ON THE HOME FRONT

Shenyang's Flourishing Industry

SHENYANG, an ancient city in northeast China, has gradually become one of the country's major industrial centres since its liberation in 1946. With more than 2,000 factories, big and small, the city provides other parts of the country with metallurgical equipment, precision machine tools, heavy-duty machines, prime movers and other industrial products.

After liberation, in the spirit of arduous struggle and self-reliance, Shenyang workers rebuilt their own industry on the ruins left by the Japanese imperialists and Kuomintang reactionaries.

Throughout those years of restoring production, the workers, untrusting in their efforts, ran their machines day and night and overfulfilled state quotas every month. During the First Five-Year Plan period (1953-57), the city rebuilt, expanded and set up industrial enterprises on a large scale with huge state investments. As a result, it was built into an industrial centre capable of making a great number of complete sets of equipment on its own.

Today, the broad masses of workers in Shenyang are full of confidence in executing the Fifth Five-Year Plan. The Shenyang No. 1 Machine Tool Plant has made rapid headway in production since the First Five-Year Plan. Its total industrial output value in the Second Five-Year Plan period was 3.6 times that of the First Five-Year Plan period, and the output value doubled in the Third Five-Year Plan period. During the Fourth Five-Year Plan period, up until the end of last October, the plant's output value was more than 4 times that under the Third Five-Year Plan. Both the output and variety of products by the transformer factory have increased greatly since the beginning of the Great Cultural Revolution and they basically meet the needs of China's developing power industry.

Since the start of the Great Cultural Revolution, the Shenyang No. 1 Machine Tool Plant has formed a "three-in-one" designing contingent comprising workers, cadres and technicians. They not only transformed all outmoded products into new advanced ones with Chinese characteristics but also designed and turned out new-type modern machine tools.

In addition, some new industrial enterprises are coming into being. In 1965, there were only 17 radio factories producing some components and simple accessories. Now there are over 80 such factories turning out not only radios and TV sets but also integrated circuits for use in industrial production, data processing and various types of electronic computers, as well as electronic computers capable of doing over 100,000 calculations per second, video recorders and other advanced equipment and instruments.

Light industry also has moved ahead at a quick pace. Before 1970, other parts of the country supplied 70 per cent of the articles for daily use sold on Shenyang's market; now 80 per cent are made locally, with some items shipped to other places. With the development of the film industry in the past few years, the city now produces more than 20 kinds of new light sources for film projection, various types of lighting equipment for shooting films, optical lens, portable projectors and some accessories. Some of them are up to advanced levels.

Poetry-Composing Gains Popularity

POEM-WRITING has been thriving among the masses in Peking, Tientsin and Shanghai since the Great Proletarian Cultural Revolution started in 1966. Filled with confidence after studying the two newly published poems by Chairman Mao, poem-writers are determined to write more and better poems in the new year.

Recitations of poems are often held and leaflets of verses distributed in many of the three municipalities' factories, villages, P.L.A. units, schools and shops. Reciting and commenting on poems has become a popular cultural activity, with people reciting the poems they have composed themselves. Members of the Hsinghing People's Commune in Peking's Ta-hsing County have written 90,000 poems in the past two years. During the same period the 600 pupils of the Hsiaochinwung Brigade in Peoti County, Tientsin, has become famous for the widespread love of poetry among its members. This led to the publication of Selection of Poems From Hsiaochinwung by the Tientsin People's Publishing House last year.

Warm praises of Chairman Mao, the Communist Party, the Great Proletarian Cultural Revolution and socialist new things are common subjects in the poems from all the three municipalities, where poem-writing is characterized by mass participation and close connection with present-day struggles. The Peking Working
People's Palace of Culture has over the last three years sponsored 140 poetry recitations with themes related to the central tasks of various periods. In Shanghai several recitations have been organized under the titles of "Eulogizing the Great Cultural Revolution," "Deepening the Study of the Theory of the Dictatorship of the Proletariat" and "Praising the Revolution in Education." In this way poems have become a weapon for dealing blows at the enemy and songs to encourage the people to continue the revolution.

Poem-writing contingents composed of workers, peasants and soldiers and professionals are constantly developing in these municipalities. Tientsin alone now boasts 600 amateur worker-peasant-soldier poets.

Party organizations at various levels have paid attention to strengthening leadership over these contingents. Poem-writers are often organized to study works by Marx, Engels, Lenin and Stalin and by Chairman Mao, criticise the revisionist line in literature and art and swap experiences. The worker-peasant-soldier amateurs are urged to retain the fine qualities characteristic of their classes and the professionals are called upon to go deep among the masses of workers, peasants and soldiers and learn from them.

**Kwangtung — Sugar Producing Base**

KWANGTUNG Province is being built into a sugar producing base. With a warm climate, plentiful rainfall and long growing period, this southern province is one of China's major sugar producers. While paying attention to grain production, people in various parts of Kwangtung expanded sugar cane production last year, increasing the total acreage to an all-time high. Sugar cane was grown over large tracts of land and planting was also undertaken in a big way in autumn.

According to incomplete statistics, Kwangtung has set up 28 sugar-cane plantations each embracing an area of from 300 to 600 hectares and some 100 smaller ones as big as 60 hectares each. In 1975, sugar cane output in many places was higher than the previous year—a result of earlier planting and more careful management; per-hectare output in a large number of production teams averaged 160 tons.

Sugar refineries were built in Kwangtung last year on an unprecedentedly large scale. Altogether 31 were built or expanded, and daily cane-milling capacity rose by 11,000 tons. Every newly expanded sugar refinery has brought quick returns with little investment as a result of technical innovations and the spirit of self-reliance displayed by the workers and staff. At the refineries under construction in the newly opened-up sugar cane producing areas, equipment installations are being speeded up so that operation can begin on schedule.

Soon after the start of the harvesting season, all of Kwangtung's sugar refineries, big, small and medium-sized alike, have swung into production.

**New Results of Scientific Research**

A new method of increasing the fertilizing effect of ammonium bicarbonate was recently devised by the Nanking Institute of Pedology. Granulating the powder and applying it deep underground not only raises the fertilizing effect about one-third but also reduces its volatility. Results of experiments show that, compared with the same amount of ammonium bicarbonate applied as powder on the ground, the granulated chemical increases the output of rice by 15 per cent, wheat by nine per cent, and maize by 18 per cent.

In co-operation with factories concerned, members of the institute have trial manufactured a granulating machine for this chemical as well as a simple device to apply the ammonium bicarbonate grains deep in rice fields, thereby facilitating their use over a large acreage.

A reverse osmosis conduit installation for the conversion of saline water into fresh water was recently trial produced by the Lanchow Institute of Glaciology, Cryopedology and Deserts.

When the salinity exceeds a certain amount, the water cannot be drunk by men or animals and is detrimental to plants. The distribution of saline water covers some 30 per cent of the area in northwest China. The new installation desalts the saline water and converts it into fresh water which men and animals can safely drink and which is also suitable for irrigation or industrial use.

The Lanchow institute started work on this installation in 1971. With the help of related units, they made the component elements and put up the installation. When it was completed, they put it into operation in desert areas for four months and collected extensive scientific data. Now the institute is making further studies and experiments so as to improve the installation.

The Chinghai Institute of Salt Lake recently evolved a new method of manufacturing iodine by replacing acids with chlorine water.

By using this new method, a high output of good iodine can be produced at 30 per cent less cost. In addition, since this manufacturing process leaves a minimum of harmful waste water, it is beneficial to environmental protection.

Iodine is an indispensable raw material in industry, agriculture and medicine. The old method of producing iodine in China called for the use of sulphuric acid and hydrochloric acid. This involved not only high costs and produced large amounts of waste water, but more important, consumed quantities of the two acids which are important raw materials for producing chemical fertilizers.

This new method of making iodine is now being used in a number of areas in China.