohsing and Ningpo, the Ningpo-Shaohsing Plain, is eastern Chekiang's most important agricultural area, producing rice, cotton and jute in abundance.

South of Ningpo along the sea coast are numerous bays, harbours and islands. Ocean-going ships can enter Hsiangshan Harbour, Sanmen Bay and Wenchow Bay. The Choushan Archipelago is an important fishing ground.

There are many picturesque mountains in eastern Chekiang, such as the Hsienhsia, the Kuatsang and the Yentang. Mount Yentang, whose summit towers 1,001 metres above sea level, stands on the coast. It is known for the beauty of its peaks, waterfalls, bamboo groves and flowers.

The mountain areas of eastern Chekiang are rich in timber and minerals, the best known are the timber from the Oukiang River basin, the Shaohsing tea and the alum from Pingyang. Winter is rather warm in the southern part of eastern Chekiang because the mountain ranges serve to block the advance of the cold waves from the north. Here sugar-cane, citrus fruit and other sub-tropical products are plentiful. The oranges of Huangyen County are nationally famous. Now in southeastern Chekiang, after two harvests of rice have been gathered, rape-seed or green manure can also be raised. Chekiang produces more tea and bamboo than any other province in China, while its special products include bamboo-shoots, the Shaohsing wine, and the Chinhua ham.

## BEAUTIFUL HANGCHOW

Hangchow stands on the northern bank of the lower Chientang River, at the southern extreme of the Grand Canal and the junction of the Shanghai-Hangchow and Chekiang-Kiangsi Railways. It was once the national capital of the Southern Sung Dynasty (1127-1279) and an important port for foreign trade.

Of the lakes among the hills around Hangchow the West Lake west of the city is the most beautiful. This body of water was originally a gulf of the sea, which later turned into a lake when its outlet became silted up. The scenery of the lake has been known to the world since the days of the Tang Dynasty (618-907).

The West Lake, with its clear waters, lies among green hills liberally wooded with flowering trees. The many points of interest on and around the lake include the Interrupting Bridge, the Pai Chu-yi Causeway, the Three Pools That Mirror the Moon, the Su Tung-po Causeway, the Mid-Lake Pavilion and the Two Cloud-Piercing Peaks. The work that has been done since liberation in the way of tree and shrub planting, landscape gardening and restoration of historical structures has revived some of the old beauties of the lake and revealed new ones. There are many other beauty spots in and around this garden city. The luxurious villas and mansions in and around Hangchow were once occupied by the feudal rulers, officials and compradors who battened on the people. Most of these are now rest homes or sanatoria for the working people. Hangchow, with its beautiful surroundings, is an ideal place for convalescence.

Long known as China's "silk city", Hangchow produces silk, satins, brocades, silk parasols, sandalwood fans and other handicraft articles. The woven silk pictures are well known abroad.

Both heavy and light industries have been speedily developed in Hangchow since liberation. Among the new factories are iron and steel works, machinebuilding plants, and silk-weaving and bast fibre mills. Hangchow is now an industrial city as well as a tourist centre.

The fertile soil and abundant rainfall combine to produce a high yield from agriculture, whose products, apart from rice, include jute, silkworm cocoons, cotton and the world-famous Lungching green tea.

## NINGPO AND WENCHOW

Ningpo, which was known in ancient times as Mingchow, has been an overseas trading port since the Tang Dynasty. This largest city in eastern Chekiang and centre of land and water transportation has a regular steamship service from Shanghai. It has textile and food-processing enterprises, one of whose main exports is canned bamboo-shoots cooked in oil.

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Wenchow is an important port and fishing ground in southeastern Chekiang, on the southern bank of the lower Oukiang River. Although it lies 20 kilometres from the sea, it is accessible to oceangoing ships. Among its industries are food-processing (chiefly condensed milk), paper-making (chiefly stencil paper), leather goods, straw mattress and paper parasols.

## **KIANGSI PROVINCE**

Southwest of Chekiang is Kiangsi Province which is bordered by mountains on the east, west and south, the land generally sloping towards the Poyang Lake in the north. The Wuyi Mountains lie on the east, the Wanyang and Chiuling Mountains on the west and the Tayu and Chiulien Mountains on the south.

## THE KANKIANG RIVER AND THE POYANG LAKE

Almost all rivers in Kiangsi belong to the Poyang Lake drainage system. The largest is the Kankiang which collects the waters of its tributaries from the east, south and west and empties them into the Poyang Lake. The Pokiang, Hsinkiang and Hsiushui also flow into the lake.

The Kankiang is largely navigable. The water power potential on its upper reaches and tributaries is now being exploited. The post road through the valleys along the Kankiang was the ancient northsouth artery in southeastern China, the main highway between Peking and Canton. The Poyang Lake, which covers 5,100 square kilometres in the flood season, is the largest freshwater lake in the country. Its warm waters and abundance of water-plants make it a natural fishbreeding ground.

Apart from the mountainous regions on the border, the province consists of low-lying hill country. Along the lower reaches of the rivers, the hills give onto broad valley plains, the largest of which is that surrounding the Poyang Lake.

Northwest of the Poyang Lake is Lushan Mountain, a famous summer resort and convalescent spot. Surrounded by low-lying land, lakes and waterways, Lushan rises imposingly to 1,426 metres above sea level. Its peaks are constantly enveloped in clouds and mist, a breeze from any direction bringing rain. As a popular saying goes: "The real face of Lushan is rarely seen!"

# A LAND OF RICE AND TANGERINES

Since Kiangsi lies a few hundred kilometres inland in the central part of the sub-tropical zone, the summers are fairly hot. The winters are moderated by the protection from the cold waves given by the Tapieh Mountains on the north. As vegetation lasts from nine to eleven months, two crops of rice can be raised. The area sown to rice amounts to fourfifths of the total area sown to all food crops. Kiangsi is one of the main rice-producing provinces in the country, and exports a big surplus to other provinces.

Tangerines grow in abundance in the central and southern parts of Kiangsi. The tiny Nanfeng seedless tangerine is famous for its delectable flavour and as a good keeper. In the old days it was sent to the imperial court as tribute.

# CONSTRUCTIVE WORK IN THE MOUNTAIN AREAS

The mountain forests are made up mostly of horse-tail pines, cedar and camphor. Most of these woods are floated down the Kankiang to mills in various places of the province, while some are rafted down the river all the way to the Yangtse to supply the mills in other parts of the country.

Kiangsi was the revolutionary centre during the Second Revolutionary Civil War. Most of the mountain areas were revolutionary bases. After the Red Army embarked on the Long March in 1934, the Kuomintang reactionaries moved once again into these areas, leaving a trail of burnt homes and blood in their path. The population of the areas dropped sharply, and the land was left untilled. Those who remained eked out a hand-to-mouth existence and kept up their struggle against their rulers. After liberation, the glorious revolutionary tradition was further developed when a large number of government functionaries and people from the cities moved into these mountain areas and together with the mountain inhabitants built up hundreds of farms and engaged in various other branches of production like forestry, livestock-raising and industrial undertakings. Communications have been developed and new mountain districts have been built on socialist lines. Big farms have appeared in such famous old revolutionary bases as the Chingkang Mountains in the southwest of the province and the Tamao Mountains in the northeast.

# COAL AND PORCELAIN

As one of the important coal producing provinces in southern China, Kiangsi has many mines, among which the Pinghsiang is the oldest. Since liberation, the Fengcheng and a number of medium-sized and smaller ones have been opened. Both the Pinghsiang and the Fengcheng have easy access to transport, being near the Chekiang-Kiangsi Railway.

Coal-mining was for many years the main modern industry in Kiangsi, although backward in technique and equipment. Considerable progress has now been made in ore-mining while other branches of industry, such as iron and steel, machine-building and textiles, have been set up.

The Chingtehchen porcelain kilns have been famous for centuries for the excellence of their products. The town has long been called the "porcelain capital". Deposits of fine clay for porcelain making are available in its vicinity. The industry is being gradually mechanized and is turning out better quality porcelain than ever before for both domestic and foreign markets.

Yichun and Wantsai produce grass-linen, another distinctive handicraft product.

## THE CHINGKANG MOUNTAINS, THE CRADLE OF THE REVOLUTION

Situated at the northern extreme of the Wanyang Range, Chingkang Mountains, some of whose peaks rise to 1,700 metres above sea level, command a highly strategic position.

In 1927 the Chinese Workers' and Peasants' Red Army, led by Mao Tse-tung, leader of the Chinese people, built the first armed revolutionary base here, which, straddling the Kiangsi-Hunan border, covered 270 kilometres in circumference. With the rapid growth of the revolutionary movement, more bases were established in other areas. In 1929 the Central Soviet Government was set up in Juichin, southern Kiangsi. At the height of its development, the Soviet area embraced two-thirds of the province and over a half of its population. In 1934 the Red Army pulled out of Kiangsi and embarked on the historic Long March northwards to resist Japan.

The sparks of revolution spread from the Chingkang Mountains to other parts of the country. As the cradle of the revolution, this range has written a glorious page in the history of the Chinese people's liberation.

## NANCHANG, BIRTHPLACE OF THE CHINESE PEOPLE'S LIBERATION ARMY

Nanchang, capital of Kiangsi Province, stands at the point where the Kankiang River meets the Nanchang-Kiukiang Railway. Kiukiang, a wellknown old port on the Yangtse, lies north of Nanchang whence the Chekiang-Kiangsi Railway extends south to Hunan and Chekiang Provinces. The provincial capital has become an important industrial centre, with tractors and insecticides as the chief products.

Nanchang is a city with glorious revolutionary traditions. It was here that the revolutionary armed

forces under the leadership of the Chinese Communist Party were first built up. On August 1, 1927 Chou En-lai, Chu Teh, Yeh Ting, Ho Lung and others led 30,000 troops of the Northern Expeditionary Army, who had come under the Chinese Communists' influence, to stage an armed uprising. The general headquarters of the uprising has now been made into a memorial hall.

Up the Kankiang River from Nanchang is Kanchow, the largest city in southern Kiangsi at the confluence of the Changshui and Kungshui Rivers. The ancient road southwestwards through the Tayuling Pass to Kwangtung has been turned into a fine highway. Eastwards the Kungshui valley road leads to Juichin, the Red capital of the early years.

#### HUNAN PROVINCE

Hunan means "south of the lake", for most of the province lies to the south of the Tungting Lake. Nearly all the waterways of the province belong to the drainage system of the Tungting, and the four big rivers — the Hsiangkiang, the Yuankiang, the Tseshui and the Lishui — all enter the lake.

With mountainous areas in the east, west and south, the land generally slopes towards a big plain around the Tungting Lake in the north. The principal mountains are the Nanling in the south, the Hsuehfeng in the west and the Wukung in the east. Among the hills in central Hunan the Hengshan stands out prominently. This range runs for 80 kilometres with 72 peaks, the highest of which rises to 1,266 metres above sea level. posits are found mainly in southern Hunan. Machine tools, generators and mining machinery are the main products of the fast-developing machine-building industry.

Many light industrial enterprises have sprung up in recent years, among them a ramie mill in Chuchow, a cotton mill in Hsiangtan, and a paper mill and a meat cannery in Changsha. Rice-milling and tea-processing have expanded rapidly in various localities.

Handicrafts include the well-known porcelain of Liling, the grass-linen of Liuyang, Hunan embroidery and umbrellas of Changsha. The Hunan embroidery rivals that of Soochow.

The Peking-Canton Railway passes through Changsha, the provincial capital, which stands on the eastern bank of the lower Hsiangkiang River. Rice, hogs, tea-oil and other agricultural and forestry products from the Hsiangkiang basin are channelled through Changsha to other parts. It is also the biggest city of the province, and possesses a high concentration of light industry. Its heavy industry is in process of steady development. On the western bank of the Hsiangkiang across from Changsha is the beautiful Yolu Mountain, now also an educational district. Here stand the ruins of the Lushan Academy, one of the four famous academies of ancient times.

Some 40 kilometres south of Changsha at the confluence of the Hsiangkiang and its tributary, the Lienshui, is Hsiangtan, an important city of central Hunan long known as a centre for medicinal herbs. Today it is an industrial city. Shaoshanchung, the
hometown of Mao Tse-tung, lies 45 kilometres west of Hsiangtan. People come from all parts of the world to see the home of the great leader of the Chinese people.

### HUPEH PROVINCE

Like Hunan, the province derives its name from its position in relation to the Tungting Lake, Hupeh meaning "north of the lake". Wuhan, the biggest city on the middle reaches of the Yangtse, is its capital.

The western part of Hupeh is made up of highlands of about 1,000 metres above sea level, whose principal ranges are the Wushan and the Wutang. The greater part of eastern Hupeh is composed of the Yangtse-Hanshui Plain, which is fringed by the Tungpo Mountains on the Hupeh-Honan border, the Tapieh Mountains on the Hupeh-Anhwei border, and the Mufu Mountains on the Hupeh-Kiangsi border.

The southern section of the Yangtse-Hanshui Plain gives onto the Tungting Plain in Hunan. In ancient times, this stretch of plain was a big lake. Centuries of accumulation of silt turned it into land, interspersed with the numerous lakes for which Hupeh is so well known.

The Yangtse-Hanshui Plain is a natural fishbreeding ground, and an important fresh-water fishery centre for the country as a whole. The western section of the Yangtse within the province is famous for its exports of fish-fry — black carp, Chinese ide, silver carp and big-headed carp.

The Tungting Lake is the second largest freshwater lake in the country. It is joined to the Yangtse by a number of waterways and acts as a regulator to the Yangtse's flow. Before liberation, the silt from the Yangtse, Hsiangkiang, Tseshui, Yuankiang and Lishui Rivers was allowed to accumulate. Over the years, the feudal landlords seized and reclaimed the silted land, gradually reducing the size of the lake and causing frequent floods. The construction of the Chingkiang flood diversion project in Hupeh Province after liberation reduced the flood menace from the Yangtse. This project, coupled with the strengthening of the dams and embankments along the lake and the dredging of its waterways, provides protection to the vast tracts of farmland and ensures a more steady yield.

In western Hunan live some national minorities the Miaos, the Tuchias and others. After liberation an autonomous *chou* was set up in a region where they live in a compact community.

### LAND OF PLENTY

Cultivation of the plains and hilly regions of Hunan began early in Chinese history. During the Warring States Period (475-221 B.C.) Changsha was already an important city. In the Yuan (1271-1368) and Ming (1368-1644) Dynasties, Hunan and Hupeh administratively belonged to Hukuang Province, an important grain-producing area. Millions of piculs of grain, mostly from Hukuang, were shipped to Peking through the Grand Canal. The old Chinese saying "When Hupeh and Hunan reap a good harvest, it is enough to feed the whole country" illustrates the position Hukuang occupied in food production.

Hunan is still known as one of China's major grain-producers. Every year large quantities of rice are shipped from here to other parts of the country. With the exception of western Hunan, where dry land is prevalent, paddy fields account for most of the cultivated land on the plains and in the hilly regions. The biggest output of rice comes from the Tungting Plain and the middle and lower reaches of the Hsiangkiang.

Other important crops include rape-seed and ramie. Tea is grown mainly in the central and northeastern hilly regions, black tea being an important item of export. Tung-oil, another important export item, is produced in the hilly regions in the west. The tea-oil trees which provide the edible oil that is so popular in Hunan are found mostly in the low hilly regions.

Hunan is also an important timber-producing province of southern China. A big variety of woods, predominantly cedar, are produced in the mountains of western and southern Hunan. The cedar from the Yuankiang basin and the upper reaches of the Hsiangkiang is rafted downstream across the Tungting Lake and into the Yangtse to supply other provinces.

#### INDUSTRIES AND CITIES

Hunan has rich mineral resources favourable to industrial development. Since liberation both heavy and light industries have expanded. Non-ferrous metals include antimony, lead, and zinc. Coal deposits are found mainly in southern Hunan. Machine tools, generators and mining machinery are the main products of the fast-developing machine-building industry.

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Most of the rivers in Hupeh rise in the mountains and hills and flow down onto the plains and into the Yangtse. The biggest river is the Hanshui. After reaching the Yangtse-Hanshui Plain, the Yangtse flows slowly and deposits much silt. Before liberation floods were frequent. Particularly in the Chingkiang section, where the course is winding and the river-bed is higher than the surrounding fields, the high-water season usually spelt disaster. After liberation, the embankment on the northern bank of the Chingkiang was reinforced and a flood diversion project was built on its southern bank. On the lower reaches of the Hanshui, the Tuchiatai flood diversion project was completed. As a result of these measures, the flood menace was greatly reduced.

### A SUB-TROPICAL CLIMATE AND AGRICULTURE

Hupeh lies in the northern sub-tropical zone and generally has a warm and humid climate with clearcut seasonal changes. With the exception of the western mountain areas, Hupeh has hot summers, especially in the Yangtse-Hanshui Plain where the average summer temperature in Wuhan is higher than that of Canton. In winter the cold waves from the north send the mercury dropping sharply. The province has an average annual precipitation of 1,000 mm.

The low-lying land and the humid and warm climate in the Yangtse-Hanshui Plain makes for ideal conditions for rice-growing. Like the Tungting Plain in Hunan, this area is also known as a "rice-bowl". The Hanshui basin is one of the important cotton areas on the middle reaches of the Yangtse. Northern and western Hupeh produce much wheat and sesame while southeastern Hupeh is one of the country's main producers of ramie. Among the many trees of economic value grown in the hilly and mountainous regions are tea and tungoil. Lacquer is also produced in these regions.

### WUHAN AND THE YANGTSE BRIDGE

At the confluence of the Yangtse and its largest tributary, the Hanshui, stands the provincial capital of Wuhan, divided by these two waterways into three parts — Wuchang, Hankow and Hanyang.

Standing at the junction of several main inland shipping routes, Wuhan has been known since ancient times as the "crossroads of nine provinces". Though on the middle reaches of the Yangtse, it can be reached by big ocean-going ships in summer as the river here is broad and deep. As a centre of convenient rail and water communications, it stands almost halfway between Peking in the north and Canton in the south, and between Shanghai in the east and Chungking in the west.

The historically famous Wuchang is the site of the outbreak of the Revolution of 1911 inspired by Sun Yat-sen which led to the overthrow of the feudal monarchy of the Ching Dynasty. It is an important historical site of China's democratic revolution.

Since liberation the Wuhan Iron and Steel Works has been built, followed by other industrial enterprises for the making of machine tools, transport equipment and agricultural machinery. Textiles and food-processing are also quite well developed. Wuhan has become an important industrial base on the middle reaches of the Yangtse.

There are many institutes of higher learning and scientific research in Wuhan, among them Wuhan University on the Lochia Hill by the East Lake. Wuhan is also a well-known tourist city with many places of historical interest, such as the Tower of the Yellow Crane in Wuchang overlooking the Yangtse and the Ancient Lute Pavilion in Hanyang.

The separation of the three parts of the city by wide rivers was over many years a source of great inconvenience to the people and a serious barrier to north-south traffic. To bridge the Yangtse had long been the dream of the Chinese people, particularly those who lived in Wuhan. It was only after liberation that this engineering feat was accomplished. The Yangtse Bridge, completed in 1957, has two decks, the upper for motor vehicles and pedestrians, the lower carrying a double-track railway. Below it, ships of several thousand tons can pass, even in the high-water season. Its completion has greatly facilitated national construction.





Glaciers in the Kunlun Mountains





The Yangtse Gorges





The Great Wall

# The Yunkang Grottoes, Shansi





An Iron and Steel Base in the Northeast



Shanghai Waterfront







On the Likiang River, Kwangsi

Forests in the Southwest





Grazing in the Tienshan Mountains





# Chapter Ten THE SOUTH CHINA REGION



This region consists of Fukien. and Taiwan Kwangtung Provand the inces Kwangsi Chuang Autonomous Region, all in the tropical or subtropical zones. Here summers long and are winters are mild, and plants are all green the

year round. Most parts of the region yield more than one crop of rice in a year. Sugar-cane, sisal hemp, oil palms and tropical fruits grow in abundance.

Highlands and hilly regions are extensive, but with the exception of the Taiwan Range most of them are less than 500 metres above sea level. Interspersed among the hills are many basins and broad valleys. The plains, which are fairly small, lie mostly along the sea; the better known are the Pearl River Delta (or Canton Delta) and the plain in western Taiwan. With the exception of the Pearl and the Minkiang, all the rivers run short courses but are rich in hydro-electric power potential.

Kwangtung and Fukien have indented coasts and numerous islands while Taiwan has many lesser islands in its vicinity. These geographical features offer good conditions for strengthening national defence and developing marine enterprises. However, U.S. imperialism is still supporting the Chiang Kaishek clique, long ago discarded by the Chinese people, to entrench in Taiwan, Penghu, Quemoy and Matsu, using military force to occupy the Chinese territory of Taiwan and the Penghu Islands, and threatening China's security.

Light industrial establishments using farm and forestry products as raw materials, such as sugar and paper mills, have been set up in Fukien, Kwangtung and Kwangsi since liberation. Heavy industry has made rapid progress, especially non-ferrous metals, machine-building and iron and steel. On the other hand, in Taiwan, under U.S.-Chiang occupation, the economy is on the brink of ruin and the people reduced to misery.

Being on the seaboard, the South China Region has had close contacts with other countries since early times. Most of the Chinese residing abroad come from this region.

### FUKIEN PROVINCE

Fukien gives onto the sea on the east, and faces Taiwan Province across the Taiwan Straits. During the Second Revolutionary Civil War many places in western Fukien adjacent to Kiangsi Province were revolutionary bases. Lying as it does in the area of the Southeastern Hills, Fukien is hilly and mountainous, with the exception of a few coastal delta plains on the lower reaches of the rivers. The principal ranges are the Wuyi and the Taiyun which run in a northeastsouthwest direction roughly parallel to the coast. After long erosion only a few peaks exceed 1,500 metres above sea level. The hills rising abruptly along the sea form a rugged coastline with many natural harbours, and over 600 islands offshore. Among the better known islands are the Tungshan, the Greater Quemoy and the Matsu.

The rivers rise not far from the sea, and the longest is the Minkiang. Thanks to a generous rainfall, although the area of the Minkiang basin is less than one-tenth that of the Yellow River, the volume of the flow of the Minkiang into the sea is 30 per cent more than that of the Yellow River. As the main rivers flow mostly at right angles or diagonal to the ranges, gorges and rapids are formed where the streams cut through the mountains, offering good sites for building check dams and favourable conditions for the development of hydro-electric power.

Before liberation Fukien had no railway and of all the coastal provinces it was the one that lent itself least to the construction of communications. After liberation the Yingtan-Amoy and Nanping-Foochow Railways were built. The former, starting from Yingtan in Kiangsi, is 697 kilometres long, running mainly through Fukien. The engineering work involved difficult tunnelling and the building of a long embankment across the sea to Amoy. The Nanping-Foochow Railway, whose route lies almost entirely along the Minkiang valley, also involved much difficult engineering work in its building. The two lines link up the highways and inland shipping routes in the province to form main arteries between the principal cities. The Yingtan-Amoy Railway transports timber, fruits and other local products out of the province and brings in industrial and consumer goods.

### SUB-TROPICAL FARM AND FORESTRY PRODUCTS, AND INDUSTRIES

With the exception in the northwestern highlands, the climate is generally warm and the period of vegetation is long. Two crops of rice are grown a year on the plains and in valleys where irrigation is good. The dry lands are planted mainly to sweet potato and maize. South of the Taiyun Mountains where it is still warmer, sugar-cane and sub-tropical fruits are grown in abundance. Here fresh fruits like longans, lichees, oranges, pomelos and pineapples are available all the year round.

In the past Fukien's industry was extremely backward. The output value of modern industry was less than one per cent of the total value of the industrial and agricultural output. Now both heavy and light industries have made much headway, in particular, the sugar and paper-making industries. Large sugar refineries have been set up in the sugar-cane areas of Hsienyu and Changchow, and big paper-mills in Nanping and Foochow where the timber of the Minkiang basin is collected and distributed. The highlands with their warm and humid climate provide excellent conditions for developing forestry, and contain both natural forests and tree plantations. On the higher uplands, such as the Wuyi and Taiyun Mountains, are large tracts of cedar, bamboo and horse-tail pine. In recent years fast-growing eucalyptuses have been extensively planted. Fukien is a richly forested and famous tea-growing province and is particularly well known for its Wuyi tea.

# FOOCHOW AND AMOY

Foochow, the provincial capital and terminus of the Nanping-Foochow Railway, stands on the lower Minkiang plain. It is connected by coastal shipping through Mamoi with the other ports in Fukien and with Shanghai and Canton. Mamoi lies on the coast 25 kilometres to the east of Foochow.

The provincial capital was formerly known as a handicraft city, producing lacquerware, woodcarving pictures and horn combs. Machine-building, paper-making and chemical industries have now been established here.

Kushan (Drum Hill) to the east of the city is a tourist centre and summer resort. A fine view of Foochow and the Taiwan Straits can be obtained from its summit, 1,000 metres above sea level.

Amoy in southern Fukien lies at the mouth of the Chiulung River. Before the building of the railway embankment connected Amoy with the mainland, it was an island. Quemoy, Tatan and other islands lie off its coast. It has a broad, deep and ice-free harbour with natural windbreaks, which can accommodate ocean-going ships. With its beautiful trees and gardens and delightful surroundings, Amoy is an exceptionally attractive seaside city. Kulangsu, a small islet to the west of Amoy, is particularly well known for its flowers and beautiful scenery.

Not a few cities and counties in southern Fukien are the hometowns of overseas Chinese. Amoy University has many students who have returned from abroad.

### TAIWAN PROVINCE

Across the sea from Fukien is Taiwan Province. Keelung, on the northern coast of Taiwan Island, lies only 270 kilometres from Foochow. Taiwan Province includes the island of Taiwan, the Penghu Islands and the nearby smaller islands with a total area of 36,000 square kilometres and a population of 10,100,000 - 98 per cent Hans and the rest Kaoshans.

Taiwan, the Penghus and the other islands have been Chinese territory since ancient times. As early as the 3rd century large-scale immigration from the continental coast to Taiwan was taking place. In the centuries that followed more people went across from Fukien, Kwangtung and other places. They worked industriously to reclaim and cultivate the land, and by the early 18th century their labour had produced a prosperous agricultural economy.

In 1895, after the Sino-Japanese War, the Japanese imperialists forcibly occupied Taiwan. Many a time the people of the island launched armed struggles against the aggressors. In 1945 with the victory of the War of Resistance Against Japan, Taiwan was returned to China. But when the Chiang Kai-shek clique was driven out of the mainland, they entrenched themselves in Taiwan, and under the protection of U.S. imperialism they continued their hostilities against the Chinese people. In 1950 while launching its war of aggression in Korea U.S. imperialism, without any legitimate justification, sent armed forces to occupy Taiwan. As Taiwan is an inalienable part of Chinese territory, the Chinese people are determined to liberate it and thus complete the national unification.

# AN ISLAND OF RICH RESOURCES

The island is shaped like a spindle, longer from north to south than from east to west. Two-thirds of it is mountainous while stretches of fairly broad plain lie along the western coast. Taiwan's chief mountain range, sharing the name of the island, roughly trends north-south, sprawling vertically throughout the island to form its backbone. Of its many peaks, Yushan, 3,950 metres above sea level, is the highest on the island and in eastern China.

Among the mineral resources coal, petroleum and gold are well known — coal mainly in the northern part, petroleum at the foot of the western mountains and gold in the northeastern corner.

As central Taiwan lies across the Tropic of Cancer, the province is fairly equally distributed within the tropical and sub-tropical zones. Rice, sugarcane, bananas, pineapples and coconuts all grow well here. Since the mountainous areas enjoy abundant precipitation, the rivers, though short, have a big volume of flow, and therefore offer great hydropower potential. The largest river is the Choshuihsi. On its upper reaches is Jihyuehtan, famous for its scenery. The largest hydro-electric station in Taiwan is located here.

Surrounded by the sea and benefited by warm currents, high temperatures, constant humidity and plenty of rainfall, the island has a flourishing vegetation. Forests of considerable size are found in the mountains, chiefly of camphor tree and spruce. Taiwan is the biggest camphor producer in the world.

#### INDUSTRY AND AGRICULTURE UNDER U.S.-CHIANG PLUNDER

A quarter of the total land area of the island is cultivated, with rice and sugar-cane as the chief crops. Rice is grown mainly on the western plains and is usually double-cropped. Most of the land is owned by landlords or bureaucrat-capitalists. The peasants are ruthlessly exploited and their lot has become steadily worse in recent years. Shortage of artificial fertilizer and lack of irrigation facilities have caused a continuous drop in the output of rice. In total disregard of the hunger of the people, the Chiang Kai-shek clique uses all kinds of methods to extort rice to support its army and for export to Japan. The area planted to sugar-cane, mainly in the southwest of the island, has also shrunk in recent years.

Sugar-refining is the principal industry, with an output value constituting 50 per cent of the total value of Taiwan's industrial output. Most of the refineries are located in southern and central Taiwan. On account of U.S. imperialist control of the capitalist world sugar market, the export of Taiwan sugar has met with difficulties and its annual production has sharply dropped. Other industries — coal, ship-building, aluminium, petroleum and paper-making — are all controlled by American monopoly capital.

Taipei, the largest city in Taiwan, is at the centre of the Taipei Basin. Situated on the Tanshui River and on the north-south main railway line, it has convenient communications with other parts of the island. It is from this city that U.S. imperialism and the Chiang Kai-shek clique exercise control over Taiwan.

### TAIWAN STRAITS AND THE PENGHU ISLANDS

The Taiwan Straits are part of the East China Sea, with whose waters they share a similar temperature and saline content very different from those of the tropical South China Sea. With an area of 60,000 square kilometres the straits are 300 kilometres long, 150 kilometres in breadth at the northern extreme and 200 kilometres at the southern. With an average depth of 80 metres, and the coincidence of cold and warm currents, they are an excellent fishing ground. Known as the "sea corridor" of East Asia, the Taiwan Straits are vital to China's maritime shipping. The U.S. occupation of Taiwan and establishment of military bases at Keelung, Kaohsiung and the Penghu Islands constitute a serious threat to China's maritime enterprises in the straits and nearby sea.

The Penghu Islands in the Taiwan Straits are made up of 64 small islands. Originally a big platform of land, they were split into many islands by long erosion from the sea. Penghu Island, 64 square kilometres, is the largest. On it is Makung Harbour, a natural harbour, where ocean-going ships of 10,000 tons can anchor.

### **KWANGTUNG PROVINCE**

China's southernmost province, Kwangtung, is crossed by the Tropic of Cancer in the central part of its continental portion. Canton, the provincial capital, lies 2,000 kilometres from Peking as the crow flies.

The Nanling Mountains lie across its northern part bordering on Hunan and Kiangsi, and from here the land slopes towards the south. Long erosion has created many low passes in the range, and these have formed natural passages between the Yangtse and Pearl River basins since ancient times. The section of the Peking-Canton Railway which crosses the Nanling Mountains at the Chitienling Pass goes through towering peaks, deep valleys, and along the Peikiang River and its tributaries.

Kwangtung is made up largely of hills, generally no higher than 500 metres above sea level, interspersed with broad valleys and small stretches of plain. The slopes of the hills are generally terraced. Even the delta plains of the Pearl and Hankiang Rivers are dotted with hills.

# THE PEARL RIVER, SOUTHERN CHINA'S LARGEST WATERWAY

The Pearl River drains half of the area of the province. This largest river in southern China is made up of the Sikiang (West River), Peikiang (North River) and Tungkiang (East River), with the Sikiang as the main stream. The Sikiang rises in eastern Yunnan as the Nanpankiang, and flows 2,100 kilometres through Kweichow, Kwangsi and Kwangtung and into the sea at Motaomen and Humen.

In this region of plentiful rainfall, the flow of the Pearl River is tremendous. While the area of the Pearl River basin is only two-thirds of that of the Yellow River basin, the annual discharge of the Pearl into the sea is eight times that of the Yellow River.

The broad expanse of the Canton Delta is covered by a network of rivers, with numerous dams and embankments. Paddy fields, orchards, fishing boats and peasants' houses present a typical scene of a southern "water country". This is Kwangtung's principal farming district. In recent years the government has constructed a large-scale irrigation and drainage system operated by electric power to do away with waterlogging, block tides from the sea, irrigate the land, and wash the deposits of saline and alkaline sediment along the coast and thus ensure good harvests from millions of *mou* of farmland. Kwangtung has a long, rocky and indented coast with many bays and inlets. More than 700 islands of all sizes dot the South China Sea. It ranks first of all provinces in the output of aquatic products. Prospects are bright for the development of maritime enterprises.

Hainan Island, 34,000 square kilometres in area, is the largest island in Kwangtung and ranks next to Taiwan as the second largest in China. The greater part of the island is hilly or mountainous. The main peak, Wuchih Mountain, is in its central part slightly to the south while vast platforms and plains of farmland are found in the north.

Hainan is noted for its coconut and banana trees and also for its abundant resources. Besides mineral and forestry products, it produces tropical and subtropical cash crops, such as rubber, sisal hemp, coffee, lemon grass and oil palm, as well as pineapples, bananas, coconuts and other tropical fruits.

In the South China Sea are four groups of islands: the Tungsha, the Sisha, the Chungsha and the Nansha, all coral in origin. They are fairly small, the 1.85 square-kilometre Yunghsing Island being the largest in the Sisha group. The Tsengmu Reef on the southern extreme of the Nansha group is the southernmost part of Chinese territory. All these islands have been a part of China since early times. They are important for communications and national defence as many vital shipping routes pass here. On the larger islands are deposits of guano, a good fertilizer. Kwangtung has a long summer, a warm winter and an abundant rainfall. With the exception of the highlands in the north, the province receives no snow and is green all the year round. Two successive crops of rice are grown in most parts, and three in a few places, such as the eastern side of Hainan Island.

Rice is the main food crop, and tuber crops are the next. The Canton Delta, where land is exploited to the full, is the biggest producer of rice, sugarcane and tropical fruits and also the main silkworm raising area. A feature of farming here is the combination of mulberry or sugar-cane growing and fish breeding. Pools are dug on the farmland and the earth piled up around them to form embankments. Fish are bred in the pools while mulberry trees, sugar-cane or fruit trees are planted on the embankments.

In sugar-cane production Kwangtung ranks next to Taiwan. The plantations are widely distributed with the big bulk of them in the Canton Delta. They are being rapidly expanded on the Leichow Peninsula and in other places.

No less than 300 different kinds of fruit grow in Kwangtung. It is the biggest fruit-producing province in China. The tangerines, bananas, pineapples and lichees are well known as exports. The biggest cannery in China has been built in Canton and others have been built in Swatow and Haikow, the two other main fruit markets.

The climate in southern Kwangtung, which lies in the tropical zone, is favourable for tropical cash crops. Coconut, sisal hemp, oil palm and coffee plantations have been extensively developed there in recent years.

### HEAVY INDUSTRY AND SUGAR-REFINING

Modern industries rose in Kwangtung quite early, but under the oppression of the imperialists and the reactionary regimes they never had a chance to develop. Liberation gave the industries a new lease of life. Light industrial establishments are more numerous than those of heavy industry, and sugar-refining leads all others. Second only to Taiwan in output, Kwangtung sugar is sent out to other provinces in large quantities every year. The refineries are located mainly in the sugar-cane areas. In Kiangmen and a few other places the waste bagasse is now used to make alcohol, paper, drugs and other by-products.

In the Canton Delta there are cotton, bast fibre and silk mills. The gambier Canton gauze, a light silk for summer wear, finds a ready demand in Southeast Asia. Paper-making is well developed in Canton and Swatow.

In heavy industry mining holds an important place. Coal, iron-ore and non-ferrous metals are widely distributed, with the biggest deposits in northern Kwangtung. The province's first iron and steel enterprises were established during the great leap forward. Iron and steel mills have now been built in Canton and other places. Machinebuilding plants, especially those for the manufacture of sugar-extracting machinery, have been set up at great speed, along with shipyards. Kwangtung also has many fine handicrafts of unique style. The ivory carving of Canton rivals that of Peking while Swatow lace mats are as famous as those of Kiangsu. In the past few years great progress has been made in these handicrafts.

### CANTON AND CHANKIANG

Canton stands on the banks of the Pearl River on the northern side of the Canton Delta. With convenient land and water transport, it has been a port for overseas trade since very early times and is now one of the major ports for foreign trade. It is fast growing as the largest industrial base in southern China.

Canton is a city with glorious revolutionary traditions. During the Opium War (1840-42) the Chinese peasants around Canton organized the Ping Ying Tuan (Quell-the-British Corps) which dealt heavy blows at the British imperialists. Before the Revolution of 1911 the Huanghuakang Uprising took place here. After 1919 Canton was the scene of many more historic events. It was here that Mao Tse-tung headed the National Institute of the Peasant Movement and devoted his efforts to training cadres for revolutionary work, and spreading Marxist-Leninist doctrines. The Canton Uprising of 1927 was launched by the workers of Canton led by the Chinese Communist Party; they set up a democratic, workers' and peasants' political power - the Canton Commune.

Canton is known as one of China's cultural centres. Sun Yat-sen University is one of the famous institutes of higher learning in Canton which also possesses large museums, libraries, cultural palaces and the South China Botanical Gardens, one of the biggest in the country.

One of the annual events in this perennially green city is the flower show that is held during the Spring Festival (Chinese New Year).

Situated in the northeast of the Leichow Peninsula on the shores of Kwangchow Bay, Chankiang (Tsamkong) has a deep natural harbour sheltered by islands. A railway built after liberation from Litang on the Hunan-Kwangsi Railway now connects Chankiang with the hinterland. New wharves have been built in the harbour for ocean-going ships. Chankiang has become a great seaport in southern China.

### HONGKONG, KOWLOON AND MACAO

Hongkong and Kowloon are part of Chinese territory. Situated to the east of the Pearl River estuary, the island of Hongkong and Kowloon Peninsula have a total area of 1,000 square kilometres. After the Opium War the British imperialists forcibly occupied Hongkong and obtained by pressure the lease of Kowloon. For more than a century imperialism used Hongkong as a base of aggression against China and for the exploitation of the Chinese people. At present Hongkong and Kowloon are still occupied by Britain. The U.S. imperialists and Chiang Kai-shek agents frequently use Hongkong to carry out their criminal, hostile activities against the Chinese people.

Macao, situated to the west of the Pearl River estuary, is also part of Chinese territory. Together
with two nearby islands, it has an area of 14 square kilometres. The Portuguese colonialists began their activities to occupy Macao in 1553. From the Opium War to the present Macao has been under Portuguese occupation.

### THE KWANGSI CHUANG AUTONOMOUS REGION

The terrain of Kwangsi is generally on a higher altitude than that of Kwangtung. The western part of the province lies near the Yunnan-Kweichow Plateau, and the land inclines from northwest to southeast. The Sikiang River and its tributaries rise on the Yunnan-Kweichow Plateau and flow across Kwangsi towards the southeast before turning east through Kwangtung and into the sea.

### THE CHUANG PEOPLE

The Chuangs are the most numerous of China's national minorities. There are over seven million Chuangs in China, mostly living in Kwangsi where they constitute 37 per cent of the population. The area in which they live in compact communities amounts to over 60 per cent of the total area of Kwangsi. Hence the establishment of the Kwangsi Chuang Autonomous Region.

The industrious and intelligent Chuang people live in the mountains and along the rivers. Historically, they were among the first people in China to cultivate rice. In some places they are therefore called "water dwellers". For over 2,000 years the Chuangs and the Hans have lived together in harmony. During the Taiping Revolutionary Movement (1851-64) and during the decades of the Chinese people's revolutionary wars, the two peoples were closely united in their fight against the reactionary rulers.

Many Chuang people engage in handicrafts as a side-occupation. The brocades woven by Chuang women have long been known for their bright and beautiful colours and fine patterns. Having lived for a long period with the Hans, they have absorbed Han culture and learned the Han language. Since liberation the People's Government has helped them to create an alphabet and a written form of Chuang language so as to further their culture and enable them to conduct their studies in their own language.

### "KWEILIN HAS THE MOST BEAUTIFUL SCENERY IN THE COUNTRY"

Limestone predominates over more than half of Kwangsi. Together with Yunnan and Kweichow Provinces, Kwangsi forms one of the largest karst regions in the world. In this land of high temperatures and heavy rainfall, centuries of erosion of the limestone has brought about a forest of pinnacles and spires, sink-holes and caverns.

In the vicinity of Kweilin, along the banks of the Likiang River on the upper reaches of the Kweikiang are numerous small rocky hills, vertical spires, and peaks whose reflections are cast upon the clear waters of the rivers. Scenery of the type found on the Tuhsiu Peak in Kweilin, and in the Chihsing (Seven-Star) Cave, the Hsiangpi (Elephant Trunk) Mountain and the Luti (Reed Flute) Cave outside the city has given Kweilin the reputation of possessing the most beautiful scenery in the country.

To sail downstream from Kweilin between the green hills that line the banks of the Likiang around Yangshuo is a never-to-be-forgotten experience. As another popular saying has it: "Even more beautiful than the scenery of Kweilin is that of Yangshuo."

### RICE, SUGAR-CANE AND SPECIAL FARM AND FORESTRY PRODUCTS

Kwangsi is approximately on the same latitude as the continental part of Kwangtung. But as the Yuehchengling Pass on the northeast is relatively low, cold waves can easily penetrate, and the terrain in the northwest is high and far removed from the sea. Kwangsi is, therefore, neither as warm nor as humid as Kwangtung. Nevertheless, tropical and sub-tropical plants can be grown.

Cultivation continues all the year round especially in the broad valleys and limestone plains and basins. As the thin soil and presence of fissures in the limestone areas make the holding of water difficult, the peasants block the fissures and build many medium-sized and small reservoirs fed from underground sources for irrigation.

Like Kwangtung, Kwangsi is an important rice and sugar-cane producer. In the south, sugar-cane predominates. In the central and southern parts, the rice generally yields two harvests a year. In the colder and drier northwestern part maize and tuber crops are grown. Big modern sugar refineries have been built in Kueihsien and Kueiping.

The northern forests produce cedar and horse-tail pine. Liuchow is an important distribution centre for timber. Three distinctive export products are star anise and fennel oil from the southwestern part of Kwangsi and the cassia lignea of the southeast. The Shatien pomelo of Junghsien County and other places is juicy and delicious, the best in the country. Tea-oil, tung-oil and ramie are produced in large quantities.

### INDUSTRY AND CITIES

Kwangsi is rich in mineral deposits. Although manganese and tin are better known, the province also possesses coal and iron-ore in plenty, a favourable factor for the development of the iron and steel and machine-building industries. Before liberation there was practically no heavy industry. Iron and steel plants have now been built in Liuchow and Luchai, while machine-building and chemical industries have also started up.

Nanning, the capital of the Kwangsi Chuang Autonomous Region, is well provided with communications both by water and rail. It stands on the upper reaches of the Yukiang River near the confluence of the Tsokiang and Youkiang, and also on the Hunan-Kwangsi Railway which extends to the border town of Munankuan where it connects with the railways of the Democratic Republic of Viet Nam, facilitating economic co-operation and cultural exchange between the two countries. Among the new industrial enterprises in Nanning are a chemical plant and a cotton mill.

Northeast along the Hunan-Kwangsi Railway is Liuchow in central Kwangsi. This is a trans-shipment point for navigation on the Liukiang as well as the junction of the Hunan-Kwangsi and Kweichow-Kwangsi Railways. From Liuchow many highways reach out to other parts, making it a key city in land and water transport. It is also Kwangsi's largest industrial city, with machine-building expanding faster than other branches.

From Nanning eastwards down the Yukiang River is Kueiping. It was here in Chintien Village that the uprising of the peasants' revolutionary forces which led to the establishment of the Taiping Heavenly Kingdom (1851-64) took place. Many valuable historical relics are preserved there.

# Chapter Eleven THE SOUTHWEST REGION

This region embraces the provinces of Szechuan, Kweichow and Yunnan. Yunnan adjoins Viet Nam, Laos and Burma. The land generally inclines towards the southeast, and is intertwined with plateaus, basins and valleys. The rivers are mostly headstreams with a fast current and voluminous discharge, offering favourable conditions for the development of hydro-electric power. The water resources of these three provinces amount to half of the water resources of the whole country, and China ranks among the countries with the richest waterpower potential.

This region has a rugged terrain and distinct climatic changes.



Because the natural conditions are varied and cultivation began very early, there are many kinds of native plants and farm crops. Practically any crop that will grow in any other part of the country will do well in Szechuan, while Yunnan is known as "a huge botanical garden".

Non-ferrous metals include copper, aluminium, tin and mercury while coal and iron-ore deposits are also considerable. Although the great potential of hydro-electric power provides favourable conditions for industrial development, the high mountains and deep valleys present great difficulties of communication. With the steady building of modern communications that has taken place in recent years, industrial construction has achieved tremendous success, particularly in Szechuan.

About thirty national minorities, over half of the total number in China, live in this region. They

make up 12 per cent of the region's population and are widely distributed.

### SZECHUAN PROVINCE

Szechuan extends from the Wushan Mountains in the east to the Chinsha River — the upper reaches of the Yangtse — in the west. With 72,160,000 inhabitants it has a bigger population than any other province.

### DIFFERENCE BETWEEN THE EASTERN AND WESTERN SECTIONS

The province is divided into eastern and western sections by the Chiunglai and Taliang Mountains. The eastern section is the famous Szechuan Basin, also known as the Red Basin from the colour of its sandstone, shale and soil. This is a fertile area of plains and hills surrounded by mountain ranges the Minshan on the northwest, the Tapa on the north, the Wushan on the east, the Talou on the south, and the Chiunglai and the Taliang on the west. Most of the mountains rise over 1,000 metres above sea level, while the basin is under 500 metres. The basin slopes slightly towards the south, where it is cut by the Yangtse River. The Chengtu Plain with its fertile soil on the middle reaches of the Minkiang is the largest plain in southwestern China.

Winters are mild in the Szechuan Basin as the high Chinling and Tapa Mountains to the north fend off the cold waves. The temperature is fairly high, and annual precipitation is about 1,000 mm. To the west of the basin, the high ranges block the moist air-mass movement from the southeast, forcing the air to rise and resulting in even greater precipitation. The warm winters and hot summers favour agricultural development.

Western Szechuan, at an elevation generally exceeding 3,000 metres, is made up of plateaus and highlands with many complex ranges. Its southern part belongs to the area of the Hengtuan Range, and is interspersed with rivers. Here the Chinsha, the headstream of the Yangtse, and its tributaries, the Yalung and the Tatu, rush down rapidly between high mountains and deep valleys, offering excellent conditions for producing abundant hydro-electric power. On the west side of the Tatu is the 7,590metre Mount Minya Konka, the highest peak in the province. The compact highlands in Western Szechuan adjoin Chinghai and Kansu Provinces in the north and form part of the Chinghai-Tibet Plateau. Here lie the vast tracts of snow-bound mountains and grasslands that the Chinese Workers' and Peasants' Red Army passed through during its Long March

### "LAND OF ABUNDANCE"

The Szechuan Basin is thickly populated. Signs of the centuries of cultivation of the soil are to be seen on all sides. On the Chengtu Plain is the Tukiang Dam — the famous water conservancy project that irrigates the plain — which was built more than 2,000 years ago. The hill-slopes throughout the basin are almost entirely covered with terraced fields growing all kinds of food and industrial crops and special farm and forestry products. The Szechuan Basin has long been known as the "Land of Abundance". The rapid progress that has been made in recent years in water conservancy, communications and industry has enabled this land to yield even more abundantly.

Rice is the main food crop. It is grown not only on the Chengtu Plain, but also on the terraced hills of the basin. In this warm climate, the peasants are tending more and more to treat rice as a doublecrop. Wheat, maize, sugar-cane and broad beans also grow well here. As the province which produces the greatest quantity of grain, Szechuan exports a big surplus to other parts of the country. The basin is known as the granary of southwestern China.

The principal cash crops are rape-seed, sugarcane, cotton and tea. Silkworms are also raised in big quantities. Rape-seed is grown as a winter crop in the rice-producing areas, and Szechuan ranks first in the output of this valuable oil crop. The Tokiang Basin is the chief sugar-cane area. New refineries, mechanized or semi-mechanized, have been built in Tsechung and Neikiang. The latter city has the best refineries and is known for its excellent sugar.

The Szechuan Basin rivals the Taihu Lake Basin and the Canton Delta in sericulture. The silks and satins produced in Chengtu, Chungking and Nanchung are well known both at home and abroad. The area of cotton fields in the basin has been expanded since liberation and in Chungking, Chengtu and other places the old cotton mills have been enlarged, and new ones built. The Szechuan Basin and its surrounding highlands produce large quantities of tung-oil, white wax, gallnuts, varnish and medicinal herbs. Tung-oil trees cover almost the whole basin; a third of the tung-oil produced in China comes from this province. It is an important item of export. The warm winter in the southern part of the basin favours the growth of sub-tropical fruits. Red tangerines and sweet oranges from Hochuan and Kiangchin are distinctive products, famous throughout the country and abroad.

Szechuan is also the province where the largest number of pigs are raised. The hog bristles are long, tough, lustrous and resilient. They are a popular export item.

### AGRICULTURE AND LIVESTOCK FARMING IN THE NATIONAL MINORITY AREAS

Of the various national minorities in Szechuan, the Tibetans and Yis are the most numerous. They live in wide areas of western Szechuan. On the broad and fertile steppes of the western plateaus, the Tibetans graze a tremendous number of yaks, goats, sheep and horses. In the thick forests of the Hengtuan Mountains are beavers, antelopes and other animals which yield valuable pelts. The rare giant panda is also found here.

In the high cold areas inhabited by the Tibetans, they for generations engaged themselves in animal husbandry but not in farming, and their living conditions were very poor. Now they are growing food crops and in some places sugar-beet, and have developed a sugar industry. The cultivation of tea was originally confined to the misty and cloudy piedmont belt of the western fringe of the basin, such as Yaan and its vicinity, and it was largely sent to Tibet and other national minority areas. In recent years the tea-growing area has been systematically extended to western Szechuan where warm and humid valleys have been turned into tea lots to meet the increasing needs of the minority peoples.

The Yi people mainly live in the Greater and Lesser Liangshan Mountains of southwestern Szechuan. In this region of high mountains and rapid rivers they opposed the reactionary rulers over a long period. The Kuomintang reactionaries found themselves unable to extend their political rule to the Yis. But during its Long March the Chinese Workers' and Peasants' Red Army, by adopting a correct policy towards minority nationalities, secured the energetic support of the Yi people and successfully passed through this region.

Formerly the Yis used the primitive method of "slash and burn" in farming and could not produce enough food to support themselves. Now new farm tools are widely used, and in some places tractors and other mechanized implements have been introduced. With the building of water conservancy projects, high-yielding crops including rice have been planted in warm low-lying valleys. Conditions are being rapidly improved with a view to making the area self-sufficient in food. Szechuan's mineral deposits are rich and multifarious. The coal-fields are largely distributed on the fringes of the Szechuan Basin. The Chungliangshan Coal Mine near Chungking is the largest mine in southwestern China. The coal here is of sufficiently high quality for coking.

The Szechuan Basin has rich oil reserves; together with oil, there is natural gas. In the salt-wells of Tsekung natural gas has been used to boil the brine since very early times.

The famous Szechuan well-salt has been exploited over many years and is widely distributed. The Tsekung wells yield half of the total output of the province. Chemical plants have now been set up in many well-salt producing areas to make potassium, bromine and other by-products. There are also large phosphorus deposits and Loshan has a phosphate fertilizer plant.

Szechuan is richly endowed with iron-ore deposits that are mined chiefly in Chikiang near Chungking and in Weiyuan. The iron-ore reserves of Chikiang meet the needs of the province's principal iron and steel works in Chungking and its rising machinebuilding industry. Copper is widely distributed while placer-gold is found in the Chinsha and Tatu Rivers.

### SZECHUAN IS NOW EASILY ACCESSIBLE

In the past Szechuan was reached mainly through the Yangtse Gorges. The journey through the 200kilometre narrow and winding section of the river with its rapids and reefs in midstream was an ex-

tremely hazardous one. Then there was the northern land route over the Chinling and Tapa Mountains, in places nothing but a narrow path of planks with a sheer drop below. The western route over the rope bridge across the rapid Tatu River was also full of risks. Li Po, a great Tang Dynasty poet (701-762), described the road to Szechuan as "more difficult than the road to Heaven!" This lack of communications proved a serious barrier to the economic development of the province. After liberation many of the shoals and reefs on the Yangtse were removed by dynamiting and modern navigation aids were installed. Night navigation is now a regular practice on this stretch of the Yangtse, even through the Gorges. Tunnels were blasted through the Chinling and Tapa Mountains and railway bridges laid across the Yangtse and the Tatu. The Paoki-Chengtu and Chengtu-Chungking Railways are long since completed while the Szechuan-Kweichow and Chengtu-Kunming lines are under construction. Of the highways, the Szechuan-Tibet and the Chengtu-Ahpa were completed some years ago. Today it can no longer be said that the road to Szechuan is difficult.

The development of modern communications has accelerated industrial production and promoted the economic development of the national minority areas. The progress made in heavy and light industries has turned Szechuan into an important base for the industrial construction of southwestern China.

### CHENGTU AND CHUNGKING

Chengtu, the provincial capital, lies on the Chengtu Plain on the northwestern fringe of the Szechuan Basin. This ancient city rose during the Spring and Autumn Period (770-475 B.C.). In the period of the Three Kingdoms (220-280) it was the political centre of the Shu Kingdom, and over many centuries was the starting point of the main road from the Southwest to the North. The Paoki-Chengtu Railway, passing over the Chinling Mountains from Shensi Province, provides an important link between the Northwest and the Southwest. The Chengtu-Chungking Railway connects the two major cities in the Szechuan Basin. Chengtu, known as "Little Peking", was at one time a typical consumer city. After more than a decade of constructive work it is now an important centre of industry.

There are many places of historical interest in Chengtu. The best known are the Temple of Chukeh Liang (181-234), famed statesman of the Three Kingdoms Period, and the Thatched Hut of Tu Fu (712-770), patriotic poet of the Tang Dynasty.

Chungking has easy land and water communications. It is the largest city and inland port in southwestern China. During the War of Resistance Against Japan, the Kuomintang, having lost a great amount of territory to the enemy, removed its government here. Since liberation Chungking has quickly developed into the largest industrial centre of the Southwest, with fast-growing iron and steel, machine-building, chemical, textile and papermaking enterprises.

Situated as it is at the confluence of the Yangtse and the Chialing, Chungking is divided into three sections by the rivers. Here, too, a bridge has been built across the Yangtse. The city is built on the steep cliffs and hillsides overlooking the rivers. The reflection of the city lights on the rivers at night presents a marvellous scene.

The Szechuan Basin is studded with towns and cities. Ipin at the confluence of the Yangtse and the Minkiang, Neikiang on the middle Tokiang, Tsekung on a small tributary of the Tokiang, and Nanchung on the middle reaches of the Chialing are all fairly large cities. Among the few cities on the more sparsely populated western highlands, Kangting and Sichang are relatively important. Kangting, formerly called Tachienlu, lies on a tributary of the Tatu and on the Szechuan-Tibet Highway. It is the political centre of the Kantse Tibetan Autonomous Chou. Sichang is on the middle reaches of the Anning, a tributary of the Yangtse, and on the highway between Chengtu and Kunming. In its vicinity are all the necessary resources for the development of agriculture, forestry, and mineral products, as well as water conservancy.

#### **KWEICHOW PROVINCE**

Kweichow lies on the Yunnan-Kweichow Plateau. In altitude, it is lower than the southwesterly province of Yunnan and higher than Kwangsi, Hunan and the Szechuan Basin. The trunk roads or railways leading from Kwangsi, Hunan and the Szechuan Basin into Kweichow wind their way up through mountains. Most parts of the Kweichow Plateau stand about 1,000 metres above sea level. The plateau as a whole is thoroughly rugged and is intersected by rivers. As a local saying goes, "There is no level ground over a mile long."

The land slopes from northwest to southeast. The drainage system is scattered. Northwestern Kweichow, the highest section, is part of the Wumeng Uplands where the Wukiang, Kweichow's largest river, has its source. The Wukiang winds its way northeastwards into the Szechuan Basin. The basin of the Wukiang constitutes the greater part of the area of the province. The rivers of eastern Kweichow flow into the Yuankiang and on into the Tungting Lake. All these waterways belong to the Yangtse Basin. The tributaries of the Pearl River - the Peipan and the Tuliu - flow southeastwards into Kwangsi. The Miaoling Mountains are the watershed between the Pearl and the Yangtse drainage systems. The Kweichow Plateau has many gorges, rapids and waterfalls, and the rivers are unsafe for navigation but possess great hydro-power potential. The Wukiang Gorges and Huangkuoshu Waterfall are well known.

Karst landscape is found in many parts of the province. Streams commonly disappear underground to flow ten kilometres or even scores of kilometres as a subterranean channel before emerging again. In some intermontane basins, many streams are devoid of surface drainage and the discharge is through underground channel. In certain places lakes without outlets are formed. Such phenomena are fairly common in southern Kweichow.

### HUMID CLIMATE AND SPECIAL FARM AND FORESTRY PRODUCTS

The Kweichow Plateau has more overcast and rainy days than any other part of the country. Summer is particularly showery. After the showers, the sky is clear and the sun shines warmly. Vegetation lasts 8-10 months, and crops generally yield two harvests a year.

Rice is the principal food crop. The area sown to rice decreases from southeast to northwest. Next comes maize, the area of which decreases in the opposite direction. The climate favours the growing of Irish potatoes, which are widely distributed.

Rape and tobacco are the main cash crops, and fields of rape are seen all over the province, especially in northern and central Kweichow. Most of the tobacco is produced in the central part of the province, mainly around Kueiting. Kweichow tobacco is well known for its quality.

Trees grow well in this moist climate, and the province abounds in cedar and pine. The local lumbermen can bring on a young cedar sapling so well that it can be felled for timber in less than ten years. The lumber is mainly rafted down the Chingshui and Tuliu Rivers. Other forestry products include tung-oil, unboiled varnish, gallnuts and white fungus.

### INDUSTRY AND CITIES

Kweichow has various mineral resources, including coal, iron-ore, phosphorus and non-ferrous metals.

It is one of the leading coal provinces in southwestern China and the deposits are widely distributed. The phosphorus of Kaiyang is well known. These resources provide sound material conditions for the development of the iron and steel, machinebuilding and chemical industries. In the old days Kweichow had very little industry. Not until after liberation did industrial development gather way. The total output value of heavy industry has already exceeded that of light industry. Textile and foodprocessing enterprises have developed to some extent. Kweichow's *maotai* liquor, made from wheat and kaoliang, is a well-known Chinese product.

Kweiyang, capital of Kweichow, is centrally located with trunk roads stretching out in all directions. The Kweichow-Kwangsi Railway southwards through the Miaoling Mountains to Kwangsi Province is now open to traffic. The Yunnan-Kweichow and the Szechuan-Kweichow lines are under construction. In course of time, Kweiyang will become one of the important centres of railway communications in southwestern China. Remarkable advance has been made in industry in the last few years, particularly in machine-building, and Kweiyang is fast becoming a key industrial city.

Among the many places of historical interest around Kweiyang are the Chiahsiu Tower and the Chienling Mountain.

Tsunyi, on the Szechuan-Kweichow Highway, <sup>15</sup> the second largest city in the province. The Szechuan-Kweichow Railway will pass through Tsunyi. Industry has made some advance here, particularly in silk textiles. This city in northern Kweichow has a glorious revolutionary history. In 1935 when the Chinese Workers' and Peasants' Red Army passed here on its Long March, it was the scene of the famous Tsunyi Conference, the historic meeting which established the leadership of Mao Tse-tung in the Chinese Communist Party. From that time on, the Chinese Communist Party and Chinese revolution, under the leadership of the Party's Central Committee headed by Mao Tse-tung, has marched from victory to victory.

The many national minorities in Kweichow are distributed over wide areas, principally in the southern part. Tuyun, capital of the Puyi-Miao Autonomous *Chou*, lies on the upper reaches of the Chingshui River and on the Kweichow-Kwangsi Railway. Originally a small town without a single industry, it now has iron and steel, bast fibre and paper mills and a farm tool factory. These have stimulated the economic development of Kweichow's national minority areas.

### YUNNAN PROVINCE

Yunnan is on China's southwestern border. The province is divided by the Yuankiang River into two distinctive topographical sections — the Eastern Yunnan Plateau and the Western Yunnan Canyons.

The Eastern Yunnan Plateau, about 2,000 metres in altitude, is a part of the Yunnan-Kweichow Plateau. On it are many fault lakes. Some of these, like the Tienchih Lake, are linked to the Chinsha River, and others, like the Fuhsien Lake, adjoin the Nanpan River (Upper Pearl River). Around the lakes and in the intermontane basins are small plains ideal for farming. The massive Wumeng Mountains lie in the northeastern part of the Eastern Yunnan Plateau bordering on Kweichow and it is here that the Pearl River has its source. Karst topography is present in wide tracts in southeastern Yunnan and the region bordering on Kweichow and Kwangsi, exemplified most distinctively by the "stone forest" in Lunan County. On the plateau the winters are mild and the summers are cool. The area between Kunming and Tali, also part of the Eastern Yunnan Plateau, is fairly flat, and has many small plains.

The Western Yunnan Canyons lie to the west of Tali in the southern part of the Hengtuan Mountain Range. Here both mountains and rivers run in a north-south direction. From east to west, there are the Yunling Mountains, the Lantsang River, the Nushan Mountains, the Nukiang River, and the Kaolikung Mountains. The Chinsha River winds its way eastwards across the north of the province. In the canyons the topography is one of high mountains and deep valleys, with some peaks rising over 2,000 metres above the valley floors. There is a great difference in temperature between the tropical warmth of the valleys and the extreme cold on the peaks.

### NUMEROUS NATIONAL MINORITIES

About a half of China's different national minorities are found in Yunnan, where they constitute a third of the population of the province. The more populous among them are the Yis, the Pais, the Hanis, the Tais, the Lisus and the Chingpos. They are widely distributed, with the Yis in the north and east, the Pais around Tali, the Tais mainly in the southwest, the Hanis mainly in the Yuankiang basin, the Lisus in the northwestern mountains, and the Chingpos in the west. An autonomous *chou* or autonomous county has been set up wherever the minority peoples live in a compact community.

There have been deep-going changes in the life of the national minorities since liberation as they advance into a socialist society. Some of them, like the Lisus, have come from a primitive communist society, and others, like the Yis, from a slave society.

### A "BOTANICAL GARDEN"

In this rugged terrain, the climate and vegetation are determined by the altitude, and on this score Yunnan may be divided into several zones. Above 5,000 metres, there is no vegetation, but below that different types of plants grow at different levels. All told, some 10,000 varieties of seed plants ranging from the tropical to the frigid are found in the province, that is, about a third of all the varieties of seed plants found in China. Yunnan is, therefore, known as a veritable botanical garden.

The flowers of Yunnan are brilliantly coloured. Red camellias, as large as tree-peonies, bloom for 4-5 months through winter and spring, making vivid splashes of colour on hills and in valleys.

The varied natural conditions also favour the growth of a great many crops. Rice is the chief food grain, and maize, tuber crops, barley and wheat are grown in big quantities. In recent years the peasants have extended the area of double-crop rice, as well as that of cotton, rape and sugar-cane. In southern Yunnan, south of the Tropic of Cancer, tropical cash crops are abundant in the low-lying river valleys. Hsishuangpanna in southwestern Yunnan is known for its coconuts and coffee. Elephants and other tropical animals roam this area. Tea and timber grow well in the mountains. The "Tienkiang" and "Pu-erh" tea are famed Yunnan products. Yunnan's pine, pomelo-wood and *nanmu* are also well known. The tobacco is the best in China and is often mixed with other kinds to produce an excellent blend.

### INDUSTRY AND CITIES

Yunnan's non-ferrous metals, particularly tin, have been exploited since early times. Kokiu in southeastern Yunnan has large deposits of tin and is known as the "tin city". Coal and iron-ore have been extensively mined since liberation, and iron and steel, machine-building and chemical industries have been established.

Kunming, the provincial capital, is in the central part of the Eastern Yunnan Plateau, 1,900 metres above sea level. To the south is the picturesque Tienchih Lake surrounded by extensive farming areas. The Kinma Mountain stands to the east of the lake, and the Pichi Mountain to the west. A local saying "Winter is not cold, nor is summer hot, while spring and autumn are long" adequately describes the climate around Kunming.

Kunming is the centre from which radiate trunk roads to Szechuan, Kweichow and Kwangsi, and a railway south to Hokow on the Sino-Vietnamese border where it connects with the railways in Viet Nam. The China-Burma airline makes a midway stop at Kunming.

Kunming's industry has made quick progress in recent years. Its machine tools and optical instruments are well known.

Tali lies near the Erhhai Lake on the western margin of the Eastern Yunnan Plateau. West of the lake rise the Tientsang Mountains, 4,124 metres in elevation. Here, in this fertile farming area, is the meeting point of the highways to Burma and the Tibetan Autonomous Region.

Tali is now the economic centre of western Yunnan and capital of the Tali Pai Autonomous Chou. The lakes and mountains around Tali are as beautiful as those around Kunming, while the landscape is even more imposing.

Chinghung, meaning "City of the Dawn" in the Tai language, the capital of the Hsishuangpanna Tai Autonomous *Chou*, lies in an agricultural area on the lower Lantsang. From here trunk roads extend northeastwards to Kunming and southwestwards to the Burma border. The processing of farm products is well developed and urban construction has made good progress.

# Chapter Twelve THE CHINGHAI-TIBET REGION

The Chinghai-Tibet Region is made up of the Tibetan Autonomous Region and Chinghai Province and occupies the greater part of the world's largest plateau — the Chinghai-Tibet Plateau.

On this plateau the headare streams of many major rivers of Asia — the Yellow, the Yangtse, the Lantsang (beyond China it is called the Mekong), the Nukiang (beyond China the Salween). the Yalutsangpo (beyond China the Brah-



maputra), and the Gar and the Sengge Khapab (beyond China the Indus). Rushing down from the plateau these rivers carry great volumes of water. Like Szechuan and Yunnan, Tibet has large reserves of water power.

On the highlands of Chinghai and Tibet are many steppes and meadows. Farming is confined to the lower areas with the cold-resistant *chingko* (highland barley) as the main crop. The yak, which is adaptable to the cold climate, is the main form of livestock on the vast pasturelands.

In the old days this region was extremely backward economically and modern industry and communications were practically non-existent. Although the constructive work of the last decade and more has brought about great changes in this situation, much work remains to be done in the exploration of mineral resources, development of communications and industry, and reclamation of wasteland.

### THE TIBETAN AUTONOMOUS REGION

Situated in the southwestern part of China on the southwest of the Chinghai-Tibet Plateau, the Tibetan Autonomous Region borders on India, Nepal, Sikkim, Bhutan and Burma on the southwest and south. With 1,270,000 inhabitants, the vast majority being Tibetans, the region has a population density of one person to a square kilometre. It is the most thinly populated region in the country.

Since ancient times Tibet has been an inalienable part of Chinese territory. The Tibetan people who lived and worked here since very early times were subjected to gruelling exploitation under feudal serfdom, and imperialist aggression aggravated their misery. They were reduced to extreme poverty and the population gradually declined. After the peaceful liberation of Tibet in 1951 social reforms were obstructed by the local reactionary clique of the upper strata. In 1959 this clique started an armed rebellion which was speedily guelled. The democratic reforms were then realized and feudal serfdom with all its cruelties was abolished. The serfs have stood up and begun a new life with increasingly better living conditions. Today, the Tibetan people are going all out for the building of a new Tibet.

### FARMING AND ANIMAL HUSBANDRY ON THE PLATEAU

Tibet occupies the greater part of the Chinghai-Tibet Plateau, most of which is over 4,000 metres above sea level; even the Yalutsangpo valley on a slightly lower level is twice as high as the Taishan Mountain in Shantung. The world-famous Himalaya Range lies in the southern part of the plateau. Many of its peaks are over 8,000 metres.

The Gangdis Range running north of the Yalutsangpo marks the dividing line between the Northern Tibet Plateau and the Southern Tibet Valleys. Eastern Tibet with its many high mountains and deep valleys is part of the Hengtuan Mountain Range.

The Southern Tibet Valleys between the Himalayas and the Gangdis Range are long and narrow and slightly lower in elevation. The Yalutsangpo flows through here. The climate is relatively warm with a vegetation period of from 6 to 7 months. A humid current from the Indian Ocean enters the valleys from the southeast, bringing an annual precipitation of more than 500 mm. Along the banks of the Yalutsangpo and its tributaries, the valleys are broad, the soil is fertile and irrigation is easy. This is Tibet's principal farming area.

In the past there were few farm crops beyond chingko (highland barley) and yuanken (a vegetable like a turnip). Chingko is extremely hardy, and when ground and roasted is called *tsamba*, a staple of the Tibetans. Tea and butter are also part of the staple diet.

Since liberation some new crops have been introduced to this region, including winter wheat, winter rye, winter chingko and buckwheat. In southern Tibet two crops a year or three crops in two years are raised in place of a single annual crop. The sub-tropical climate in the valleys of the Bomi area in southeastern Tibet, less than 2,000 metres above sea level, is ideal for rice. Bananas, pomelos and other sub-tropical fruits are also grown in this area. Tea is a new product, the planting of which is fast expanding.

There are more permanently snow-covered peaks in Tibet than in any other part of the country. There is as great a variation in temperature between the summit and the foothills in southeastern Tibet as there is between the polar region and the subtropics. The cold here is due to the high altitude, rarefied air and easy loss of heat. On the Tibetan Plateau, the sun shines brightly. If the heat from sunlight is stored to keep the crops warm during the night, then cold-resistant crops can be planted even in highland valleys 4,000 metres up. Already the emancipated peasants have succeeded in growing chingko and yuanken on highlands 4,500 metres high, such as Phari.

Northern Tibet is a broad plateau on a 5,000metre elevation. The Kunlun Mountains lie across the northern part. The plateau itself is made up of gently sloping ranges and basins. Short rivers flow into numerous lakes of all sizes. Snow-capped peaks, 6,000 metres above sea level, towering above blue lakes lined by trees are a typical scene of the Northern Tibet Plateau. The Nam Tso Lake (Tengri Nor), 4,627 metres above sea level, is the largest lake on this plateau. The Tibetans call it "the heavenly lake".

Surrounded by high mountain ranges as it is, the Northern Tibet Plateau is not benefited by the humid current from the ocean. The climate here is therefore cold and dry, with rarefied air and strong winds. Vegetation lasts only three months. But as the sun shines strongly, summer crops can still be grown. The sunny slopes and lakeside steppes provide excellent pastures.

Animal husbandry is an important occupation. Besides the broad pasturelands on the Northern Tibet Plateau, those in the Southern Tibet Valleys and in the Hengtuan Mountain Range are also extensive, some being partly pastoral and partly agricultural. The yak is the chief draught animal. Adaptable to a cold climate, it serves as a means of transport, and its long hair, milk, flesh and hide are all utilized. There are also sheep and goats.

### DEVELOPMENT OF MODERN COMMUNICATIONS AND THE BIRTH OF A MODERN INDUSTRY

The high altitude, deep canyons and cold climate long presented an almost insuperable barrier to communications. Shortly after liberation, however, work began on trunk roads across the Gobi Desert and the plateau. Cliffs and precipitous peaks were blasted to make way for the famed highways across the roof of the world. The highways completed are the Szechuan-Tibet (from Yaan in Szechuan to Lhasa), the Chinghai-Tibet (from Sining in Chinghai to Lhasa) and the Sinkiang-Tibet (from Karghalik in Sinkiang to Pulan Dzong in western Tibet). An airline between Peking and Lhasa has started on its regular run. The time of travel between Tibet and the hinterland has been shortened. Formerly it took three months to travel by yak from Yaan to Lhasa, and the road was passable for only three months of the year. Now it takes a fortnight by the Szechuan-Tibet Highway.

Tibet has abundant resources for hydro-electric power and rich reserves of minerals. It is also rich in agricultural and animal husbandry products. But in the past under the ruthless exploitation of the reactionary regimes, no industry in the modern sense was ever developed. Since liberation, especially since the quelling of the rebellion in 1959, industry has begun to develop. Hydro-power stations, thermal-power plants, motor vehicle repair works, an iron-smelting mill, farm tool factories, serum laboratories and leather works have been built. Although these establishments are fairly small, they mark the start of modern industry in Tibet.

### LHASA AND SHIGATSE

Standing on the northern bank of the Kyichu River, a tributary of the Yalutsangpo, Lhasa is the biggest city in Tibet. As the seat of the Preparatory Committee for the Tibetan Autonomous Region, it is also its political centre. It stands at the central point of communications, with highways connecting the principal cities. Though on an elevation of 3,600 metres, it is warmer than Peking in winter. It receives brilliant sunshine, and no cold waves penetrate here.

Lhasa is a city with a long history. The gorgeous Potala Palace was built 1,300 years ago. Standing on the Potala Hill, it has towers, palace halls, temples and forts. This dazzling structure can be seen 20 kilometres away. Among the many large lamaseries in Lhasa are the Daipung, the Sera and the Gandan, and the Jokhan and the Ramogia where historical relics of the Tang Dynasty are preserved. Many well forested "lingka", formerly private gardens of feudal serf-owners, have been turned into parks.

Shigatse, Tibet's second largest city, stands at the confluence of the Yalutsangpo and its tributary, the Nyangchu. From here highways extend east to Lhasa and south to Yathong. The valleys near Shigatse are Tibet's major grain producing areas. Handicrafts are quite well developed, notably the beautiful Tibetan carpets and wooden bowls. Modern industries are beginning. On one of the hills in the city stands the majestic Tashi-Lhunpo Monastery, one of the four great lamaseries in Tibet.

Shigatse is known for its dances and songs.

### **CHINGHAI PROVINCE**

The province derives its name from the large lake, the Chinghai (Koko Nor). There are many national minorities in Chinghai, including Tibetans, Mongolians and Huis, the Tibetans being the most widely distributed. Six autonomous *chou* have been set up. In many areas the population is a mixed one.

### SOURCE OF THE YANGTSE AND THE YELLOW RIVERS

The province lies in the northeastern part of the Chinghai-Tibet Plateau, and may be topographically divided into four sections: the Chinghai Plateau composed of the wide southern areas, the Tsaidam Basin in the northwest, the Chinghai Lake Basin in the northeast, and the Yellow River-Huangshui Basin further east.

With an average elevation of 4,000 metres, the Chinghai Plateau slopes from west to east. The Yangtse and the Yellow Rivers have their source here. Flowing through broad but not too deep valleys, the waters of these headstreams move over wide areas. Some of their tributaries consist of little more than seepage from one small pond to another. These calm waters are very different from the rushing current further downstream.

The Bayan Kara Mountains, the watershed between the headstreams of the Yellow River on the north and the Yangtse on the south, are the southeastern arm of the Kunlun Mountains. They stand more than 5,000 metres above sea level. Their slopes are gentle and their wide passes provide favourable conditions for the construction of trunk roads and railways. At 6,000 metres the ridges and peaks are mostly covered with snow all the year round, adding considerable beauty to the plateau.

### AN EXPANDING AGRICULTURE AND ANIMAL HUSBANDRY

Southwest of the Huangshui Basin is a ridge called Jihyueh Mountain, through which the Chinghai-Tibet Highway passes. It marks a line between two entirely different types of country. On the eastern side is the Yellow River-Huangshui Basin consisting of large tracts of farmland criss-crossed by canals and dotted with villages. On the western side is the plateau basin where herds of cattle and sheep graze on vast stretches of grassland.

The eastern side is Chinghai's principal farming area. On a slightly lower elevation, it has a longer vegetation period than the rest of the province and the waters of the Huangshui and other streams have long been used for irrigation. In the past this was practically the only farming area in the province. But in fact most parts of Chinghai have fertile soil, abundant water and a climate that favours the growth of various food and cash crops. Agriculture is steadily developing in many parts of the province, with spring wheat, *chingko* and Irish potatoes as the principal crops.

Most of the national minorities in Chinghai have long engaged in animal husbandry. The greater part of the Chinghai Plateau provides good grazing ground, and the wool output is high and of good quality.

In the last few years vast areas of land in the pastoral areas have been opened up for cultivation, thus bringing into being a mixed arable-pastoral economy. Some of the counties which in the past were purely pastoral are already self-sufficient in grain.

The Kunlun and Chilien Mountains are well forested, while peach, apricot, pear, apple and walnut orchards are plentiful in the farming areas. Among the timber produced are spruce, birch, Chinese pine, and Chinese juniper. Wild plants and rare birds and animals are found in many places. Westwards from Sining over Jihyueh Mountain and round the Chinghai Lake is the Tsaidam Basin. About 220,000 square kilometres in area, it is almost as large as the Szechuan Basin. Nothing was done before liberation to develop it. It had roughly 10,000 inhabitants, mostly Kazakh, Mongolian and Tibetan herdsmen. An old poem described the basin in these words:

> The Chiliens in the north, The Kunluns in the south. And 800 li of waste land Bare of human habitation, In between.

The large-scale exploration that has been carried out since liberation has proved this "waste land bare of human habitation" to be an excellent oilfield. Now a considerable quantity of crude oil is being produced here. In addition to oil, the Tsaidam Basin has huge deposits of coal, iron-ore, non-ferrous metals, including some rare ones, and non-metallic minerals. Big salt lakes offer an inexhaustible supply of salt — so much that it is used to pave roads, build bridges and construct houses. It comes in different colours — red, blue and white — and in the form of crystal "glass salt" and small "pearl salt". There is also a large deposit of potassium and a goodsized potassium fertilizer plant has been built in the basin.

Prospects for developing agriculture are also bright in the Tsaidam Basin. Although the annual rainfall amounts to only about 100 mm., melting snow from the surrounding mountains provides a constant source of irrigation. It is estimated that over 20,000 square kilometres of waste land can be irrigated and brought under cultivation. In the last few years a great number of people have come here from other provinces, and state farms have been set up to reclaim waste land. Factories and mines have also taken up farming and reclamation. A considerable amount of grain has been delivered to the state.

The population of the Tsaidam Basin has multiplied manyfold. It is steadily being built into a new industrial and agricultural base.

### SINING AND GOLMO

Sining, the capital of Chinghai Province, lies on the Huangshui River in the northeastern part of the province. Since the Lanchow-Sining section of the Lanchow-Chinghai Railway was opened to traffic, this city has had easy communications with the eastern provinces. Before liberation, Sining had only some small poorly equipped tanneries and match factories and the like. Now, a good number of industrial enterprises have been established, most notably in woollen textiles and dairy products. As animal husbandry is well developed in Chinghai, these two have particularly bright prospects for further development.

Golmo stands at the southern margin of the Tsaidam Basin. The Chinghai-Tibet Highway turns from here southwards into the Kunlun Mountains, ascends the Chinghai Plateau and from there winds on to Tibet. Here some of the highways in the Tsaidam Basin intersect. It is, therefore, an important centre of communications. This new city has arisen where only a few shabby tents stood in the old days.

### Chapter Thirteen

## THE INNER MONGOLIA-SINKIANG REGION



The Inner Mongolian - Sinkiang Region in the northern and northwestern parts of China embraces over 3,150,000 square kilometres, that is, a third of the total area of the country. It covers the Inner Mongolian Autonomous Region, the

Sinkiang Uighur Autonomous Region, the Ningsia Hui Autonomous Region and Kansu Province. In these autonomous regions national minorities live in compact communities. In Kansu Province a number of autonomous *chou* and autonomous counties have also been formed.

Topographically, the region is characterized by extensive plateaus and basins, the vast grasslands providing excellent pastures for animal husbandry. The climate is for the most part dry but dependable sources of irrigation are provided by the melting snow and ice from the high mountains, underground water and rivers, and much of the waste land can therefore be reclaimed. Nine-tenths of the 1,066,670 square kilometres of desert area in the country lies in this region. Tens of thousands of square kilometres of this desert land have already been transformed into farms, forests or pastures.

The region is rich in deposits of coal, iron-ore, petroleum and non-ferrous metals. In recent years both heavy and light industries have grown from nothing. Of national significance is the iron and steel enterprise in Inner Mongolia and the petroleum industry in Kansu and Sinkiang. Railway building has made good headway.

### KANSU PROVINCE

Long and narrow in shape, Kansu lies in the central part of the country, slightly to the northwest. The climate is humid in the southeast and becomes progressively drier towards the northwest.

THE SOUTHEASTERN AND NORTHWESTERN PARTS

The Wuhsiao Mountains mark the dividing line between the southeastern and northwestern parts of the province.

The southeastern part consists chiefly of the Southern Kansu Highlands and the part of the Loess Plateau that extends from Shensi. The Southern Kansu Highlands are a western extension of the Chinling, and for this reason they are also known as the Western Chinling Mountains.
As the Southern Kansu Highlands are largely in the humid area, the rivers have great volume of flow. The Pailung River rushing between the northern and southern branches of the Western Chinling Mountains is a big tributary of the Chialing. In the Loess Plateau, mainly a semi-arid area, the annual precipitation is 200-400 mm. As a result of the great variations in precipitation, agriculture is constantly threatened with drought. There are many ravines and deep valleys which render the terrain not so favourable to the development of water conservancy. In spite of this, irrigation has made much headway on the Loess Plateau. The Tungliang and Yinghsiung Canals have been completed, and with the help of the state the local people's communes have built a number of big pumping stations to draw water from the deep river valleys for irrigation.

The northwestern part is made up of the Chilien Mountains and the Hohsi (West of the Yellow River) Corridor, also known as Kansu Corridor. Running between the Hohsi Corridor in Kansu and the Tsaidam Basin in Chinghai, the Chilien Mountains embrace many parallel ranges on a general elevation of about 3,000 metres with the chief peak, Mount Chilien, rising to 5,564 metres. The Hohsi Corridor is long, narrow and easily passable. Over 1,000 kilometres in length, it is bordered on the south by the Chilien Mountains and on the north by the broken, slightly lower Peishan Mountains. It is penetrated by the rolling sand from Inner Mongolia. The corridor, though an arid area, is constantly watered by the melting snow and ice from the Chiliens. The irrigation system here goes back 2,000 years, when

agriculture was originally developed on the oases on which most of the towns and villages have since arisen.

# AGRICULTURE AND ANIMAL HUSBANDRY

The variations in climate from one area to another also affect the geographical distribution of farm products. Take wheat, the principal food crop in Kansu. The Southern Kansu Highlands and the Loess Plateau are generally planted with winter wheat while the Hohsi Corridor is planted with spring wheat. The areas growing winter and spring wheat are about equal.

Rice is grown in the warm and humid climate of the Southern Kansu Highlands and around the oases in the Hohsi Corridor, like Changyi and Kiuchuan, where water is abundant. The rice produced in the Hohsi Corridor is known for its excellent quality.

The western part of the Hohsi Corridor, particularly along the banks of the Shuleh and the Tangho Rivers, is suitable for cotton growing. Here the elevation is relatively low, and the summers are hot and sunny. It is one of China's new cotton areas and, with the progress in water conservancy and reclamation of waste land, there are good prospects for its further development.

To check the shifting sand from the deserts of western Inner Mongolia, the people in the Hohsi Corridor have in recent years adopted energetic measures for afforestation. Different kinds of shelter belts have been built to suit local conditions, such as forest belts for anchoring sand and sandbreaks for shielding the farm land. A green "Great Wall" is beginning to emerge.

In the humid and semi-humid areas of southeastern Kansu, especially around Tienshui, mulberry growing and silkworm culture has a history of several centuries. Besides providing feed for silkworms, mulberry trees are useful in water and soil conservation. Much has therefore been done to develop sericulture in recent years.

The luxuriant grasslands in the Chilien mountain area and the Southern Kansu Tibetan Autonomous *Chou* offer excellent pastures for livestock. Grasslands make up a quarter of the total area of Kansu and livestock-raising is one of the main occupations. Not a few good breeds are raised on these pastures. Many areas in the province are partly agricultural and partly pastoral.

### INDUSTRIAL DEVELOPMENT AND RAILWAY BUILDING

At the beginning of China's First Five-Year Plan, Kansu was one of the provinces marked for major industrial construction. Since then, railway building has gone side by side with immense industrial development. In place of the few tens of kilometres of inefficient railtrack which was all the province possessed before liberation there are now 2,000 kilometres of modern lines linking cities with mining areas and the broad countryside.

Since ancient times the Hohsi Corridor has been the main highway between China and Central Asia, and Lanchow has been the communication hub from which roads lead to Inner Mongolia, Sinkiang, Chinghai and Tibet. Now the four trunk rail lines — the Lunghai, Lanchow-Sinkiang, Lanchow-Chinghai and Paotow-Lanchow — converge at Lanchow. A long section of the Lanchow-Sinkiang Railway passes the Hohsi Corridor. The rapid pace of railway building has come as a great stimulus to the industrial expansion of Kansu and its neighbouring provinces and regions.

Kansu is one of the important oil provinces of China. The Yumen fields in the western part of the Hohsi Corridor are China's oldest natural oil base.

Tienshui is the industrial centre of southeastern Kansu situated on the Lunghai Railway. It has a number of industrial enterprises, including a steel mill, a machine-building plant, a woollen textile mill and other small and medium-sized mills.

Industrial construction in Lanchow has forged rapidly ahead. Near the city is the Ahkanchen Coal Mine. The new Shantan Coal Mine in the Hohsi Corridor has become an important supply base for places along the Lanchow-Sinkiang Railway.

# LANCHOW, KIUCHUAN AND TUNHUANG

Lanchow, the provincial capital, has been for centuries known as an important crossing place on the Yellow River which flows through the city. Both railway and road bridges have now been built across the river. These bridges add considerably to the beauty of the landscape around Lanchow.

With convenient access to communications and sources of coal, water power and animal products, Lanchow has excellent prospects for the development of heavy and light industries. Remarkable progress has been made in the cultural and scientific fields. In the city there are many institutes of higher learning and scientific research, including the Lanchow branch of the Chinese Academy of Sciences. These institutes play an invaluable role in training personnel for constructional work and solving key scientific problems that arise in the course of the construction of the Northwest.

Kiuchuan, the biggest city in the Hohsi Corridor, lies not far from the Chiayu Pass, the western terminus of the Great Wall. It is an old city, fairly well known in history. Situated in the oasis on the western source of the Joshui River (Edsin Gol), it is surrounded by rich farmland. In recent years industrial development has gone ahead at a good pace. A famed handicraft of this city is the Night Shining Cup or Jade Cup, a decorative wine cup.

Tunhuang, at the western extreme of the Hohsi Corridor, is famous for the mural paintings of the Caves of a Thousand Buddhas, some 20 kilometres to the southeast of the city. The oldest of the caves date from over 1,600 years ago. An institute of research has been set up here for studying and preserving the ancient relics.

# THE NINGSIA HUI AUTONOMOUS REGION

This is the main region in which the Huis live in a compact community, making up a third of the total population. In the wake of the expanding economic construction in recent years the population has rapidly increased. Southern Ningsia is part of the Loess Plateau, with the Liupan Mountains as the main ridge. The Liupans lie across Kansu and Ningsia, with their principal ranges and peaks within Ningsia. The region is covered with a thick carpet of loess, in some places over 100 metres deep, and the topography is generally fairly flat.

Northern Ningsia is made up for the most part of the Ningsia Plain. On an elevation of 1,100-1,200 metres, it slopes gradually from south to north. The Yellow River flows through the plain in the same direction. West of this plain are the Holan Mountains which have compound rock formations with rich mineral deposits. In the piedmont belt, a few coal mines have been opened.

With an annual precipitation of only 200 mm. the Ningsia Plain is an arid area. But large volumes of water are brought down from the Chinghai Plateau by the Yellow River, and this serves to irrigate the plain. Many canals have been built over the centuries, with the main one usually named after the dynasty during which it was built — Chin, Han or Tang, as the case may be. The networks of willowlined canals and paddy fields give the landscape a look of southern China. The Ningsia Plain is in fact known as the "South of the Yangtse in the Border Region".

Under the reactionary Kuomintang regime, the warlords and landlords seized the irrigation system of the Ningsia Plain and used it as a means of exploiting the people. Maintenance was neglected, and the drainage from paddy fields accumulated in low-lying areas while salt and alkali collected on the surface, rendering a lot of land unfit for cultivation. In recent years the system has been overhauled and improved, and the cultivated area has expanded. There is still room for expansion by making good use of the terrain and water resources.

The Ningsia Plain produces abundant wheat and good quality rice. Cash crops include sesame and sugar-beet. In the mixed agricultural and pastoral areas, a good breed of sheep, the argali, is being raised. Its wool is soft, white and lustrous.

### YINCHUAN AND THE PAOTOW-LANCHOW RAILWAY

Yinchuan, capital of the Ningsia Hui Autonomous Region, lies in the centre of the Ningsia Plain. The Yellow River on its east provides irrigation and water transport facilities while the Holan Mountains serve as a shelter against the sandstorms from the west.

Well known in ancient times as a border city, Yinchuan used to be a trading centre for farm and animal products. After liberation medium-sized and small factories have been built up, including a farm tool plant and a woollen textile mill.

The Paotow-Lanchow Railway which passes Yinchuan links the two new industrial bases of Paotow and Lanchow and helps the development of industry and agriculture in the Ningsia Hui Autonomous Region. In the centre of the region it runs on the fringes of the Tyngeri Desert. It is the first railway to be successfully built on shifting sands. To ensure the smooth running of the line forest belts have been planted to hold the sand along the route of the railway.

### THE INNER MONGOLIAN AUTONOMOUS REGION

Bordering on the People's Republic of Mongolia in the north, the Inner Mongolian Autonomous Region is the earliest autonomous region in China. It was established under the leadership of the Chinese Communist Party in 1947 when the War of Liberation was still going on and the greater part of the country was not yet liberated.

There are 1,100,000 Mongolians in this region, where they live in compact communities. In keeping with the Mongolian tradition, the administrative divisions are somewhat different from those of the provinces and other autonomous regions. In addition to the counties and cities, there are leagues and The counties and cities are mainly enbanners. gaged in industry and agriculture and inhabited largely by Hans, while the leagues and banners are mostly animal husbandry areas inhabited mainly by Mongolians. The banner corresponds to the county. The league corresponds to the special administrative district and exercises jurisdiction over counties, cities and banners.

# FORESTS, STEPPES AND DESERTS

The greater part of the region is plateau standing about 1,000 metres above sea level. In the plateau's central section the Yinshan Mountains strike eastwest while the Holan Mountains to the southwest run from north to south. In the northeast of the region are the Greater Khingan Mountains, slanting in a southwesterly direction. South of the Yinshan along the bend of the Yellow River is the alluvial Hotao Plain formed by silt from the river. With fertile soil and a developed agriculture, it is an important grain producing area.

The region is longer from east to west than it is from north to south and precipitation therefore decreases towards the west according to the distance from the sea. The highest rainfall of 500 mm. occurs in the Greater Khingan Mountains. Luxuriant forests of deciduous pines make this area one of China's most important timber producing districts.

The eastern part of the Inner Mongolian Plateau has an annual precipitation of over 300 mm. and is famous for its pastures. The western part where precipitation is under 300 mm. has a dry climate with widely distributed deserts.

Inner Mongolia has a total area of desert of 226,000 square kilometres. The largest are the Tyngeri in the Bayan Naor League and the Maowusu in the Ikh Chao League. They consist mainly of gravel and shifting sand. Over past centuries wind-borne sand often covered up farmland, pastures, canals and roads, seriously impeding the development of industry, agriculture and animal husbandry. After liberation, work began to control the shifting sand and to turn the deserts to useful purpose. Extensive tree-planting, and sowing of grass coupled with irrigation have brought about an initial improvement in the areas bordering the Tyngeri and Maowusu Deserts, and greater efforts are now being made to effect further improvement.

# A RISING POPULATION AND GROWING HERDS

Pastoral areas constitute a large part of Inner Mongolia, animal husbandry being especially well developed in the Hulunbir League in the northeastern part of the region, and the Silingol and Ulan Chap Leagues in the central part. Sheep, cattle, horses and camels are included among the livestock, of which sheep are the most numerous. The Sanho cattle and Sanho horse of Hulunbir League are nationally known breeds. Animal products and stock are exported from Inner Mongolia to other parts of the country. The hundreds of thousands of square kilometres of natural pastures, coupled with the long experience of the people in livestock raising, provide excellent prospects for the further development of this region.

The herdsmen of the past knew little security. A hard frost or blizzard might kill off thousands of cattle and sheep. Animal husbandry remained backward over a long period. Now with the establishment of the people's communes many settlements have appeared. While the able-bodied herdsmen drive their herds to fresh pastures for grazing, their family members remain in their settlements. With the help of the government, they are setting up pumping stations, animal products processing plants, veterinary centres, schools, shops and clinics. In these new communities, the population has grown rapidly and the herds and flocks have multiplied. In Inner Mongolia there are now more than 1,000 dairy product factories of varying sizes, mostly in the settlements. They have raised the herdsmen's income and provided capital for construction in the pastoral areas.

Arable farming with wheat, Irish potatoes and coarse grain as the main products also occupies an important place. Considerable amounts of surplus grain are sent to other parts of China every year.

# HUHEHOT AND PAOTOW

Huhehot, the capital of the Inner Mongolian Autonomous Region, is bounded by the Taching Mountains in the north. On the south it gives on to a broad plain. The Peking-Paotow Railway passes here and the Taheh River, a tributary of the Yellow, flows before the city, watering the fertile soil in the vicinity. Tanneries and woollen textile mills are well developed, while heavy industries like iron and steel and machine-building have started. The output value of industry in Huhehot is second in Inner Mongolia only to that of Paotow.

In the old days Inner Mongolia had no institute of higher learning. Now in Huhehot alone there are the Inner Mongolia University, the Normal College, the Animal Husbandry and Veterinary College, and other institutes.

Situated in the eastern part of the Hotao Plain, Paotow is the leading industrial city in Inner Mongolia.

Before liberation it was a clearing house for the wool and hide from the surrounding grasslands, and had a small population which fluctuated with the seasonal trade. The building of a great iron and steel base here since liberation has changed the city beyond recognition.

In the vicinity of Paotow are the rich iron-ore deposits of Bayin Obo and coal deposits of Shihkuaikou. Transport is made easy by the Peking-Paotow and the Paotow-Lanchow Railways and by the Yellow River. Grain and manpower are adequate on the Hotao Plain. These are the conditions that determined the choice of this city as the site for the big Paotow Iron and Steel Works.

Many branches of light industry have also been developed in Paotow. Sugar is made out of the sugar-beet grown in profusion along the Peking-Paotow Railway and cotton textile mills have been set up to meet local needs using the cotton supplied by other provinces.

This large and beautiful city is indeed a far cry from the old wool and hide centre.

### THE SINKIANG UIGHUR AUTONOMOUS REGION

This region lies in the northwestern part of China — to the northwest of Kansu and Chinghai Provinces and north of the Tibetan Autonomous Region. It borders on the Mongolian People's Republic, the Soviet Union, Afghanistan, Pakistan and India. In size, it occupies one-sixth of the area of China, and is 16 times as big as Chekiang Province.

This vast area has long been sparsely populated, with an average of less than four persons per square kilometre. With the recent economic development, the population has increased rapidly. The region is inhabited by 13 nationalities: the Uighurs, Hans, Kazakhs, Mongolians, Huis, Khalkhas, Russians, Uzbeks, Sibos, Tadjiks, Tartars, Tahurs and Manchus. The Uighurs are the most numerous and most widely distributed.

Although they are the predominant nationality in this autonomous region the people of other national minorities also enjoy full rights as citizens. Autonomous *chou* and autonomous counties have been set up for the Kazakhs, Mongolians, Huis, Khalkhas and other nationalities.

### THE TIENSHAN MOUNTAINS

The Tienshan Mountains cut across the central part of Sinkiang, with a great basin on either side the Tarim Basin in the south, the Dzungarian Basin in the north. Constituting one-fifth of Sinkiang's total area, the Tienshan district includes several valleys as well as the basins. Tectonically, the Turfan and Hami Depressions are the result of violent fault depressions. The floor of the Turfan Depression, about 4,000 square kilometres in area, is below sea level, the lowest land point in China.

The Tarim Basin, about 1,000 metres above sea level, occupies more than half of the total area of Sinkiang. Fringed by high ranges, it is quite isolated, and being deep in the centre of the Eurasian continent it has a dry climate. The 370,000-square kilometre Taklamakan Desert which occupies its most low-lying area is covered with countless sand dunes. Surface water is extremely short. Investigations since liberation have revealed that in the heart of the desert there are lakes and grasslands and much land to be reclaimed. Some of this land is already under the plough.

On the margins of the basin are some oases. The larger ones are Khotan at the Kunlun foothills, Kashgar below the Pamir Plateau and Aksu at the Tienshan foothills.

The upper Tarim River is fed by the melting snow and ice from the Kunlun, the Pamirs and the Tienshan. The large discharge makes it the longest inland river in China. The Lop Nor in the eastern part of the Tarim Basin, 3,000 square kilometres in size, is one of the biggest lakes in the country's interior drainage basins. It is mostly fed by underground water and partly by the Peacock River.

The floor of the Dzungarian Basin, smaller than the Tarim Basin, is on an average altitude of 500 metres. On its northwestern margin are massive mountains interspersed with depressed valleys. These valleys are natural passages facilitating the communications between China and the Soviet Union as well as the penetration of moist air from the Atlantic into northern Sinkiang. The greater part of the Dzungarian Basin is relatively humid, and its floor is mainly grassland. It has less desert than the Tarim Basin and most of its sand dunes are anchored by tamarisk and other trees.

# OASIS AGRICULTURE

The greater part of Sinkiang has a dry climate and more than 90 per cent of its cultivated land depends entirely on irrigation. Oasis agriculture is a characteristic feature in this region. The people of various nationalities in Sinkiang have had rich experience in water conservancy. The *kareze* system of irrigation<sup>1</sup> in the Turfan and Hami Depressions is an ingenious one. Agriculture has made rapid progress since liberation. The Sinkiang Production and Construction Corps of the Chinese People's Liberation Army has done a great deal in the way of building water conservancy projects and opening up waste land for cultivation, as instanced by the vast Manass area in northern Sinkiang. Over the last decade big mechanized state farms have also appeared on both the northern and southern sides of the Tienshan. In all, the army men have turned some 6,700 square kilometres of waste land to good account.

According to an estimate of the potential facilities for irrigation from mountain glaciers, rivers and underground waters, Sinkiang still has over 153,000 square kilometres of waste land which can be turned into farmland. In other words, the present cultivated area can be more than doubled. Furthermore, the existing irrigation system can be made more effective and the cultivated area expanded if the canals

<sup>&</sup>lt;sup>1</sup> Where a water-bearing layer is found, a series of wells are sunk at intervals of 20 metres or so in the direction of the water-bearing layer, down the mountain slope to the plain. The wells are then linked up by a subterranean passage along which the water flows till it emerges on to level ground. A *kareze* may run for many kilometres under the desert. In this way, an almost inexhaustible source of irrigation is provided for agriculture. Furthermore, as the water flows underground, it is not exposed to evaporation or absorbed by the parched earth. Most of the farmlands in Turfan and Hami are irrigated by *kareze*.

on the oases are redistributed and water used more rationally.

Half of the total crop area in Sinkiang is sown to wheat of both winter and spring varieties. Another important crop is maize, which is grown more extensively in southern Sinkiang than in the north. Rice, kaoliang and millet are also produced in great quantities. Sinkiang rice rivals that of the Hohsi Corridor in quality.

The plentiful sunshine in the basins makes the area an ideal one for cotton, particularly the Tarim Basin and the Turfan Depression, where vegetation exceeds 220 days while cumulative temperature is 4,000° C or above. Long-staple cotton does particularly well in this hot climate. In the northern and western parts of the Dzungarian Basin, the irrigation is convenient but the vegetation period lasts only about 140 days. These areas are more suited to sugar-beet than to cotton.

The climate of Sinkiang makes it one of China's main fruit-producing regions. The sweet Hami melons, the seedless Turfan grapes and the Ili apples are well known at home and abroad. The Uighurs are experienced fruit-growers. Orchards dot the oases in the Tarim Basin. Between May and September the markets are full of fresh fruits.

# RAPID INDUSTRIAL EXPANSION

Before liberation Sinkiang had no more than a score or so of old workshops. It is only during the last decade that modern industry has made its appearance. Today there are thousands of factories, large and small, of both heavy and light industries. The petroleum and non-ferrous metals industries have been extensively developed. Karamai is an important oilfield. An iron and steel works and a cement factory have been built in Urumchi and a farm tool plant in Kashgar. These are of great help in developing water conservancy and raising farm technique. Thermal-power or hydro-power stations have appeared in the major cities north and south of the Tienshan Mountains.

The light industrial enterprises have been set up near the areas producing raw materials, as for instance, the cotton mill in Kashgar of western Sinkiang, the silk mill in Khotan of southern Sinkiang, the cotton mill in Shihhotse and the woollen textile mill in the Kazakh pastoral areas of northern Sinkiang, the beet-sugar mill in the Manass reclamation area and the numerous animal products processing factories in the cities in and around the pastoral areas.

In the years before the railway reached Sinkiang, the transport of machinery and equipment presented almost insuperable difficulties. Industrial construction was therefore greatly handicapped. Now that the Lanchow-Sinkiang Railway has entered Sinkiang, industrial construction can proceed at a much faster rate.

# URUMCHI, KASHGAR AND HAMI

Urumchi, Sinkiang's capital and political, economic and cultural centre, stands on the Urumchi River in the northern foothills of the Tienshan. In communications, a highway connecting southern and northern Sinkiang winds through a pass in the nearby Tienshan; airlines extend from Urumchi east to Hami, south to Khotan, west to Ining and north to Altai. An international airline connects Urumchi with Alma-Ata in the Soviet Union. The Lanchow-Sinkiang Railway under construction will pass here.

Thanks to the efforts of the people of various nationalities over a decade or more since liberation, Urumchi has become a brand-new industrial centre in China's northwest frontiers. In the cultural and educational fields, rapid progress has also been made. A number of institutes of higher learning have been set up, with ten times as many students as in pre-liberation days, more than half of them from the national minorities.

A hundred kilometres south of Urumchi are the Tienshan peaks covered by dazzling snow and ice. On the mountainsides are belts of spruce and upland meadows. The beauty of the scenery has made it a popular summer resort.

Kashgar, on the western edge of the Tarim Basin, lies under the snow-clad Pamir peaks. Situated on the pass from the Tarim Basin to central Asia, it was an important town over the centuries and also the most important post station on the ancient "silk road" through which Chinese silk was exported during the Han and Tang Dynasties to central Asia and Europe.

Kashgar has many new factories. Many among the people of various nationalities who live in this area have become skilled operators of machine tools, generators, or spinning and weaving machines.

Hami is a beautiful city situated in the Hami Basin in eastern Sinkiang. West and southeast of Hami are miles and miles of uninhabited deserts but nearby are very large oases. It is an important communication centre linking Sinkiang with the provinces to the east.

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### 中国地理概述

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任育地 著

★ 外文出版社出版(北京) 1964年第一版 編号:(英)12050-8 00150 12--E-601P

# A SHORT HISTORY OF CHINA

### 1840-1919

### LIN YI

This is the second of the three volumes issued under the title A Short History of China. They are designed for popular reading.

The present one deals with the period from the Opium War in 1840-42 to the eve of the May Fourth Movement in 1919. It covers the Taiping Revolution, the Reform Movement, the Yi Ho Tuan Uprising and the Revolution of 1911. It presents the salient facts about imperialist aggression in China, traces the transformation of China from an independent feudal society into a semi-colonial and semi-feudal society. It describes the Chinese people's persistent fight against imperialism and feudalism and recounts their struggles and the lessons drawn from them. The first volume deals with events from earliest times to 1840 and the third from 1919 to the establishment of the People's Republic of China in 1949. Both will shortly be available.