# RED CHINA'S ECONOMIC WAR POTENTIAL

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To WAGE was independently for any length of time a world power must possess several important assets. All may not agree that Red China is yet a world power in this respect, but all must admit that her shadow hovers in the background of world conferences. Her influence is growing at a fantastic rate.

The economic factors essential to enable a country to wage war are sufficient manpower, sufficient food, natural mineral resources, technical ability, and good internal communications. Other factors are also desirable, or even necessary, but if they are not present they are not such a crippling handicap as would be the lack of any one of the five major ones just mentioned.

Few countries, even the large ones, have all these five assets in abundance As a result, when considering defense,

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they are forced into uneasy alliances or coalitions because one country may have a surplus of what another lacks. Has Red China all these five major assets, and is she capable of waging war independently?

Red China's communication picture is not substantial. The deduction is that internal communications would severely restrict Red China from taking protracted offensive action against a world power. However, what about the other factors: manpower, food, natural mineral resources, and technical ability?

In the Korean War, Red China leaned very heavily upon the Soviet Union. She still does to a large extent, boes this mean, then, that she could not fight without the USSR's consent, active assistance, and backing? Let us see.

## Mannower

The first military essential manpower can be dismissed very briefly because Red China has so much. Her population has been estimated to be about 650 million and, moreover, is increasing by between 12 and 15 milhon a year. Experts say that at this present rate the population will rise by 100 million every seven years or so, and that by 1980 it will exceed one billion.

It seems that this trend of a rapidly rising population will continue, at least for a while. A birth control campaign was advocated in 1956, but after some hesitation it was eventually decided that Red China would be able to develop industry and allow the population to increase naturally at the same time, without lowering the standard of living. In a few years' time, when she is bursting at the seams with people whom she perhaps cannot feed, this policy may change.

However, at the moment, and for some time to come, Red China certainly has ample manpower. Perhaps it is because of this that she boasts that she alone of the major powers is not afraid of nuclear war. But vast manpower is no military asset by itself.

#### Food

One of the most difficult problems of war is to feed the civil population at a time when so much energy and material are drained off into other channels. This is especially so when the population is large, or when a proportion of the food consumed has to be imported. Britain faced this situation in World War II. A country which can feed its population in wartime from internal resources is in a strong military position.

At the moment, the food imports and exports of Red China are negligible, and the people live on what is produced within the country. In fact, the whole economy of Red China rests upon agriculture but, in general, her techniques in this sphere are backward and her yields are low. As a result, the standard of living is poor. It is true that the average Chinese has enough but only just enough to eat, There is little surplus,

In spite of lofty pronouncements from Peking and boasts of agricultural improvements and achievements, one can detect that the planners are more than slightly worried by the acutely rising population. They are faced with the problem of trying to increase the output to keep pace with the increasing number of mouths to feed.

Red China consists of just under four million square miles, but of this vast area less than 20 percent is cultivated. The remainder is mainly swamp, mountain, forest, or desert. This small percentage may, of course, be gradually increased, but there is an eventual limit to such expansion.

The cultivated land lies mainly in the valleys, on the plains, and along the coastal areas where the bulk of the population is crowded. Before World War II it was estimated that food for each Chinese, and this is decreasing as the population swells.

Ninety percent of this farmland is under intense cultivation. This means that it maintains few large domestic animals, although China has always raised poultry and pigs in profusion. It was reported that there were only about 90 million large cattle in 1958.



Red China has less than one-half acre of land per person under cultivation

the average "farm" was less than three and one-half acres in size (compared with 77 acres in Britain and 157 acres in the United States). This uneconomical trend continued until 1958 when the bulk of the peasants were herded into communes.

Today, experts estimate that there is slightly less than one-half acre of cultivated land available to produce

and that they were kept mainly for draft purposes. Meat is a luxury to most Chinese, and as a rule is only eaten in the north of the country. Those in the south, along the coast and by the rivers, have fish as a compensating item of diet.

The staple diet of the Chinese is grain in one form or another—millet, wheat, or rice, depending upon which part of the country they live in. Ninety percent of the cultivated land is devoted to grain production. Yields are poor.

In 1949 the total grain output was 113 million tons compared to a previous average figure of about 150 milion tons. This was boosted up to 164 million tons by 1952 when the First Five-Year Plan began, and increased to 194 million tons when it ended in 1957. Available production figures are suspect as Red China has often juggled them to make her various points or excuses; however, these may be as accurate as any others.

The Second Five-Year Plan, due to end in 1962, aims at doubling this output by fertilization, irrigation, and by bringing more land under cultivation.

In addition to the two five-year plans, there is a 12-year plan for agriculture which began in 1956. This plan has the object of both raising the existing output and of encouraging subsidiary crops such as, sunflowers, castor beans, tea plants, rubber, hemp, coffee, sugarcane, sugar beets, groundnuts, and jute in the various parts of the country where these crops can grow. Also Red China now produces about four million tons of cotton annually, which is just about enough for internal consumption.

Although the production of food is being increased, it will be a neck-andneck race to keep pace with the increasing population.

# Natural Mineral Resources

Raw material is required to produce the munitions of war. If a country cannot provide it from its own natural resources, the raw material or the finished, or partly finished, product has to be imported. This correspondingly reduces the war potential and increases the vulnerability. Heavy in-

dustry to function requires, basically, coal, iron, petroleum, and copper.

Let us see what natural deposits of these, and other important materials, Red China has.

#### Coal

Red China has never been completely surveyed and prospected for mineral resources, but this is now in progress. There are some 4,000 prospecting and surveying teams now operating. That she has large deposits of coal of varying quality there is no doubt, but whether they exceed 50 billion metric tons, as she claims, no one can be quite sure.

Red China claims to be the third largest coal-producing country in the world, and to have the largest opencast mine in the world at Fushun, in Manchuria. The main coal deposits are in Manchuria and the north. While a few produce good quality coal, much is of low grade.

The coal produced in 1952 was about 60 million tons, but the First Five-Year Plan raised annual production to about 120 million tons. The Second Five-Year Plan aimed at increasing it to over 200 million tons. This target has already been exceeded. Red China can be considered fairly well off in coal resources, having sufficient to power heavy industry to manufacture munitions.

In regard to subsidiary power, Red China is making efforts to harness her rivers, but as yet her hydroelectric schemes are in their infancy. Their contribution will be negligible for some years.

#### Iron

Red China claims to have workable deposits of iron ore of about 12 billion tons, three-fourths of which are located in Manchuria. However, on the whole, the metal content is low,

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Other new deposits have been found in Szechwan, Kwantung, and Hainan.

About 1.35 million tons of steel were produced in 1952. The First Five-Year Plan increased this to 5.8 million tons—not enough for her normal domestic consumption, even at her almost primitive level of existence.

Red China is acutely conscious of this deficit, and in 1958, the year of the Great Leap Forward, there was an intense campaign to increase production to 10 million tons. The "back-yard furnaces" were given great publicity. It is claimed that at one time there were over 600,000 of them in operation, but they were wasteful and the quality of the steel was poor. There was a burning desire to exceed the annual steel output for Britain, which is about 20 million tons.

Most of the backyard furnaces have disappeared and it is now planned to develop some 800 steel-producing centers in places situated near the raw supplies. The target set for 1962 is 12 million tons, and there is some doubt as to whether it will be fulfilled. The output of the US is about 102 million tons annually.

Red China is, at the moment, only capable of producing about one-tenth of the steel produced by the US. This is by no means enough to face a world power in modern warfare.

Red China has difficulty in reaching her steel-production targets, and one at once suspects juggled figures. When she has reorganized her ironsmelting works and steel mills, production may improve, but no astronomical rise can be expected immediately.

#### Oil

In order for a country to operate its aircraft, tanks, and vehicles, it must have ample supplies of petroleum. Red China has been enthusiastic about allegedly rich discoveries of oil deposits, which she claims, when fully developed, will produce about 100 million tons a year. This, although only about one-third the annual production of the US, is considered to be overoptimistic.

There are several oil shales in Manchuria, a few of which have been worked for some years. The most important one is at Fushun. Two new, allegedly very rich, oilfields have been discovered—one at Yûmen, in Kansu, on the edge of the Gobi Desert, and the other at Karamai, in Sinkiang. It is claimed that oil deposits have been located in other parts of Kansu, in Szechwan, Tsinghai, and on the borders of Inner Mongolia. These are being assessed and exploited.

In spite of these rosy prospects, Red China has not been successful in her oil production. In 1957 she produced only 1.4 million tons far short of the target figure of two million tons. By 1962 she hopes to be producing about six millions tons. Her domestic needs are now in the region of five million tons, and any increase in vehicles will inevitably cause her requirements to increase.

Such oil as she is producing, or is expecting to produce, is fairly low grade and unsuitable for aviation. All high-octane fuel has to come from the USSR. Therefore, the USSR holds the string which activates the Red Chinese Air Force.

The deduction must be that Red China does not have enough fuel oil to fight a modern war, even a strictly defensive one, as she is entirely dependent upon Soviet generosity to move her tanks and motor transports and to fly her aircraft. Even if her allegedly large petroleum resources are

developed to the maximum of 100 million tons a year, she would still not be able to fight any form of mechanized warfare unaided for more than a few weeks.

#### Copper

Copper is an essential ingredient in the manufacture of munitions and in industry in general. Red China has only small deposits—far from enough for her peacetime needs. She has to rely upon imported copper. Survey teams are actively searching for copper, but as yet no success has been reported.

### Other Natural Resources

Red China has a sprinkling of most of the other manufacturing metals, especially nonferrous ones. She claims to have the largest deposits in the world of tungsten and molybdenum, and deposits of manganese, lead, and aluminum are also extensive

Red China alleges that rich deposits of uranium have been located in the Tien Shan Mountains, in Sinkiang, but few details have been made public.

As far as natural resources are concerned, the deduction must be that while Red China has ample "subsidiary" metals for her industries, and plenty of iron and coal, she lacks sufficient oil and copper.

# Technical Ability

Possessing raw materials is of little use unless the skill and knowledge is available to turn them into munitions and accessories of war. China had a late start as far as industry was concerned and had made little progress by 1912 when a period of nearly 40 years of civil disorder and war began.

After World War II the USSR promptly stepped in and dismantled the Japanese-developed industrial complex in Manchuria. By 1949 the new Communist government was left with

little but crude cottage industries which were born under the stresses of war.

Red China has been striving desperately ever since to become an industrial nation, but as yet she compares unfavorably with even some of the smaller Western nations. In Red China the medium of labor is still predominantly the human being and not the machine. She can continue to exist at her almost primitive level of economy, but it is problematic whether her industry would be adequate to enable her to put up a prolonged defense, let alone carry out offensive operations.

# **Economic Planning**

The five-year plans, from an industrial and organizational point of view, were copies of the Soviet plans. They were, in fact, extremely successful in that they built up an industrial structure from practically nothing. Large-scale planning, or national planning of any kind, was something entirely new to China and, mitially, it worked wonders.

The First Five-Year Plan aimed especially at developing heavy industry in the north and northwest and restarting the dismantled Manchurian plants. Progress was made with Soviet help although the target figures had to be revised from time to time. By the end of 1957 Red China claimed that her heavy industry was getting on its feet again, and the Second Five-Year Plan aimed at spreading and developing it.

In 1957 Red China claimed she had over 600,000 technicians such as engineers and scientists. It is not known whether this figure was strictly accurate or how skilled the individuals were. In addition, a large number of Soviet technicians had been loaned to start or restart various projects.

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These advisors numbered perhaps as many as 20,000, and they were obviously the key personnel in the several industries. At one time there had been as many as 40,000 Soviet technicians and advisors in Red China. In 1956 they began to thin out as Chinese who were considered capable—having been trained in the USSR or by the Soviets—stepped in to take their places.

In October 1956 the first Liberator trucks—designed and produced by the Chinese—were turned out. Now approximately 20,000 a year are going out onto the roads of China.

In 1957 Red China began to design and build her own small hydroelectric stations and her own shipyards, steel mills, and diesel engine factories. In that year, the first trainer aircraft, the first oil tanker, and the first tractors in any number were produced almost entirely by the Chinese. The next year, the first cargo ship was completed at Dairen.

## Arms Production

In the field of armaments, the Chinese have, for years, produced small arms, mortars, and ammunition. Small field guns have also been produced, but the Chinese have not yet progressed to designing and producing their own tanks, fighter aircraft, or large guns. Chinese prototypes of aircraft have appeared, it is true, but so far the tanks and other heavy armament is still Soviet.

All radio, radar, and precision instruments are still imported from the USSR. Chinese technicians do not yet seem to have acquired the necessary degree of skill in this sphere.

In the field of nuclear research, the Chinese have attained a certain amount of knowledge. However, it is not yet thought that they possess nuclear weapons or are yet capable of producing them. By 1954 there were 36 nuclear research stations set up in Red China, staffed by Soviets with Chinese assistants. This number has increased since. In July 1958 the first atomic reactor in Red China was put into operation.

There are several rocket sites in Red China which are manned by Soviet experts. Chinese technicians are being trained to service and handle them. However, it is not anticipated that Red China will be capable of firing rockets unaided for some years, or of producing unaided her own nuclear weapons.

## Soviet Help

To complete the picture it is perhaps fitting to give a brief résumé of what help the USSR has given Red China to enable her to develop her industrial potential so quickly. No other country has helped Red China in any material way.

From 1945 to 1949 the USSR underestimated Red China and gave her no help in the civil war she was fighting. The Soviets were probably quite surprised and startled to find the Communist Chinese to be the eventual winner. She then eyed Red China with a new interest and, as the cold war was developing, decided to step in to help her before any other large power became interested. The USSR, it should be remembered, had already callously stripped Manchuria of industrial plants and machinery in 1945.

Soviet-Red Chinese liaison began in February 1950, when a Treaty of Friendship, Alliance, and Mutual Assistance was signed, and the USSR granted a loan of over 280 million dolars, at one percent interest, to purchase materials and equipment. But this was not arrived at without hard

bargaining on both sides. The Korean War brought the USSR and Red China closer together, and quantities of Soviet war material were sent to Red China.

Red China was deeply concerned with initially establishing a number of key projects which would serve as pilot schemes from which she could-build up her industrial complexes. She wanted Soviet help to establish steel mills, oil refineries, chemical works, power stations, assembly plants, and engine factories, and to open new mines.

In September 1953 the USSR agreed to help build 141 of these large-scale enterprises, or to reconstruct them, and to give ample technical assistance. Between that date and February 1959 she agreed to help with others to bring the total to just under 250 major enterprises of various kinds. About 100 were in operation by the end of 1958, and it is thought that perhaps half the total number have been completed.

The USSR, as well as granting loans, also embarked upon a scheme to train Chinese technicians, both in the USSR and in Red China, and many thousands have onalified since.

## Summary

When considering the economic war potential of Red China, one must constantly bear in mind the fact that she is a backward country with a low, even primitive, standard of living. Her claims of industrial progress cannot be checked, and, assuming they might be roughly accurate, they still fall far below the average figures of the great powers.

Industrially, Red China has made great strides. This progress will continue, but more slowly as it reaches its ceiling. Her normal peacetime internal needs will quickly swallow up whatever she can produce in the industrial field, and there will be little surplus available for other purposes.

It can be said that Red China's war potential is great but unbalanced. She has ample manpower, but may run into difficulties in food production. She has ample coal, but steel production is painfully slow in developing. She does not have enough petroleum nor enough copper to produce munitions for herself without external aid. Her prospecting teams may yet locate deposits of essential minerals which would improve her war potential considerably.

If Soviet technicians were suddenly withdrawn, her progress, especially in the fields of nuclear research and manufacturing of precision instruments, would stand still, if not regress.

For fuel oils, especially high grade, Red China is completely dependent upon the USSR, and is likely to be for several years. Visions of whole corps of mechanized troops motoring across Sinkiang into the USSR, or to the borders of other adjacent countries, such as India, or of motoring anywhere in large numbers, are illusions which cannot materialize for a long while.

The policy of Red China will be to continue to filter forward on foot through the most difficult country she can find, a voiding the wide-open spaces.