

**SECRET**

13

**ECONOMIC INTELLIGENCE REPORT**

**ECONOMIC PLANNING AND DEVELOPMENT  
IN COMMUNIST CHINA  
1952 - 60**



**CIA/RR 73  
20 June 1956**

**CENTRAL INTELLIGENCE AGENCY**

**OFFICE OF RESEARCH AND REPORTS**

**SECRET**

SECRET

**WARNING**

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

S-E-C-R-E-T

ECONOMIC INTELLIGENCE REPORT

ECONOMIC PLANNING AND DEVELOPMENT IN COMMUNIST CHINA  
1952-60

CIA/RR 73

(ORR Project 15.849)

CENTRAL INTELLIGENCE AGENCY

Office of Research and Reports

S-E-C-R-E-T

S-E-C-R-E-T

FOREWORD

This report attempts to assess the impact of the Communist system of economic planning, regimentation, and rapid industrialization upon the backward, predominantly agricultural economy of China; to estimate the effect of that impact upon Communist China's economic development and capabilities through 1960; and to examine the foreign economic relations of Communist China with Western countries, the USSR, and other members of the Sino-Soviet Bloc.

- iii -

S-E-C-R-E-T

S-E-C-R-E-T

CONTENTS

|   | <u>Page</u> |
|---|-------------|
| Summary and Conclusions . . . . .   | 1           |
| I. Introduction . . . . .   | 9           |
| A. 1949 Through 1952 . . . . .  | 9           |
| B. January 1953 Through July 1955 . . . . .                               | 9           |
| C. July 1955 Through 1957 and 1960 . . . . .                              | 10          |
| II. Economic Planning and Administration . . . . .                        | 11          |
| A. Five Year Plan (1953-57) . . . . .                                     | 11          |
| B. Extension of Economic Controls . . . . .                               | 11          |
| 1. Organizational Structure . . . . .                                     | 11          |
| 2. Economic Control Organizations and Methods . . . . .                   | 12          |
| 3. Progress Toward Socialization . . . . .                                | 16          |
| C. National Budget and Fiscal and Accounting System,<br>1950-55 . . . . . | 23          |
| 1. Budget Revenues and Expenditures, 1950-55 . . . . .                    | 23          |
| 2. Capital Construction Program . . . . .                                 | 32          |
| III. Population and Labor Force . . . . .                                 | 49          |
| A. Population Trends . . . . .  | 49          |
| B. Labor Force . . . . .  | 51          |
| 1. Employment in Modern Industry . . . . .                                | 53          |
| 2. Employment in Industry . . . . .                                       | 55          |
| 3. Working Conditions . . . . .   | 57          |
| C. Education and Technical Training . . . . .                             | 58          |
| IV. Trends in the Economy . . . . .                                       | 61          |
| A. Significance of Chinese Communist Statistical<br>Reports . . . . .     | 61          |
| B. Gross National Product . . . . .                                       | 62          |

S-E-C-R-E-T

|   | <u>Page</u> |
|---|-------------|
| 1. By Sector of Origin . . . . .                    | 62          |
| 2. By End Use . . . . .                             | 64          |
| 3. Size of Gross National Product in 1952 . . . . . | 64          |
| C. Consumption and Investment . . . . .             | 66          |
| 1. Consumption . . . . .                            | 66          |
| 2. Investment . . . . .                             | 67          |
| D. Agriculture . . . . .                            | 68          |
| 1. Food Production . . . . .                        | 68          |
| 2. 1955 Food Situation . . . . .                    | 72          |
| 3. Principal Commercial Crops . . . . .             | 72          |
| E. Industry . . . . .                               | 74          |
| 1. Engineering Industries . . . . .                 | 79          |
| 2. Armaments Industry . . . . .                     | 82          |
| 3. Electric Power . . . . .                         | 85          |
| 4. Coal . . . . .                                   | 86          |
| 5. Ferrous Metals . . . . .                         | 87          |
| 6. Nonferrous Metals . . . . .                      | 89          |
| 7. Petroleum . . . . .                              | 89          |
| 8. Chemicals . . . . .                              | 92          |
| 9. Cement . . . . .                                 | 92          |
| 10. Light Industry . . . . .                        | 94          |
| F. Transport and Telecommunications . . . . .       | 96          |
| 1. Transport . . . . .                              | 96          |
| 2. Telecommunications . . . . .                     | 108         |
| V. Foreign Trade and Economic Relations . . . . .   | 109         |

Appendixes

|                                   |     |
|-----------------------------------|-----|
| Appendix A. Methodology . . . . . | 115 |
|-----------------------------------|-----|



50X1

S-E-C-R-E-T

Tables

|  | <u>Page</u> |
|--|-------------|
| 1. Socialization of Agriculture in Communist China,<br>1951-55 . . . . .   | 18          |
| 2. Socialization of Credit in Communist China, 1950<br>and 1953-55 . . . . .   | 21          |
| 3. Socialization of Selected Industries in Communist China<br>During the Five Year Plan (1953-57) . . . . .                            | 22          |
| 4. Budget Revenues and Expenditures in Communist China,<br>1950-55 . . . . .   | 24          |
| 5. Disposition of Surplus Funds Under the 1955 Budget<br>of Communist China . . . . .  | 27          |
| 6. Economic Construction Expenditures in Communist China<br>During the Five Year Plan (1953-57) . . . . .                              | 33          |
| 7. Comparison of Investment in Communist China During the<br>Five Year Plan (1953-57) with Gross National Product<br>of 1952 . . . . . | 35          |
| 8. Investment and Value Added for Selected Industries<br>in Communist China During the Five Year Plan<br>(1953-57) . . . . .           | 36          |
| 9. Increases in the Industrial Capacity of Selected<br>Industries of Communist China During the Five Year<br>Plan (1953-57) . . . . .  | 39          |
| 10. Estimated Cost of Industrial Capital Construction<br>in Communist China During the Five Year Plan<br>(1953-57) . . . . .           | 41          |
| 11. Cost of Nonindustrial Capital Construction in Communist<br>China During the Five Year Plan (1953-57) . . . . .                     | 44          |
| 12. Population of Selected Cities in Communist China,<br>1953 . . . . .  | 49          |

S-E-C-R-E-T

|  | <u>Page</u> |
|--|-------------|
| 13. Population of Communist China, 1953-60 . . . . .   | 51          |
| 14. Estimated Number of Workers in Communist China, by<br>Category of Employment, 1952 and 1954 . . . . .  | 52          |
| 15. Number of Workers and Clerical Staff in Communist China,<br>1952 and 1954 . . . . .  | 53          |
| 16. Estimated Number of Persons Employed in Industry<br>in Communist China, 1952 and 1954 . . . . .  | 54          |
| 17. Increases in Labor Productivity in Communist China . . .   | 56          |
| 18. Indexes of Gross National Product of Communist China,<br>by Sector of Origin, 1949-57 and 1960 . . . . .   | 63          |
| 19. Indexes of Gross National Product of Communist China,<br>by End Use, 1949-57 . . . . .   | 65          |
| 20. Estimated Per Capita Index of Available Consumer Goods<br>in Communist China, 1949-57 . . . . .  | 67          |
| 21. Allocation of Sown Area of Communist China, by Crop,<br>1952 . . . . .   | 68          |
| 22. Estimated Yields of Food Crops in Communist China,<br>1952, 1954, and 1957 . . . . .   | 70          |
| 23. Population, Food Production, and Per Capita Availability<br>of Food in Communist China, 1931-37 Average and<br>1949-60 . . . . .                       | 71          |
| 24. Officially Announced Production of Commercial Crops in<br>Communist China, 1952, 1954, and 1957 (Plan) . . . . .                                       | 73          |
| 25. Comparison of US Estimates and Communist Claims<br>of Production of Raw Cotton, Cotton Yarn, and Cotton<br>Cloth in Communist China, 1949-54 . . . . . | 75          |
| 26. Index of Value Added by Industry in Communist China,<br>1949-60 . . . . .  | 76          |



S-E-C-R-E-T

|   | <u>Page</u> |
|---|-------------|
| 27. Index of Gross Value of Production in Communist China, 1949-57 . . . . .                              | 77          |
| 28. Output of Major Engineering Industry Products in Communist China, 1952 and 1957 . . . . .             | 80          |
| 29. Estimated Output of Armaments and Munitions in Communist China, 1949-60 . . . . .                     | 83          |
| 30. Estimated Capacity and Production of Electric Power in Communist China, 1952-60 . . . . .             | 85          |
| 31. Estimated Capacity and Production of Coal in Communist China, 1952-60 . . . . .                       | 86          |
| 32. Estimated Production of Ferrous Metals in Communist China, 1952-60 . . . . .                          | 88          |
| 33. Estimated Production of Selected Nonferrous Metals and Minerals in Communist China, 1952-60 . . . . . | 90          |
| 34. Estimated Production of Petroleum Products in Communist China, 1952-60 . . . . .                      | 91          |
| 35. Estimated Production of Selected Chemical and Rubber Products in Communist China, 1952-60 . . . . .   | 93          |
| 36. Estimated Capacity and Production of Cement in Communist China, 1952-60 . . . . .                     | 94          |
| 37. Estimated Production of Commodities in Light Industry in Communist China, 1949-60 . . . . .           | 95          |
| 38. Imports and Exports of Communist China, 1954 . . . . .  | 109         |
| 39. Indexes of Production of Industrial Commodities in Communist China, 1949-57 and 1960 . . . . .        | 118         |
| 40. Output and Income for the Agricultural Sector of Communist China, 1952 . . . . .                      | 121         |

S-E-C-R-E-T

|  | <u>Page</u> |
|--|-------------|
| 41. Income Originating in the Nonagricultural Sector<br>of Communist China, 1952 . . . . .   | 124         |
| 42. Income Originating in the Nonagricultural Sector<br>(Excluding Consumer Services and Rent) of Communist<br>China, 1952 . . . . . | 125         |
| 43. Valuation of Industrial Production in Communist China,<br>1952 . . . . .   | 128         |
| 44. Estimated Gross National Product in Communist China,<br>by End Use, 1952 . . . . .   | 131         |

Illustrations

|  | <u>Following Page</u> |
|--|-----------------------|
| Figure 1. Communist China: Structure of Government,<br>December 1955 (Chart) . . . . .                                       | 12                    |
| Figure 2. Communist China: Functions of the Economic<br>Ministries (Chart) . . . . .   | 12                    |
| Figure 3. Communist China: Budget Revenues and<br>Expenditures, 1950-55 (Chart) . . . . .                                    | 24                    |
| Figure 4. Communist China: Capital Construction Expendi-<br>tures in the First Five Year Plan (1953-57)<br>(Chart) . . . . . | 34                    |
| Figure 5. Communist China: Growth and Projected Output<br>of the Economy, by Sector, 1950-60 (Chart) . . . . .               | 64                    |
| Figure 6. Communist China: Gross National Product, by<br>Sector of Origin, 1952 and 1957 (Chart) . . . . .                   | 64                    |
| Figure 7. Communist China: Foreign Trade, 1950-54<br>(Chart) . . . . .   | 110                   |

- x -

S-E-C-R-E-T

S-E-C-R-E-T

|   |                        |
|---|------------------------|
| Communist China: Administrative Divisions (Map) . . . . .     | } Inside<br>Back Cover |
| Communist China: Railroads and Selected Roads (Map) . . . . . |                        |

CIA/RR 73  
(ORR Project 15.849)

S-E-C-R-E-T

ECONOMIC PLANNING AND DEVELOPMENT IN COMMUNIST CHINA\*  
1952-60

Summary and Conclusions

The announcement in July 1955 of the first Five Year Plan (1953-57) for Communist China followed a period of reconstruction and economic experimentation and a series of basic policy decisions. These decisions, which indicated the trend of the planned development program, included the socialization of large-scale consumer goods industries and the monopolization of trade in grain, cotton, and agricultural export products. By "postponing increased output of consumer goods," "regulating the profits of agriculture," and following a general policy of forced economizing, the Communists were able to expand heavy industry despite the additional decision to modernize the armed forces with its resultant heavy drain on resources that could alternatively be used for investment. Governmental actions of this nature are dictated by the Communist Party through the State Council and by agencies, such as the State Planning Commission, which are formally controlled by the State Council.

*see 1956 Budget Miss  
+ Rept of State Plan Com  
where these are  
cited as weak-  
nesses*

The acceleration of the pace of socialization of agriculture, industry, and trade in late 1955 under direct order of Mao Tze-tung showed sharp advancement of the goal of complete socialization as set forth in the Five Year Plan. Over 60 percent of all peasant households were organized into cooperatives by late 1955 as compared with only 11 percent at the end of 1954. By the end of 1954, 75 percent of industry was under state, cooperative, or joint state-private enterprises, and practically all of foreign and wholesale trade and 58 percent of retail sales were in the hands of state and cooperative trading companies.

The most recent information on the budget of Communist China indicates further increases in revenues and expenditures in 1955 and a growing reliance on the taxes and profits of state enterprises as

\* The estimates and conclusions contained in this report represent the best judgment of ORR as of 1 January 1956.

S-E-C-R-E-T

S-E-C-R-E-T

a source of revenue.

50X1

The increased defense expenditures in combination with economic construction expenditures comprise 75 percent of the budget for 1955.

The Chinese Communists plan to build up productive capacity on a wide front from 1953 to 1960. The capital construction program emphasizes industrial buildup especially. It also includes investment in the fields of transport, communications, agriculture, water conservancy, education, propaganda facilities, and health. The total amount of planned capital investment in the Five Year Plan is equivalent to \$18.1 billion at the official exchange rate. The relative emphasis assigned by the Chinese Communists to development of the various sectors is shown by the allocations, which are 58.2 percent to industry; 19.2 percent to transport and posts and telecommunications; and 7.6 percent to agriculture, forestry, and water conservancy. Within the industrial portion of the current plan, 88.6 percent (\$9.3 billion) of investment is to be in producer goods industries and 11.4 percent (\$1.2 billion) in consumer goods industries.

The population of Communist China totaled 582.6 million in mid-1953, according to the official results of China's first complete census. This is approximately 20 percent higher than the officially reported total of 487 million in 1950. The sharp increase is due chiefly to improved statistical coverage rather than to natural increases. The predominantly rural character of the Chinese population is indicated by the classification of 505.3 million people, or 83.7 percent of the population, as rural inhabitants. There is increasing evidence of overpopulation in present-day China. The appearance of articles on birth control in Party-controlled publications indicates that the ground is being prepared for a policy shift on population control.

The estimated labor force in Communist China is about 300 million of the 1954 population of 594 million, with over 75 percent of the labor force in farm employment. The dominance of agriculture in the

50X1

- 2 -

S-E-C-R-E-T

S-E-C-R-E-T

Chinese economy is brought out even more clearly by the fact that in 1954, less than 23 million of the nonfarm labor force of 56 million were in industry, trade, transport, and government.

Indexes of industrial production show large annual increases averaging nearly 33 percent from 1949 to 1952. Estimated 1952 output was about 10 percent over pre-Communist peak levels of output. Increases in industrial production in 1953 and 1954, the first 2 years of the Five Year Plan, dropped to an average of about 20 percent. Estimated increases of output from 1955 to 1957 are smaller, averaging about 10 percent a year and reaching a total in 1957 that is 87 percent higher than in 1952. Output originating in modern industry alone in 1957 is expected to double that of 1952. This estimated increase reflects a level of gross value of production that is 75 percent over that of 1952 as compared with the Five Year Plan goal of nearly 100 percent. The rate of industrial growth is expected to decline further from 1957 to 1960 to about 8 percent a year. The decline in rate of increase is due in part to the greater reliance on increases in capacity and also to the much slower increases in output of agricultural raw materials, limiting the expansion of light industry. The output of industry, however, still is relatively very small in the Chinese Communist economy as compared with that in more industrialized economies.

The success of Chinese Communist objectives for developing heavy industry at the expense of light industry is shown in the industrial indexes for producer goods and for consumer goods. After 1957 the projected value-added index for consumer goods shows an average annual increase of about 9 percent as against an average annual increase of about 17 percent for producer goods.

The current Five Year Plan places increasing emphasis on the development of heavy industry in order to industrialize the country and modernize the military establishment. With the exception of electric power, steel, machine tools, and chemicals, in which relatively large new capacities are to be brought into production after 1957, planned rates of growth of the principal industries from 1955 on decline sharply. The trends in the modern industrial sector are illustrated in the figures for production of major industries for 1953 and projected for 1957 and 1960 as follows:

S-E-C-R-E-T

| Product                                 | First Year<br>(1953)<br>of Five Year<br>Plan | Last Year<br>(1957)<br>of Five Year<br>Plan | 1960   |
|---|--|---|--------|
| Electric power (billion kilowatt hours) | 9  | 16  | 23     |
| Coal (million metric tons)              | 69   | 113   | 133    |
| Pig iron (million metric tons)          | 2.23   | 4.20  | 5.90   |
| Crude steel (million metric tons)       | 1.76   | 3.80  | 5      |
| Finished steel (million metric tons)    | 1.49   | 3.04  | 4.23   |
| Crude oil (thousand metric tons)        | 628  | 1,400                                       | 2,400  |
| Machine tools (units)                   | 11,200                                       | 12,720                                      | 30,000 |
| Tungsten (thousand metric tons)         | 17   | 24  | N.A.   |
| Copper (thousand metric tons)           | 11   | 14  | 15     |
| Lead (thousand metric tons)             | 12   | 23  | 24     |
| Zinc (thousand metric tons)             | 7  | 14  | 19     |
| Antimony (thousand metric tons)         | 11   | 15  | 17     |
| Tin (thousand metric tons)              | 10   | 17  | 22     |
| Ammonium sulfate (thousand metric tons) | 225  | 500   | 730    |
| Cotton fabric (million linear meters)   | 4,365  | 5,583                                       | 6,463  |

The estimated average increase in gross national product\* (GNP) from 1950 to 1952 is about 12 percent. The increase in GNP for 1953 is about 6 percent over 1952 and is higher if Communist figures are accepted. Setbacks in agricultural output in 1954 reduced the increase in GNP in 1954 to 4.5 percent over 1953, but agricultural output in 1955 was expected to increase by 6 percent over 1954. The projected trend from 1954 to 1957 gives annual average increases in GNP of about 7.5 percent, with total production reaching a level 36 percent higher than in 1952. The GNP is expected to increase from 1957 to 1960 at an annual rate of about 4.5 percent.

\* See footnote \*\*\*\*, p. 34, below.

S-E-C-R-E-T

The general trend embodied in the indexes of major sectors of GNP shows a steady increase in the proportion of national output originating in the industrial sector. Modern industry is expected to rise by one-half in its contribution to GNP in the period of the Five Year Plan, and the modern industry sector, including transport and state construction, should increase from 17 to 25 percent of GNP. This trend through 1957 still leaves the modern sector a relatively small share of total output in comparison with Japan or Western industrial powers. Moreover, because the index was computed in 1952 Chinese Communist prices, it reflects the high prices of producer goods relative to agricultural prices.

In terms of 1952 prices, consumption is expected to decline from about 73 percent of GNP in 1952 to about 65 percent in 1957 and investment to rise from about 15 percent to about 21 percent. Government purchases of goods and services including military expenditures are expected to rise from about 12 percent to about 14 percent.

The index for construction in fixed prices, derived from an index of available investment goods including construction materials, shows the following percentages of the total estimated volume of construction in the Five Year Plan completed in 1953-54 and projected for 1955-57: 1953, 15 percent; 1954, 18 percent; 1955, 20 percent; 1956, 22 percent; and 1957, 25 percent. The burden of the Five Year Plan on the economy is therefore expected to rise steadily from 1952 to 1957, and investment should increase as a proportion of total output.

The GNP of Communist China in 1952 now is estimated to be about 69 billion yuan in the new currency. The increase over the previous estimate of 60 billion yuan is due in general to the acceptance of Communist claims of output of agricultural products in 1952. The usual procedure for converting Communist China's GNP into other currencies is to apply the official exchange rate, which for nearly all of 1952 was about 20,000 old yuan (2 yuan, new currency) to 1 US dollar. This is equal to \$34 billion. If the GNP for Communist China in 1952 is directly valued in US 1952 prices, however, its value is about \$65 billion. On the other hand, when both US and Chinese GNP's are valued in 1952 yuan prices, the value of the Chinese output as a percentage of US output is equivalent to \$25 billion.



S-E-C-R-E-T

The Communists' estimate of total grain production in 1954-55 of 169.5 million metric tons\* probably is overstated by about 11 million tons. This difference, however, probably is attributable to a number of factors, including the collection of peasant grain reserves carried over from previous years.

The Communist plans for agriculture include ambitious increases of production of commercial crops as well as grain. The limitations of total cultivated acreage, plus the possibility of expanding it by about 1-1/2 percent per year, necessitate close scrutiny of planned conversions of land from grain to commercial crops.

In the field of transport the Five Year Plan includes the laying of about 10,000 kilometers (km) of track, including over 4,000 km of new lines (later revised upward to more than 5,000 km), and increases in double tracking, spur lines, and sidings. By the end of the Five Year Plan, 7,100 km of new highways will be open to traffic. Investment for transport in the Five Year Plan is more than 8.2 billion yuan (\$3.4 billion), or nearly 20 percent of the total basic construction plan.

The new official figures on Communist China's foreign trade indicate a much higher level of trade than had been previously estimated. Total trade is valued at \$3.47 billion in 1954 and is approximately in balance if military deliveries under loan arrangements are excluded. The bulk of Communist China's trade continues to be with the Soviet Bloc, the Free World portion being about 20 percent. The USSR, as Communist China's most important trading partner since February 1950, has agreed to provide extensive assistance for 156 of the 694 principal projects currently scheduled for construction or renovation during the Five Year Plan.

In 1954 the North Korean government placed a value equivalent to about \$125 million on Chinese Communist goods delivered in 1954, the first year of the 10-year economic agreement, under which Communist China promised to send the equivalent of \$338 million in goods and materials during 1954-57. Detailed reports of actual materials delivered in 1954, however, are estimated to be only half that value, or about \$60 million to \$70 million. In 1954, Communist China exported to North Vietnam a minimum of 30,000 tons of goods, which

---

\* Tonnages throughout this report are given in metric tons.

S-E-C-R-E-T

consisted of ordnance supplies, petroleum, communications equipment, trucks, cloth, and rice. In July 1955, Communist China announced that North Vietnam was to be granted \$338 million (the same amount promised to North Korea) in material aid for the rehabilitation of the North Vietnam economy.

---

- 7 -

S-E-C-R-E-T

S-E-C-R-E-T

I. Introduction.

The period of Communist control of China -- since the seizure of the mainland in 1949 -- and of the imposition of the Communist pattern on the economic institutions of the country may be divided into three phases, as follows:

A. 1949 Through 1952.

The Chinese Communist leaders during 1949-52 concentrated upon reconstruction and rehabilitation of the industrial plants left by the Nationalists and Japanese, demolished the influence and seized the reserve assets of the Nationalist capitalists, and expropriated Western-owned enterprises. Industrial production was restored generally to the levels previously attained under the Japanese in Manchuria and under the Nationalists in China proper, and the assets of Chinese and Western industrialists seized in China proper were used as means for further expansion. During this period, also, the institutional framework was established for central planning and statistical compilation, financial and budgetary controls, centralized procurement and allocation of resources, and socialization of agriculture and private industry.

B. January 1953 Through June 1955.

Although annual production goals and plan fulfillments had been announced during the previous period, goals and announcements for 1953 became parts of the new Five Year Plan for economic development. This plan depended heavily upon a Soviet technical assistance agreement, reached only in May 1953 and announced in the following August. After the truce in Korea, in June 1953, which entailed the diminution of Soviet military aid and the reallocation of domestic resources, further detailed elaboration of the plan depended principally upon (1) surveys to establish geological resources, engineering requirements, economic feasibility, and practical sites for the location and construction of industrial projects and mines; (2) basic planning to develop cost and resource calculations, engineering designs, and determination of the extent to which the USSR and the European Satellites could provide industrial equipment for the projects; and (3) further extension and development of the economic controls and institutional framework of socialization and centralized economic planning and administration.

S-E-C-R-E-T

C. July 1955 Through 1957 and 1960.

The Chinese Communist government outlined the Five Year Plan at the Annual National People's Congress in July 1955. The delay between the inauguration of annual production goals under the Five Year Plan and the enactment into law of the complete plan provided time for the development of specific industrial projects, for working out detailed technical assistance arrangements with the USSR and the European Satellites, and for the Chinese to prove their ability to execute annual segments of the plan. After 2-1/2 years of the plan, major portions of the capital investment plan, in addition to production goals for the more complicated machine and producer goods industries, still remained to be accomplished.

The following sections briefly examine the resources, capabilities, and weaknesses of the Chinese Communists in relation to the goals of the Five Year Plan.

- 10 -

S-E-C-R-E-T

S-E-C-R-E-T

II. Economic Planning and Administration.

A. Five Year Plan (1953-57).

The Chinese Communist government announced in July 1955 its complete Five Year Plan which had been inaugurated in 1953. The principal aim of the plan is to form a base for further industrialization of the economy and modernization of the armed forces. With the aid of the USSR, 156 projects are to be undertaken, projects which are to make possible the doubling of industrial output within the 5-year period. The collectivization of agriculture and the nationalization of private industry are to be carried out in accordance with the Soviet model. In fact, since the announcement of the aims of the plan, official pronouncements have indicated that the pace of collectivization and industrialization has been increased. 1/\*

*new 205*

B. Extension of Economic Controls.

1. Organizational Structure.

The recent changes in the organizational structure of the Chinese People's Republic represent the continuing trend toward greater centralization of control over the economic, political, and social life of Communist China. This trend is illustrated by the formal structure of the Chinese Communist government adopted in September 1954, as shown by the chart in Figure 1.\*\* This new structure indicates that there has been little change in the real locus of power, which resides in the key organs of the Chinese Communist Party -- the Central Committee, the Politburo, and the Secretariat.

*Hand?*

*How can a post structure which shows no outward connection with the party, show that the party hasn't changed?*

Under the constitution the National People's Congress and its Standing Committee are superior to the State Council, but in practice and on the basis of the membership of both organizations the State Council appears to be the "more important of the two". The State Council, which is described in the constitution as "the Government of the People's Republic of China," has increased its functions to include responsibility for the armed forces by subordinating to the Council the newly created Ministry of Defense. 2/ In the economic field the State Council is charged by the constitution with

*not more emp. It has a different /ct. executive leg.*

\* [Redacted]

\*\* Following p. 12.

50X1

S-E-C-R-E-T

S-E-C-R-E-T

responsibility for national economic planning, the state budget, control of foreign and domestic trade, and the coordination and leadership of the various ministries and commissions on the national level and of the local people's councils at every subordinate level throughout the country. 3/

It appears probable that coordination functions which formerly were handled by committees under the former Government Administrative Council now are performed by the eight staff offices of the State Council which were established "to assist the Premier in controlling the work of the various departments under the State Council." 4/ These staff offices are directed by men who are, in general, prominent Party leaders and who frequently hold concurrent posts as ministers or commission chairmen.

2. Economic Control Organizations and Methods.

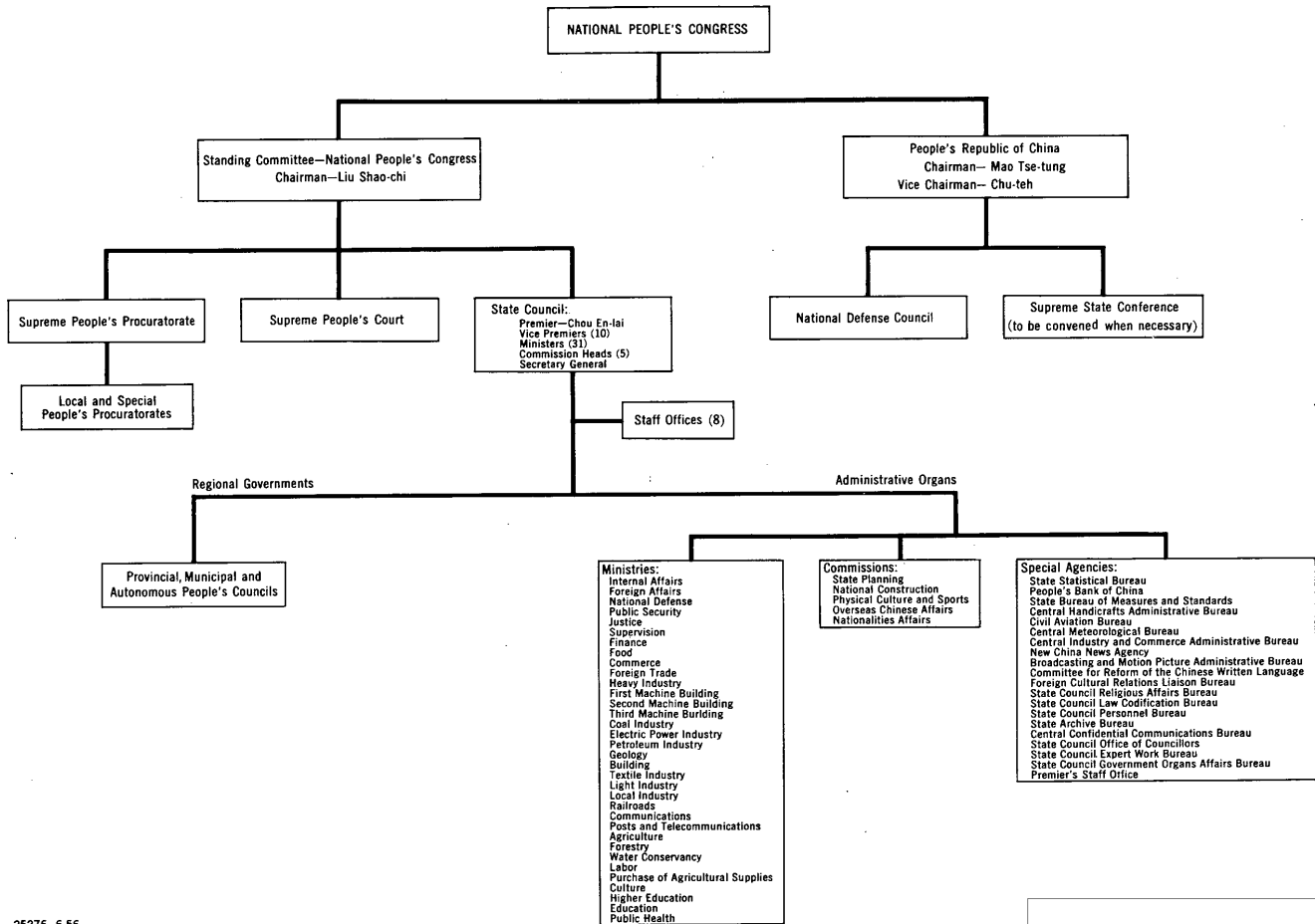
The Chinese Communist economy is formally controlled by a number of economic ministries, commissions, and agencies under the State Council. The various economic ministries, commissions, and agencies may be divided into three general groups: (a) those which control the extractive or productive industries, (b) those which control economic services, and (c) those which perform over-all control and planning functions. Figure 2\* shows the subordination and functions of the economic ministries.

There are approximately 11 agencies in the Chinese Communist government administrative structure whose duties include over-all economic planning or control functions. On the commission level there are two agencies, the National Planning Commission and the National Construction Commission. There are also six ministries which are mainly concerned with over-all economic control and planning functions rather than with operations -- these are the Ministries of Finance, the Procurement of Agricultural Products, Local Industry, Third Machine Building, Supervision, and Labor. Four of the specialized agencies are in this category: the National Statistical Bureau, the People's Bank of China (which is also a service organ), the Central Handicrafts Administrative Bureau, and the Central Industry and Commerce Administrative Bureau.

---

\* Following p. 12.

### COMMUNIST CHINA STRUCTURE OF GOVERNMENT (December 1955)



COMMUNIST CHINA  
**FUNCTIONS OF THE ECONOMIC MINISTRIES**

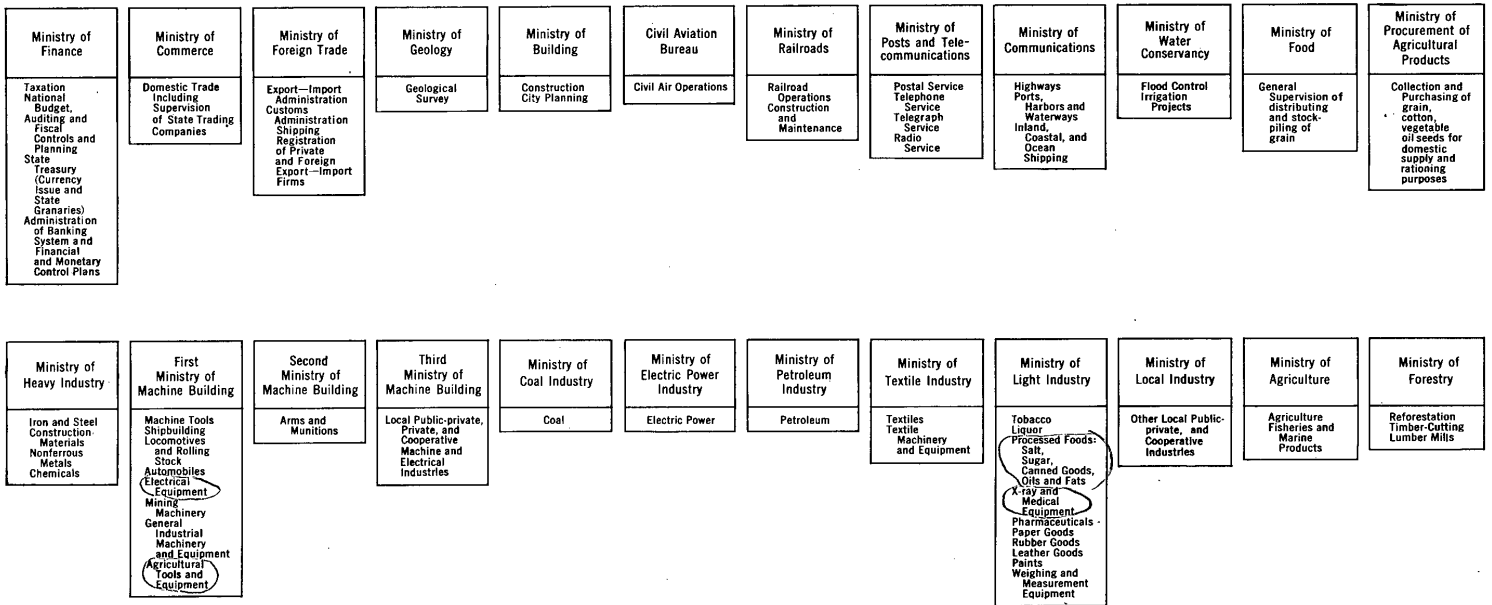


Figure 2





S-E-C-R-E-T

drives and other national borrowing activities, and serves as the principal government and public depository and dispenser of credit.

e. Ministry of the Procurement of Agricultural Products.

Following 1-1/2 years of experience in the implementation of the state's "balanced supply and marketing program," the State Council apparently concluded that a reorganization of the control mechanism for the procurement of agricultural products was needed. The Ministry of the Procurement of Agricultural Products accordingly was established in June 1955. Its functions and responsibilities have not been publicly announced, but apparently it is intended to centralize all procurement efforts with respect to grain and commercial crops. The Ministry of Food still appears to have responsibility for the supply and marketing of foodstuffs and operates the ration coupon program.

f. Ministry of Local Industry.

It is believed that the Ministry of Local Industry was created to provide central coordination for the enterprises directly under the control of the local governments and prepare the way for the further socialization of private industries under the state's nationalization program. 11/

g. Third Ministry of Machine Building.

The Third Ministry of Machine Building was established in April 1955 purportedly "to direct the machine and electrical engineering industries of local state enterprises, joint state-private, cooperative, and private enterprises." 12/ Its functions are believed to be related to further socialized control of industries in the machine and electrical engineering fields.

Two other organizations apparently also exist for the control, direction, and extension of socialization of local industries and trade:

h. Central Handicrafts Industry Administrative Bureau.

i. Central Industry and Commerce Administrative Bureau.

S-E-C-R-E-T

j. National Statistical Bureau.

The National Statistical Bureau, because of its functions of auditing and aggregating national production statistics in all fields and of providing basic data for national planning, is one of the key support agencies for economic planning and control.

k. Ministry of Labor.

The Ministry of Labor apparently does not play a very important role in the Chinese Communist economic control mechanism other than to provide over-all statistical and planning data. It has declined in importance with the eclipse of its Minister, Li Li-san.

Finally, there are two ministries which, although not primarily economic, play an important role in the economic control system.

l. Ministry of Public Security.

The Ministry of Public Security is important in the economic field because it controls a considerable resource of manpower through the "reform through labor" (forced labor) program. <sup>13/</sup> Under this program, labor is supplied for water conservancy work, highway construction and maintenance, and construction programs of varied nature in hardship areas. In addition, this ministry has the power to prevent mass migration of the peasants to the cities.

m. Ministry of Supervision.

The Ministry of Supervision presumably controls the people's supervisory offices which are attached to government organizations and enterprises at all levels. It was reported in 1954 that there were almost 4,000 supervisory organs alleged to be "supervising all activities of production and finance, concentrating on the supervision of economic construction." <sup>14/</sup> This ministry is responsible for cutting down waste and costs in connection with the implementation of state procurement and allocation of resources for the 5-year capital construction program.

S-E-C-R-E-T

### 3. Progress Toward Socialization.

Speeches made by various Chinese Communist officials leave no doubt as to their ultimate objective of a socialist economy. They consider state control the only way to industrialize, and, in order to provide support for the industrialization program, measures to socialize industry and to collectivize agriculture have priority as the means of controlling output. By the end of 1954 these measures had reduced the private sector to 25 percent in industry, 12 percent in wholesale trade, and 42 percent in retail trade. The record is less impressive in handicrafts and agriculture, but even here 5 percent of handicraftsmen and 11 percent of farm households had been organized in producer cooperatives, an intermediate form of socialist organization preceding complete collectivization.

The initial slackening of the socialization pace in 1955 varied in degrees from sector to sector. An actual rise in private retail trade was first predicated, from 42 percent of sales in 1954 to 48 percent in 1955, but large-scale conversion of private trading enterprises to joint state-private firms in December 1955 apparently reversed the announced policy. A stepping-up of the process of socializing private industrial enterprises by means of converting whole industries in the large cities to joint state-private status also began in December 1955. The conversion of private industry and trade into the intermediate form of state capitalism termed "joint state-private enterprise" (in which the state initially invests the requisite new capital funds in the form of raw materials or merchandise inventory as a share of total capital) is more gradual than outright nationalization which characterized earlier years. The preharvest policy of temporary abatement in the rate of agricultural socialization -- that is, of recruitment of peasants as members of producer cooperatives -- was terminated abruptly in October 1955 when an all-out drive for agricultural cooperativization was launched following publication of a speech by Mao Tse-tung. <sup>15/</sup> He called for a 100-percent increase in agricultural cooperatives (from 650,000 to 1.3 million) rather than the previously agreed on target of 1 million cooperatives by October 1956. The December 1955 results of this effort indicated that Mao's goal already had been exceeded.

- 16 -

S-E-C-R-E-T

S-E-C-R-E-T

On a somewhat longer range basis -- that is, by the end of the Five Year Plan -- the Chinese Communists expected to reduce the contribution of private industry to 12 percent of total industrial output and the contribution of private retail trade to 21 percent of sales and to organize into producer cooperatives 5 million handicraftsmen (about 50 percent of the total).

a. Agriculture.

State-owned farms in Communist China account for an insignificant part of the total farm area. The number of totally socialized mechanized state farms is expected to rise from 94 in 1954 to 117 in 1955 and to 141 in 1957, while nonmechanized state farms will then number 2,897, according to plan. The establishment of large-scale state farms is said to be delayed pending the planned production of farm machinery.

The government embarked on an intensive campaign in 1952 to form mutual aid teams, and by 1954 these teams embraced 56 percent of peasant households. Great headway in organizing producer cooperatives was made during 1954, but it occurred in a year of declining agricultural production. Although floods probably were the chief cause of the decline, the decision to slow down the organizational work of forced socialization is a partial acknowledgement of the effects on production of peasant resistance to the "hard line" policy pursued by the government during that year. Nevertheless, the number of producer cooperatives reached 500,000 by the end of 1954. Despite the emphasis on consolidation and voluntarism, the latest statistics on agricultural producer cooperatives show continued organizational increases to a total of 670,000, embracing 15 percent of peasant households by the spring of 1955 and to over 1.24 million, containing 63 percent of peasant households, by the end of 1955. These data are summarized in Table 1.\* The effect of such a rapid rate of growth of peasant cooperatives on production will not be evident until the next harvest, but past experience in other Communist countries suggests that it may be seriously adverse.

---

\* Table 1 follows on p. 18.

S-E-C-R-E-T

Table 1  
Socialization of Agriculture in Communist China  
1951-55

| <u>Year</u>                  | <u>Number<br/>of<br/>Cooperatives</u> | <u>Households<br/>Organized<br/>(Percent)</u> | <u>Number<br/>of Mutual Aid<br/>Teams<br/>(Million)</u> | <u>Households<br/>Organized<br/>(Percent)</u> |
|------------------------------|---------------------------------------|---|---|---|
| 1951 <u>a/</u>               | 400                                   | Less than 1                                   | 4.3   | 20  |
| 1952 <u>a/</u>               | 3,600                                 | Less than 1                                   | 8.3   | 40  |
| 1953 <u>a/</u>               | 14,000                                | Less than 1                                   | 10.0  | 43 (including<br>cooperatives)                |
| 1954 <u>b/</u>               | 500,000                               | 11  | N.A.  | 56  |
| 1955<br>(spring) <u>b/</u>   | 670,000 <u>c/</u>                     | 15  | N.A.  | N.A.  |
| 1955<br>(December) <u>a/</u> | 1,240,000                             | 63  | N.A.  | N.A.  |

a. 16/

b. 17/

c. Based on 26 households per cooperative as in 1954. 18/

b. Trade.

The official policy with respect to socialization of trade in Communist China as announced in the Five Year Plan indicated a desire on the part of the central government to increase rural-urban trade and therefore to delay further socialization in order to utilize the talents of private merchants. Private retail trade was to be the main beneficiary of this policy, as wholesaling and foreign trade had been largely taken over by the state. This new line was changed again in November 1955, however, as a result of the direct intercession of Mao Tze-tung, and the emphasis again was on conversion of private trading firms into joint state-private firms as an intermediate step to complete socialization.

S-E-C-R-E-T

In 1954-55, before the abrupt change of policy prescribed by Mao, supply and marketing cooperatives and state trading organizations were directed to concentrate on wholesale trade and to curtail competition with private retailing. Private merchants were encouraged to make wholesale purchases from supply and marketing cooperatives, and, in order to strengthen the effects of this policy, cadres were directed to encourage private traders to organize mutual aid groups, or cooperatives, to pool capital for such purchases.

The state trading companies apparently have consistently underquoted prices of private traders in a multitude of fields. The major blow to private trade, however, came in the form of bans on private trading in major agricultural products and in the policy of "planned purchase and supply," which gave the state the exclusive right to buy certain commodities and enabled it to control supplies to the market. This policy was applied to grain in November 1953 and to cotton, cotton cloth, and oil-bearing seed crops in September 1954. The state then assigned some of its purchasing authority to supply and marketing cooperatives, which, in addition to buying the products mentioned above, monopolized purchases of tea, tobacco, peanuts, and jute. Private sales of these commodities were made for the most part on a commission or fixed-price basis.

The 32,000 supply and marketing cooperatives with a membership of 160 million have continually cut into private trade. They were in a position to underprice private trade because of the lower wholesale prices, cheaper credit, and tax exemption accorded to them by the state. The inroads made on private trade were manifested in its declining share of total wholesale and retail sales, from 81 percent in 1950 to 42 percent in 1953. State trading departments and cooperatives, as indicated in the Five Year Plan, were expected to control 55 percent of retail trade by 1957, as compared with 34 percent in 1952. The policy inaugurated in November 1955, whereby the state contributes capital funds in the form of merchandise inventories to private trading firms thus converting them into joint state-private firms, is a drastic intermediate step toward complete socialization and places nearly all trade under direct state control.

S-E-C-R-E-T

c. Credit.

The People's Bank of China has controlled almost all credit in urban areas since the beginning of Chinese Communist rule. A more difficult socialization task has been the elimination of private credit in the rural economy. Several organs have been used to achieve this goal, the key ones being the rural credit cooperatives. Their number has grown from 542 in 1950 to 130,000 in April 1955, which means that 59 percent of rural villages now are served by credit cooperatives. Other villages are served by credit departments of the supply and marketing cooperatives or by credit mutual aid teams. These forms are used to prepare the way for credit cooperatives.

The plans for 1955 are to forego further expansion of credit cooperatives in favor of improved management and firmer alignment with the state financial policy. The 1957 goal for credit cooperatives had been achieved by the first half of 1955. The expansion of socialized credit organs is shown in Table 2.\*

The socialization of industry is a clear goal of the Chinese Communists although there has been variation in government relations with private enterprise. The initial approach to private enterprise prevailed through 1951 and may be described as a period of adjustment with recognition of state leadership as the basis of adjustment. Private enterprises had to submit operational plans for government approval, distribute earnings according to a set pattern, and submit reports on the value of their assets.

Having substantially restored production and gained knowledge of private industrial practice, the Chinese Communists embarked on a direct and violent attack on private enterprise during the first half of 1952. The campaign succeeded in breaking the power of private industry and commerce. Subsequent production declines and unemployment brought about a shift in government policy. The means used to revive private enterprise, such as state loans and orders, made private enterprises almost completely dependent on the state. The simplest device was for the state to place an order with a private enterprise and then arrange for state distribution of the output.

---

\* Table 2 follows on p. 21.



S-E-C-R-E-T

Table 2  
Socialization of Credit in Communist China  
1950 and 1953-55

---

|   | <u>1950</u>   | <u>1953 a/</u> | <u>1954<br/>(June) b/</u> | <u>1955<br/>(April) c/</u> |
|---|---------------|----------------|---------------------------|----------------------------|
| Number of credit cooperatives   | 542 <u>d/</u> | 9,400          | 42,190                    | 130,000 <u>e/</u>          |
| Membership (million)  |               | 6.0            | 20.4                      | 170                        |
| Cooperative deposits (new<br>currency, million yuan)                    |               | 74             | 73                        | 488                        |
| Number of credit departments<br>of supply and marketing<br>cooperatives |               | 2,000          | 3,232                     |                            |
| Number of credit mutual aid<br>teams                                    |               | 4,790          | 42,084                    |                            |

---

- a. 19/
- b. 20/
- c. 21/
- d. 22/
- e. 23/

Moreover, the state, by control of raw materials and their allocation, could make a private enterprise simply an agent carrying out a processing contract. It was announced officially that 86.4 percent of the gross output of private industry in 8 leading cities fell within such control. 24/

Joint enterprises are another form of state capitalism, and their encouragement dominated policy in 1955. This form evolves when private enterprises are forced to the verge of bankruptcy because of state capital levies, price controls, or stoppage of credit and are obliged to accept state funds, usually in the form of raw materials, as a share of total capital. These enterprises are subject to direct supervision and financial control by the government and, regardless of the percentage owned, the state directs their policies. The share of

S-E-C-R-E-T

joint enterprises in total industrial output doubled between 1953 and 1954 and was expected to contribute 15.4 percent of total industrial production in 1955. The joint form facilitates eventual takeover by the state and at the same time retains some incentives for private entrepreneurs to contribute their experience.

In late 1955 a hastening of the process of socialization of private industry in the intermediate form of joint state-private ownership was indicated in a policy change instituted by Mao Tse-tung. The only industries in which as much as 5 percent was planned to be left in private hands by 1957 were the food processing and machine building industries. Table 3 shows the planned proportions of ownership of selected industries in 1957. In view of this policy inaugurated in late 1955, however, it is estimated that these proportions will be effective in 1956.

Table 3

Socialization of Selected Industries in Communist China  
During the Five Year Plan (1953-57)

| Industry <u>a/</u> | Percent of Total Output |             |       |                |
|--------------------|-------------------------|-------------|-------|----------------|
|                    | State <u>b/</u>         | Cooperative | Joint | Private        |
| Steel              | 90.9                    | 0           | 9.1   | Less than 1    |
| Pig iron           | 97.3                    | 0.3         | 2.0   | 0.4            |
| Steel products     | 85.4                    | 0           | 14.1  | 0.5            |
| Cotton yarn        | 51.4                    | 0           | 48.6  | 0              |
| Electric power     | 90.84                   | 0.01        | 9.14  | 0.01           |
| Coal               | 81.6                    | 0.1         | 4.2   | 4.1            |
| Petroleum          | 100                     | 0           | 0     | 0              |
| Machine building   | 77.7                    | 0           | 15.9  | 6.4            |
| Cement             | 68.0                    | 0           | 32.0  | 0              |
| Food processing    | 64.7                    | 6.9         | 17.2  | 11.2 <u>c/</u> |
| Paper              | 61.6                    | 0.1         | 37.3  | 1.0            |

a. 25/

b. Includes both central and local government-owned enterprises.

c. Of which 7 percent is for handicrafts.

S-E-C-R-E-T

The handicraft industry is the only sector of the Chinese Communist economy in which socialized organization still plays only a minor role. Although the Communist timetable under the Five Year Plan called for organizing all 10 million handicraftsmen into cooperatives by 1960, 26/ Mao Tze-tung stated in late 1955 that the socialization problem of the handicrafts would be solved in the spring of 1956. Handicraft output was valued at 15.3 billion yuan in 1953, and the 300,000 organized handicraftsmen contributed less than 4 percent of the total. Membership in the various types of handicraft organizations is expected to rise from 1.16 million in 1954 to 1.7 million in 1955. The Five Year Plan membership goal of 2.1 million persons applies only to handicraft cooperatives, which account for roughly half of the organized handicraftsmen.

C. National Budget and Fiscal and Accounting System, 1950-55.

1. Budget Revenues and Expenditures, 1950-55.

Planned revenues and expenditures in the 1955 budget represent new highs for the Chinese Communists (see Figure 3\*). Planned current receipts of \$11.85 billion\*\* are 7 percent higher than in 1954. Inclusion of the surplus carried over from 1954 raises the total revenue of \$13.178 billion. In terms of yuan, the total budget amounts to roughly 31 percent of the Chinese Communist GNP. Despite a rise in expenditures of 20.7 percent to \$12.56 billion, 1955 is to be the fifth successive year in which the achievement of a budget surplus is claimed. This surplus, however, includes revenue from the surplus brought forward which is drawn upon to cover the actual deficit of \$710 million. The proportions of revenue derived from each category are presented in Table 4,\*\*\* with budget data for 1950-55.\*\*\*\*

\* Following p. 24.

\*\* The yuan converted at the official Chinese Communist rate -- 1 US dollar = 2.367 yuan. The official rate of the Communist Bank of China probably overstates the value of capital investment in yuan as much as 50 percent in terms of US prices and understates the value of services and of food crops. However, the official rate of exchange is used throughout this report (except where otherwise noted) in order that consistent proportions may be maintained in the discussion of value relationships between budget categories.

\*\*\* Table 4 follows on p. 24.

\*\*\*\* Continued on p. 27.

## S-E-C-R-E-T

Table 4  
Budget Revenues and Expenditures in Communist China  
1950-55

|  | 1950            |                  | 1951             |                  | 1952             |                  | 1953             |                  | 1954                       |                  | 1955 (Plan)      |                  |
|--|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------------|------------------|------------------|------------------|
|  | Million Yuan    | Percent of Total | Million Yuan     | Percent of Total | Million Yuan     | Percent of Total | Million Yuan     | Percent of Total | Million Yuan               | Percent of Total | Million Yuan     | Percent of Total |
| Expenditures                                     |                 |                  |                  |                  |                  |                  |                  |                  |                            |                  |                  |                  |
| Economic construction                            | 1,735.37        | 25.5             | 3,511.15         | 29.5             | 7,626.34         | 45               | 8,644.53         | 40               | 12,358.22                  | 50               | 14,188.76        | 48               |
| of which:  |                 |                  |                  |                  |                  |                  |                  |                  |                            |                  |                  |                  |
| Capital construction <sup>a</sup> / <sub>*</sub> |                 |                  | (2,459.40)       | (20.7)           | (4,549.80)       | (27.3)           | (7,552.79)       | (35.1)           | (8,685.71)                 | (35)             | (9,591.64)       | (32.2)           |
| Social, cultural, and educational                | 755.01          | 11               | 1,343.76         | 11               | 2,279.68         | 13.5             | 3,360.69         | 15.5             | 3,460.51                   | 14               | 3,850.69         | 12.9             |
| Defense  | 2,827.39        | 41.5             | 5,060.81         | 42.5             | 4,371.34         | 26               | 5,679.22         | 26.5             | 5,813.53                   | 24               | 7,193.15         | 24               |
| Administrative                                   | 1,313.27        | 19               | 1,744.86         | 15               | 1,727.38         | 10               | 2,118.69         | 10               | 2,162.07                   | 9                | 2,241.56         | 7.5              |
| Other  | 177.02          | 3                | 241.61           | 2                | 782.28           | 6                | 1,684.65         | 8                | 838.11                     | 3                | 1,245.73         | 4.2              |
| General reserve                                  |                 |                  |                  |                  |                  |                  |                  |                  |                            |                  | 1,017.23         | 3.4              |
| Total  | <u>6,808.06</u> |                  | <u>11,902.19</u> |                  | <u>16,787.02</u> |                  | <u>21,487.78</u> |                  | <u>24,632.44</u>           |                  | <u>29,735.72</u> |                  |
| Revenue  |                 |                  |                  |                  |                  |                  |                  |                  |                            |                  |                  |                  |
| Taxes  | 4,897.81        | 75               | 8,112.17         | 62.5             | 9,768.45         | 55.5             | 11,967.12        | 55               | 13,218.08                  | 50               | 13,780.57        | 49               |
| Profits of state enterprises                     | 869.65          | 13               | 3,053.73         | 23.5             | 5,727.97         | 32.5             | 7,669.05         | 35               | 9,961.50                   | 38               | 11,115.81        | 40               |
| Credits, loans, and insurance                    | 327.91          | 5                | 567.95           | 4.5              | 193.16           | 1                | 491.83           | 2.5              | 2,345.37                   | 9                | 3,153.40         | 11               |
| Other  | 423.75          | 7                | 1,233.17         | 9.5              | 1,870.10         | 11               | 1,634.36         | 7.5              | 711.87                     | 3                |                  |                  |
| Total  | <u>6,519.12</u> |                  | <u>12,967.02</u> |                  | <u>17,559.68</u> |                  | <u>21,762.36</u> |                  | <u>26,236.83</u>           |                  | <u>28,049.78</u> |                  |
| Deficit  | - 288.94        |                  |                  |                  |                  |                  |                  |                  |                            |                  | -1,686.94        |                  |
| Surplus<br>(carried over from previous year)     |                 |                  |                  |                  |                  |                  |                  |                  | 4,509.0 b/<br>(cumulative) |                  | 3,142.74         |                  |
| Total revenue                                    |                 |                  |                  |                  |                  |                  |                  |                  | <u>30,745.83</u>           |                  | <u>31,192.52</u> |                  |

\* Footnotes for Table 4 follow on p. 25.

COMMUNIST CHINA  
**BUDGET REVENUES AND EXPENDITURES**  
 1950-55  
 (Billions of Current Yuan)

50X1

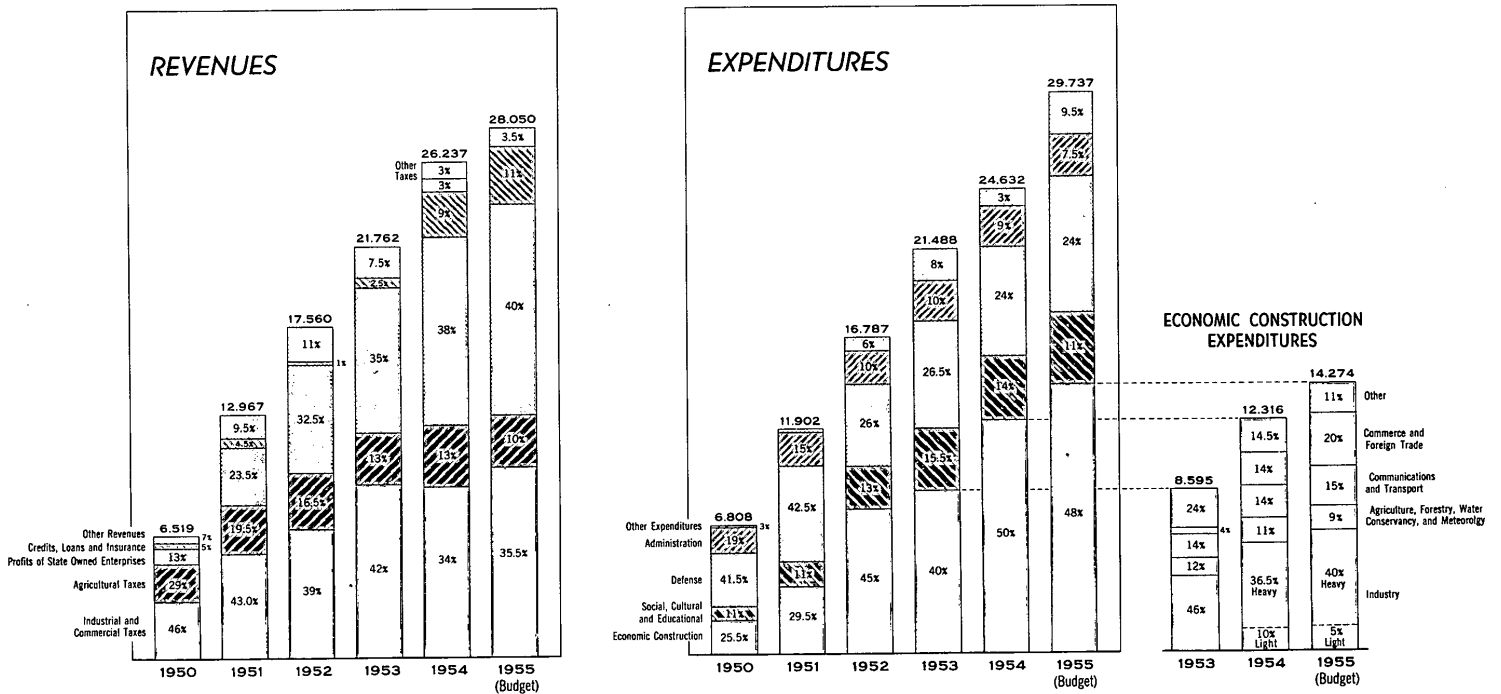


Figure 3

50X1

S-E-C-R-E-T

Table 4  
Budget Revenues and Expenditures in Communist China  
1950-55  
(Continued)

|   | 1950            |                     | 1951             |                     | 1952             |                     | 1953             |                     | 1954             |                     | 1955 (Plan)      |                     |
|---|-----------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|------------------|---------------------|
|   | Million<br>Yuan | Percent<br>of Total | Million<br>Yuan  | Percent<br>of Total | Million<br>Yuan  | Percent<br>of Total | Million<br>Yuan  | Percent<br>of Total | Million<br>Yuan  | Percent<br>of Total | Million<br>Yuan  | Percent<br>of Total |
| Revenue by Sectors  |                 |                     |                  |                     |                  |                     |                  |                     |                  |                     |                  |                     |
| Taxes, profits and depreciation reserves of state enterprises | 2,221.72        | 34                  | 6,399.22         | 49                  | 10,181.10        | 58                  | 13,623.24        | 62.5                | 16,344.79        | 65                  | 18,618.60        | 69                  |
| Taxes and bond payments by cooperatives                       |                 |                     |                  |                     | 189.64           | 1                   | 539.71           | 2.5                 | 914.44           | 4                   | 1,282.65         | 5                   |
| Taxes and bond payments by peasants                           | 1,931.61        | 30                  | 2,356.11         | 18                  | 2,809.55         | 16                  | 2,933.57         | 13.5                | 3,565.09         | 14                  | 3,162.58         | 12                  |
| Taxes and bond payments by private enterprises                | 2,146.09        | 33                  | 3,716.35         | 29                  | 3,720.90         | 21                  | 3,703.95         | 17                  | 3,342.11         | 13                  | 2,877.22         | 11                  |
| Taxes and bond payments by joint enterprises                  |                 |                     |                  |                     | 184.37           | 1                   | 267.68           | 1.2                 | 415.88           | 1.5                 | 532.42           | 2                   |
| Other   | 219.69          | 3                   | 495.75           | 4                   | 474.12           | 3                   | 694.39           | 3.3                 | 476.01           | 2                   | 354.95           | 1                   |
| Total   | <u>6,519.12</u> |                     | <u>12,967.02</u> |                     | <u>17,559.68</u> |                     | <u>21,762.36</u> |                     | <u>25,053.33</u> |                     | <u>26,889.95</u> |                     |

a. Capital construction is composed of expenditures for fixed assets under the economic construction, administrative, and social, cultural, and educational categories of the budget.  
b. A total of 1,604.39 billion additional yuan was added to the cumulative surplus by the end of 1954. The 1955 budget speech states that roughly half of the surplus had been previously allocated and therefore only a portion was available for 1955 expenditures. It is not clear how the surplus was accumulated for it exceeds the unspent revenue of the years 1950 through 1953.

S-E-C-R-E-T

S-E-C-R-E-T

a. Revenues.

(1) Surplus.

The surplus of the Chinese Communist budget was stated to be \$2.583 billion at the end of 1954. It is not clear how this surplus was accumulated because the unexpended balance on budgets of previous years totals only \$1.448 billion. Certain statements in the 1955 budget report clarify the nature of the surplus category and indicate for the most part that it is fictitious because all but \$1.327 billion of the surplus is already allocated. The available surplus is even lower if a 1955 appropriation of \$713 million to state enterprises for repayment of overdue loans from the state bank is considered an existing obligation.

Clarification of the relationship of the state bank loan program to government surplus accounts was necessary because of overlapping plans for the same funds. In both 1953 and 1954, budget officials apparently drew on the surplus funds forcing the state bank to contract its loans of working capital to state enterprises and cooperatives. The state bank now has free use of the funds repaid to it. The breakdown of the surplus category is presented in Table 5.\*

(2) Revenue Increases and Secret Military Credit.

Revenues in the Chinese Communist budget of 1955 are expected to increase at roughly the same rate as agricultural and industrial output. Over 60 percent of the increased revenue will be in the form of profits from state enterprises. The increases in profits are to result from increased productivity and expansion of commodity circulation. The remaining two categories of revenue -- taxes and credits, loans and insurance -- also will increase but to a lesser degree.

In accounting for the rise in the credits, loans, insurance, and the category other, announcement is made for the first time of military loans from the USSR. The only specific reference to military credit is in connection with a \$40-million increase in credits and loans in 1955. There is reason to believe, however, that military credit of from \$400 million to \$500 million

\* Table 5 follows on p. 27.

S-E-C-R-E-T

Table 5

Disposition of Surplus Funds Under the 1955 Budget  
of Communist China

|  | Million US \$   |
|--|-----------------|
| Total surplus funds                                  | <u>2,582.72</u> |
| Allocation   |                 |
| Repayment of central government overdraft            | 912.05          |
| Transfer to special accounts in state bank           | 213.09          |
| Replenishment of local budget revolving funds        | 129.88          |
| Carried into 1955 budget                             | 1,327.70        |
| Allocation of 1955 carryover                         |                 |
| Repayment of state enterprises loans from state bank | 712.70          |
| Unallocated  | 615.00          |
| Total  | <u>1,327.70</u> |
| Increase in local budget revolving funds             | 35.96           |

was given in 1954 and will continue at the same level in 1955. This range is derived from a statement that a Soviet loan is mainly responsible for a \$600-million excess in revenues from the credits, loans, and insurance category achieved over the budgeted 1954 figure. Over-subscription to a domestic bond drive accounts for \$100 million of the unexpected revenue. If this were in fact the only other cause of overfulfillment -- and only the two are cited in the budget speech -- the military credit may have been as much as \$500 million.



S-E-C-R-E-T

There is evidence, however, that other components of the budget category may have increased unexpectedly during 1955. These possibilities include an increase in industrial credit based on the Soviet loan of \$130 million (520 million rubles -- terms not announced) agreed to in October 1954 and on the inclusion as a credit of Soviet shares in several jointly owned companies turned over to the Chinese Communists during 1954. The October 1954 agreement specifies that Communist China is to repay the USSR with exports over a period of years for the capital shares thus surrendered. Allowances for these items would support a military loan estimate closer to \$400 million.

This interpretation of the budget statement is substantiated by foreign trade statistics announced by the Chinese Communist government on 29 July 1955. The reported value of imports is approximately \$600 million more than previously estimated and could encompass at least \$400 million worth of undisclosed Soviet military deliveries under the announced 1954 loan.

A lower estimate of the loan might be derived from the expenditure side of the budget. Defense expenditures for 1954 exceeded the plan by \$230 million. If the unplanned expenditure was due chiefly to the allocation to the Ministry of Defense of an unexpected Soviet loan, the loan could be estimated at roughly that amount.

(3) Revenue by Sectors.

Revenue also is broken down into contributions by sectors. Taxes, profits, and depreciation reserves of state enterprises are a greater source of revenue than the bond and tax payments of all the other sectors combined. These sector contributions were mentioned in the budget speech only as a percentage of total revenue excluding foreign loans. In order to arrive at the dollar value of revenue by sectors, as presented in Table 4,\* estimated foreign loans of \$500 million in 1954 and \$475 million in 1955 were deducted from total revenue.

\* P. 24, above.

S-E-C-R-E-T

b. Expenditures.

(1) Increases.

The large increase in expenditures in 1955 is attributed by the Chinese Communists to a carryover of unused appropriations for basic construction in 1954, increased payment of interest and principal on domestic bonds and Soviet loans, and allocations for economic development. The more important causes are the appropriation of approximately \$700 million to state-operated enterprises to provide for repayment of overdue loans from the state bank and the increase of \$600 million in defense expenditures necessitated by the withdrawal of Soviet armed forces from Port Arthur -- that is, "necessitated" by the allocation to the Ministry of Defense of Soviet equipment turned over at the time of the withdrawal and the subsequent maintenance of operations and equipment at Port Arthur.

Although the defense share of the budget did not increase in the 1955 plan, the substantial absolute increase in military expenditures may be partially responsible for the declining share of expenditures for economic construction. Within the economic construction category there are significant shifts in expenditures from agriculture and light industry to foreign trade, heavy industry, and transport. From the small allocation of economic construction funds to agriculture it is apparent that the Chinese Communists are still relying largely on organizational changes, minor investment measures, and favorable weather to realize their goals of increases in production of 7 percent per year. The investment plans also show scant consideration for production incentives in the form of consumer goods inasmuch as investment in light industry is cut almost in half and will represent only 10.8 percent of industrial investment as compared with 22 percent in 1954.

(2) Capital Construction.

Capital construction is a new budget category, defined by the Chinese Communists as "construction increasing the fixed assets of the state." 27/ It cuts across the usual expenditure categories of economic construction; social, cultural, and educational; and administration, and gives a more accurate figure of fixed investment in Communist China than could be derived from previous budgets. Fixed assets are to increase by \$4.05 billion in

S-E-C-R-E-T

1955, which is approximately \$0.5 billion more than was spent in 1954. The only breakdown of the capital construction figure that is given pertains to industrial investment in 1954. In that year, 48 percent of the funds allocated for capital construction were spent by industrial departments.

(3) Budget Trends.

(a) Nationalized Assets.

In order to view the 1955 budget of Communist China in a wider perspective, a comparison with budget trends since 1950 is useful. Socialization probably is the best single explanation for over-all and specific budget trends. The primary reason why revenue has risen from roughly \$2 billion in 1950 to \$12 billion in 1955 is that receipts include the value of confiscated enemy assets, profits, and reserves of former private enterprises, and capital levies on the public in the form of forced bond purchases and penalties for alleged tax violations and profiteering.

(b) Categories of Expenditure and Revenue.

Socialization of the economy also affects the types of expenditures in the Chinese Communist budget. Allocations to heavy industry account for 40 percent of economic construction expenditures under the 1954 budget in contrast to the 5 percent allocated to light industry. Total budget allocations for fixed investment (capital construction) constitute about one-third of budget expenditures and about 10 percent of GNP. The apparent rate of savings is thus very high considering the low level of per capita income in Communist China. The actual rate of savings in Communist China is even higher when private investment and working capital are taken into consideration.

Another aspect of the socialization program which has tremendous repercussions on the budget of Communist China is the government monopoly over purchases of major agricultural products. The prices at which agricultural products are sold by state stores or supply and marketing cooperatives are estimated to involve substantial markups over the official procurement price. The trading profits resulting from this price differential constitute almost 25 percent of the profits of state enterprises. This category of revenue has risen from 13 to almost 40 percent of the budget. A

S-E-C-R-E-T

similar price differential also prevails on the tax assessment values at which grain taxes in kind are taken into the budget. The tax value of grain is less than half the fixed retail price. The consequences of these differentials are that the tax burden on the peasant is heavier than the budget indicates, whereas the payment of wages in kind to administrative and military personnel, at a rate roughly midway between procurement values and official retail prices, understates these expenditures in relation to others. The true grain tax burden on the peasant has been estimated at 21 percent of budget receipts rather than the official proportion of 13.5 percent. <sup>28/</sup> The subsidization of expenditures through the use of wages in kind affects about 30 percent of both defense and administrative expenditures. If this portion of the two categories were raised by 25 percent to represent the extent of underevaluation of grain, total expenditures would be \$600 million more than reported in 1954.

Defense and economic construction expenditures have more or less reversed their proportions in the budget over the 5-year period. At the beginning, 41 percent was allocated to defense and 25.5 percent to economic construction. In 1955, 24 percent was allocated to defense and 48 percent to economic construction. The correlation of the two expenditure groups is close: for example, in 1952 the allocation to defense fell 16 percent, and the allocation to economic construction increased by 16 percent.

The Chinese Communists have succeeded in restraining the growth of administrative expenditures and thus freed a greater portion of revenue for other more productive use. The share of administrative expenditures in the state budget has declined steadily, from 19 percent in 1950 to a planned 7.5 percent for 1955.

Recent budgets have tried to build up the General Reserve Fund to give leeway for seasonal fluctuations of receipts and expenditures and for shifting the expenditure allocations during the fiscal year. Planned budgets since 1953 have included an appropriation to the General Reserve Fund, but no budget speech has indicated that reserves were increased according to plan.

(c) Budget Fulfillment.

Information on budget fulfillment since 1950 shows a consistent underestimation of revenues and overestimation of expenditures. Profits of state enterprises seem to be the most

S-E-C-R-E-T

unpredictable revenue category for the Chinese Communist planners. The Soviet loan in 1954, however, caused the greatest single case of overfulfillment.

Failure to carry out basic construction (investment) plans reflects a serious shortcoming in Chinese Communist planning. In contrast to this underfulfillment, there has been consistent overspending on economic construction. A partial explanation for the contrasting results is that certain economic construction expenditures, such as training and operating expenditures and assignment of working capital and fixed assets, are not dependent on availability of scarce skills, materials, and equipment and so can be more readily carried out.

2. Capital Construction Program.

a. Introduction.

The Five Year Plan of Communist China predicates a total expenditure for "economic construction and cultural and educational development" during 1953-57 of 76.64 billion yuan (equivalent at the official exchange rate to \$32.8 billion). This planned expenditure includes allocations for capital construction, geological prospecting, engineering survey and design, stockpiling of equipment and materials, trial manufacture of new products, working capital of government enterprises and economic ministries, and operating expenses and training of personnel under the education ministries.

Capital construction as defined by the Chinese Communists includes construction, repair, and conversion of buildings and other structures for the purpose of expanding production; purchase of productive machinery and equipment and their installation; survey, design, and planning in the preparation for construction; 29/ and expenses for training production cadres after completion of construction. 30/ The sum allocated for capital construction constitutes 55.8 percent of the total planned outlay, or 42.74 billion yuan (equivalent at the official exchange rate to \$18.1 billion). The allocations of the total planned expenditure and of the capital construction funds included are shown in Table 6.\*

---

\* Table 6 follows on p. 33.

S-E-C-R-E-T

Table 6

Economic Construction Expenditures in Communist China  
During the Five Year Plan (1953-57)

| Sector  | Total<br>Planned Expenditures<br>by Category |                     | Total<br>Planned Investment<br>in Capital Construction<br>by Category |                     | Capital Construction<br>as a Percent<br>of Total<br>Planned Expenditures |
|---|--|---------------------|---|---------------------|--|
|   | Billion<br>Yuan                              | Percent<br>of Total | Billion<br>Yuan   | Percent<br>of Total |  |
| Industry  | 31.32  | 40.9                | 24.85 a/  | 58.2                | 79.3   |
| Agriculture, water conser-<br>vancy, and forestry   | 6.10   | 8.0                 | 3.26  | 7.6                 | 53.4   |
| Transport, posts<br>and telecommunications          | 8.99   | 11.7                | 8.21  | 19.2                | 91.3   |
| Commerce, banking, and<br>commodity stockpiling     | 2.16   | 2.8                 | 1.28  | 3.0                 | 59.2   |
| Culture, education,<br>and health                   | 14.27  | 18.6                | 3.08  | 7.2                 | 21.6   |
| Municipal public utilities                          | 2.12   | 2.8                 | 1.60  | 3.7                 | 75.5   |
| Working capital for various<br>economic enterprises | 6.90   | 9.0                 | 0   | 0                   | 0  |
| Major repairs for various<br>economic enterprises   | 3.60   | 4.7                 | 0   | 0                   | 0  |
| Other economic expenditures                         | 1.18 b/                                      | 1.5                 | 0.46 b/   | 1.1                 | 0  |
| Total   | 76.64  | 100.0               | 42.74   | 100.0               | 55.8   |

a. This sum excludes 1.77 billion yuan to be spent by nonindustrial ministries for industrial enterprises.

b. It is not known whether these two items are parallel.

S-E-C-R-E-T

S-E-C-R-E-T

b. Capital Construction Investment.

The distribution of investment funds under the Five Year Plan of Communist China demonstrates the pattern of development which the Chinese Communists are attempting to put into effect. The pattern is one of emphasis on the building up of sectors which historically have been weak in the Chinese economy. This pattern is illustrated in Table 7\* and Figure 4.\*\* Agriculture, which was the sector responsible for 44 percent of the estimated GNP in 1952, is receiving only 2 percent of the investment funds. Modern industry, which in 1952 contributed 12 percent to the estimated GNP, is receiving 62 percent. Within modern industry the emphasis on development of heavy industry shows up strikingly. The contribution of heavy industry to GNP in 1952 was about 50 percent higher than that of light industry, yet investment in heavy industry is to be eight times as great as in light industry. The transport and telecommunications sector contributed 2 percent to GNP in 1952, yet it is to receive 19 percent of capital construction investment under the Five Year Plan. As would be expected, investment in transport and telecommunications is in approximately the same proportion to investment in heavy industry as was the 1952 GNP contribution of transport and telecommunications to the 1952 GNP contribution of heavy industry. The two sectors are moving together.

Within the modern industry sector the pattern of emphasis upon historically weak phases is carried out. This pattern is illustrated in Table 8,\*\*\* which compares estimated value added\*\*\*\* by various industries with the shares of those industries in the capital construction investment under the Five Year Plan. Value added by heavy industry in 1952 is estimated to have been approximately 60 percent of value added by modern industry, and value added by light industry is estimated to have been approximately 40 percent. Investment in heavy industry under the Five Year Plan

\* Table 7 follows on p. 35.

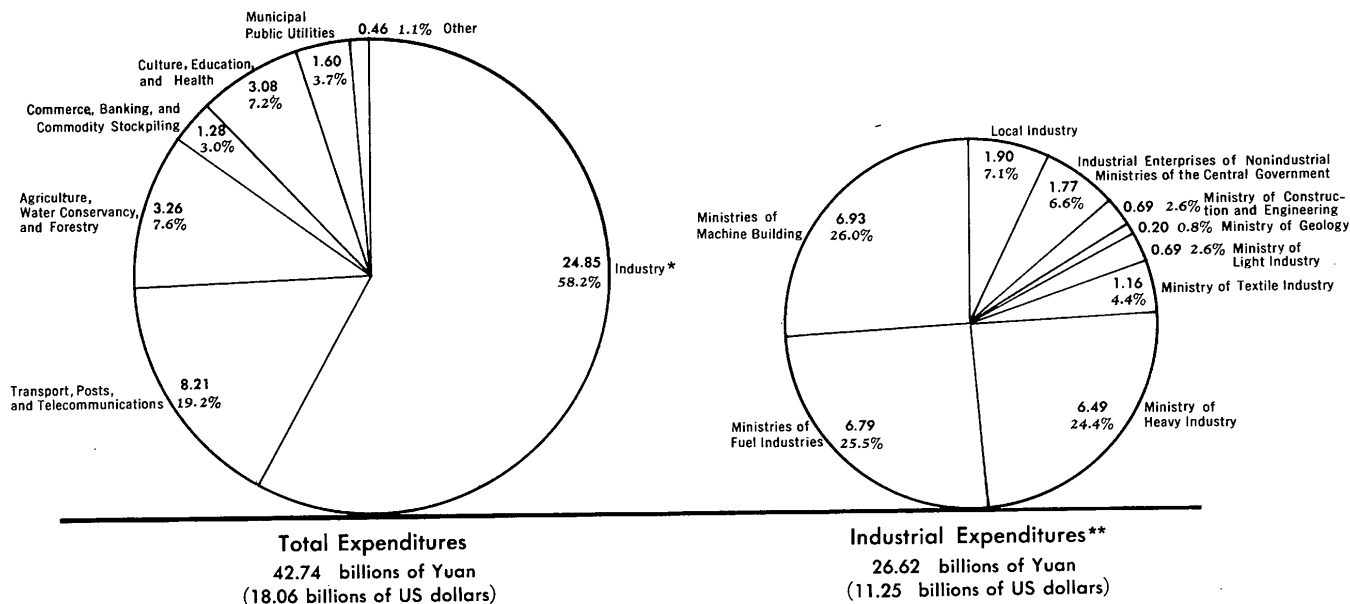
\*\* Following p. 34.

\*\*\* Table 8 follows on p. 36.

\*\*\*\* Value added is the sum of the values created in the process of producing the output of an economy. Gross national product is the sum of the sales to the final consumer of the economy: that is, the gross value of the output of the economy less purchases of materials, fuels, and power used in the production process. The totals of these measures are equal.

COMMUNIST CHINA  
**CAPITAL CONSTRUCTION EXPENDITURES**  
**IN THE FIRST FIVE-YEAR PLAN**  
 1953-57

(Figures are in billions of Yuan)



\* Excludes industrial capital construction investment by nonindustrial ministries.  
 \*\* Includes industrial capital construction investment by nonindustrial ministries.

Figure 4



S-E-C-R-E-T

Table 7

Comparison of Investment in Communist China  
During the Five Year Plan (1953-57)  
with Gross National Product of 1952

| Sector                              | Percent<br>of Gross<br>National Product<br>(Factor Prices)<br>1952 | Allocation<br>of Capital Construction<br>Investment a/<br>1953-57<br>(Percent) |
|-------------------------------------|--|--|
| Agriculture                         | 44   | 2  |
| Modern industry                     | 12   | 62   |
| Heavy industry                      | 7  | 55   |
| Light industry                      | 5  | 7  |
| Transport<br>and telecommunications | 2  | 19   |

a. Based on Five Year Plan announcement.

is to amount to 89 percent, and investment in light industry is to amount to only 11 percent of total industrial capital construction investment. The textile industry, with the second highest value added in 1952, is to receive only 5 percent of total investment in industrial capital construction.

Within heavy industry the engineering industry of Communist China shows the biggest contrast between 1952 value added and investment under the Five Year Plan. The showing for steel on the other hand seems low in relation to value added. This probably is because of the high price of steel products in Communist China, which results in a lower capital output ratio than in the engineering industries. Within heavy industry the emphasis is upon engineering, power, and steel. Petroleum products and miscellaneous heavy industries (chemicals, construction materials, and nonferrous metals) are of less interest, though the proportion of investment they are receiving is greater than their share of value added by heavy industry.

## S-E-C-R-E-T

Table 8  
Investment and Value Added for Selected Industries in Communist China  
During the Five Year Plan (1953-57)

| Sector                                | Sector Contribution to Value Added by Modern Industry 1952 (Percent) | Allocation of Industrial Capital Construction Investment (Percent) | Contribution of Each Industry to Value Added by Heavy Industry 1952 (Percent) | Allocation of Capital Construction Investment in Heavy Industry (Percent) | Contribution of Each Industry to Value Added by Light Industry (Percent) | Allocation of Capital Construction Investment in Light Industry (Percent) |
|---------------------------------------|--|--|---|---|--|---|
| Heavy Industry                        | 60   | 89 a/  | 100   | 100   |  |   |
| Engineering                           | 9  | 26 a/  | 14  | 29  |  |   |
| Power                                 | 10   | 14 b/  | 16  | 16  |  |   |
| Coal                                  | 11   | 4 b/   | 18  | 5   |  |   |
| Petroleum products                    | 3  | 7 b/   | 5   | 8   |  |   |
| Ferrous metals and metallurgical coke | 17   | 17 b/  | 28  | 19  |  |   |
| Miscellaneous heavy industries        | 3  | 8 b/   | 7   | 9   |  |   |
| Industrial lumber                     | 3  | 3 a/ c/  | 4   | 3   |  |   |
| Other                                 | 4  | 10   | 8   | 11  |  |   |
| Light Industry                        | 40   | 11 a/  |   |   | 100  | 100   |
| Textiles                              | 14   | 5 d/   |   |   | 36   | 45  |
| Other                                 | 26   | 6 e/   |   |   | 64   | 55  |

a. Based on Five Year Plan announcement.

b. Estimate.

c. This figure may not include the whole industrial lumber investment.

d. This figure includes investment by the Ministry of Textile Industry and textile investment under local industry.

e. This figure includes investment by the Ministry of Light Industry and includes part of the 1.77 billion yuan invested in industrial enterprises by nonindustrial ministries, as well as some investment under local industry.

S-E-C-R-E-T

c. Industrial Capital Construction. 31/

The Chinese Communist program of industrialization envisages a 98.3-percent increase in the gross value of total industrial output by the end of the Five Year Plan, requiring an average yearly increase of 14.7 percent. Production by modern industry (exclusive of handicrafts) is to increase by 104.1 percent during the period, or 15.3 percent per year. Within the present plan period, emphasis is to be upon the development of heavy industry, which is to receive 88.8 percent of industrial investment funds, whereas light industry is to receive only 11.2 percent.

In terms of the number of investment projects the major effort is to be expended on 694 projects which the Chinese Communists call "above-norm" construction projects.\* Among these are 156 projects for which the USSR is furnishing technical and material aid, of which 145 are to be started, and, of these, 45 to be completed, during the 5-year period. The remaining 11 are to be designed within the 5-year period. It is contemplated that 455 of the 694 projects will be completed within the current Five Year Plan. In addition to the above-norm projects, there are 2,300 relatively small, "below-norm" construction projects, which the Chinese Communists expect to complete by 1957.

The following are among the large projects:

(1) Forty-eight major construction and reconstruction projects are to be completed between 1953 and 1960 in the Anshan iron and steel complex, including 3 iron mines, 8 ore-selecting and sintering plants, 6 automatic iron blast furnances, 3 steel-making plants, 16 steel-rolling mills, 10 batteries of coke ovens, and 2 heat-resistant material shops.

\* For each industry a norm has been established for building and expansion projects, according to an arbitrary classification of the size of the expenditure involved or the new capacity to be added. The relatively large projects, classified as "above-norm," generally are considered to be of key importance in the over-all plan of economic development and, therefore, require higher level supervision and control than the smaller "below-norm" projects.

S-E-C-R-E-T

(2) Two other major iron and steel combines are to be started: the No. 315 Plant at Wu-han - Ta-yeh 32/ in central China, and another plant at Pao-t'ou in Inner Mongolia. The No. 315 Plant is to be an entirely new development apart from the existing Ta-yeh Steel Mill. Although the latter is already expanding its facilities, it is believed that large-scale new construction work at the two new plants is not yet under way and may not get into full swing until 1956 or 1957.

(3) Fifteen thermal power plants of 50,000-kilowatt (kw) capacity are included among the many power projects to be built in the 5-year period. The Feng-man hydroelectric station in the Northeast is to have a total capacity of 567,000 kw 33/ after the installation of new generating units and completion of renovation.

(4) Thirty-one projects in the coal mining industry are to be completed during the 5-year period, each of which is to add a capacity in excess of 1 million tons of coal a year.

(5) Many projects in the engineering industries are to be completed or started in the 5-year period. These include the No. 1 Automobile Plant, to be completed at Ch'ang-ch'un within the current plan period; the No. 2 Automobile Plant, with a planned capacity double that of the No. 1 Plant; and a tractor plant with a capacity of 15,000 units per year. In addition, power-generating equipment is planned with an output of 800,000 kw of new capacity within the 5-year period, including units of 12,000-, 25,000-, and possibly of 50,000-kw capacity. 34/

(6) Cotton textile mills with 1.65 million spindles and 47,100 looms are to be built in the 5-year period. The mills will range in size from 30,000 to 100,000 spindles.

The additions to capacity planned for the principal industries by 1957 over 1952 and the total increases to be realized when all the planned projects have been completed are shown in Table 9\* and indicate that the major part of the capital construction work remains to be carried out in the last 2 years of the plan period. The basic construction program as a whole reached 32 percent of completion by the end of the first 2 years. The Chinese Communists announced in September 1955 that by the end of the first 3 years of

\* Table 9 follows on p. 39.

## S-E-C-R-E-T

Table 9

Increases in the Industrial Capacity of Selected Industries of Communist China  
During the Five Year Plan (1953-57)

| Industry               | Unit                 | Capacity<br>1952    | Planned<br>Total Increase<br>in Capacity <sup>a/</sup> | Percentage Increase<br>from Projects<br>Started 1953 to 1957 | Planned<br>Total Capacity<br>after all Projects<br>are Completed |
|------------------------|----------------------|---------------------|--|--|--|
| Steel                  | Million metric tons  | 1.8 <sup>b/</sup>   | 6.1  | 339  | 7.9 <sup>c/</sup>  |
| Coal                   | Million metric tons  | 79.0                | 93.0   | 118  | 172.0  |
| Cement                 | Million metric tons  | 4.83 <sup>d/</sup>  | 3.6  | 75   | 8.43   |
| Power                  | Million kilowatts    | 2.05                | 4.06   | 198  | 6.11   |
| Cotton spinning        | Million spindles     | 5.66 <sup>e/</sup>  | 1.89   | 33   | 7.55   |
| Sugar                  | Thousand metric tons | 300.0 <sup>f/</sup> | 560.0  | 187  | 860.0  |
| Trucks                 | Units                | 0.0                 | 90,000.0   | 0.0  | 90,000.0   |
| Tractors               | Units                |                     | 15,000.0   | 0.0  | 15,000.0 <sup>g/</sup>   |
| Chemical<br>fertilizer | Thousand metric tons | 325.0 <sup>h/</sup> | 910.0  | 280.0  | 1,235.0  |

a. The total increase will result from all projects started in the first Five Year Plan period.

b. Production figures are for 1954, when most industries were operating at nearly full capacity. The reported increase in 1953 and 1954 has been subtracted.

c. Although a capacity increase of 6.1 million tons is to be attained when all projects started during the present plan period are completed, the Five Year Plan indicates that a total steel capacity of 10 million tons is contemplated by 1962.

d. It is assumed that production was 59 percent of installed capacity in 1952 and 84 percent of installed capacity in 1954.

e. <sup>35/</sup>

f. It is assumed that production was 80 percent of capacity in 1952.

g. In 1959.

h. It is assumed that production was 65 percent of capacity in 1952.

S-E-C-R-E-T

the Five Year Plan, 52 percent of the volume of capital construction would have been completed, 36/ leaving 48 percent to be completed in the last 2 years of the plan period.

Table 10\* shows the sum specifically allocated by the Peiping regime to selected industrial ministries for capital construction under the Five Year Plan, with estimates of the sums to be devoted to capital construction in individual industries under those ministries. Among the industrial capital construction investments the planned investment of the Ministries of Machine Building, 6.93 billion yuan, is the largest. Under the Ministries of Fuel Industries, electric power is to receive the largest share of investment funds -- 3 billion yuan. In addition, the estimated local investment in electric power is 140 million yuan. The capital construction investment in the petroleum industry is the residual sum of 1.53 billion yuan.

It is estimated that, under the Ministry of Heavy Industry, steel will receive the largest share of capital construction funds -- 3.4 billion yuan. The residual sum of 1.79 billion yuan under this Ministry covers, for the most part, investment in the construction materials, nonferrous metals, and chemical industries.

Capital construction under the Ministry of the Textile Industry is devoted principally to production of cotton textiles, with minor investment in plants for production of woolen textiles, silk, hemp, synthetic fibers, and for printing and dyeing. Capital construction for production of textile machinery also falls under the Ministry of the Textile Industry. Investment by the central government in productive capacity to produce cotton textiles is estimated to be 703 million yuan. Investment by the central government in other textile industry projects is estimated to be 225 million yuan, which is a residual sum.

Under the Ministry of Light Industry, investment is in the food-processing, sugar, rubber products, pharmaceutical, and paper industries.

\* Table 10 follows on p. 41.

S-E-C-R-E-T

Table 10

Estimated Cost of Industrial Capital Construction  
 in Communist China  
 During the Five Year Plan (1953-57)

| Ministry or Industry   | Expenditure <sup>a/</sup> *<br>(Billion Yuan) | Expenditure<br>as a Percent<br>of Total<br>Expenditure<br>for Industrial<br>Capital Construction <sup>b/</sup> |
|--|---|--|
| Ministries of Machine Building   | 6.930 <u>c/</u>                               | 26   |
| Ministries of Fuel Industries  | 6.790 <u>c/</u>                               | 25   |
| Power  | 3.000   | 11   |
| Coal   | 0.900   | 3  |
| Petroleum  | 1.530   | 6  |
| Nonproductive construction   | 1.360   | 5  |
| Ministry of Heavy Industry   | 6.490   | 24   |
| Steel  | 3.400   | 13   |
| Nonproductive construction   | 1.300   | 5  |
| Other (including nonferrous<br>metals, chemicals, and<br>construction materials<br>industries) | 1.790   | 7  |
| Ministry of the Textile<br>Industry  | 1.160 <u>c/</u>                               | 4  |
| Cotton textiles  | 0.703   | 2.6  |
| Other textile industries   | 0.225   | 0.7  |
| Nonproductive construction   | 0.232   | 1.0  |
| Ministry of Light Industry   | 0.690   | 3  |
| Ministry of Geology  | 0.200   | 1  |
| Ministry of Construction<br>and Engineering  | 0.690   | 3  |

\* Footnotes for Table 10 follow on p. 42.

S-E-C-R-E-T

Table 10

Estimated Cost of Industrial Capital Construction  
 in Communist China  
 During the Five Year Plan (1953-57)  
 (Continued)

| <u>Ministry or Industry</u>  | <u>Expenditure <sup>a/</sup><br/>(Billion Yuan)</u> | <u>Expenditure<br/>as a Percent<br/>of Total<br/>Expenditure<br/>for Industrial<br/>Capital Construction</u> |
|--|---|--|
| Industrial Enterprises<br>of Nonindustrial Ministries<br>of Central Government | 1.770 <u>b/</u>                                     | 7  |
| Lumber industry  | 0.790 <u>b/</u>                                     | 3  |
| Other  | 0.980   | 4  |
| Ministry of Local Industry   | 1.900 <u>b/</u>                                     | 7  |
| Power  | 0.140   | 0.5  |
| Coal   | 0.100   | 0.4  |
| Heavy industries   | 0.150   | 0.5  |
| Textiles   | 0.285   | 1.0  |
| Food industries  | 0.645   | 2.4  |
| Other  | 0.580   | 2.2  |
| Total  | <u>26.62</u> <u>b/</u>                              | <u>100</u>   |

- a. Unless otherwise noted, expenditures are estimates.  
 b. Totals may not add because of rounding.  
 c. Five Year Plan figure.



S-E-C-R-E-T

It is believed that the capital construction investment funds allocated to the Ministry of Construction and Engineering, amounting to 690 million yuan, are to be expended upon construction machinery and equipment and upon construction of storage facilities for storing building supplies.

Within the total of 26.62 billion yuan to be spent on industrial capital construction, 1.77 billion is to be spent by nonindustrial ministries upon industrial enterprises. Among such expenditures by nonindustrial ministries is an investment of 790 million yuan by the Ministry of Forestry for capital construction in the lumber industry. The other industrial investments by non-industrial ministries are in processing enterprises of the Ministries of Commerce and Food, shipyards of the Ministry of Communications, locomotive and railroad car construction and maintenance shops of the Ministry of Railroads, film studios of the Ministry of Culture, and others.

d. Nonindustrial Capital Construction.

Of the total amount of 42.74 billion yuan allocated for capital construction under the Chinese Communist Five Year Plan, 26.62 billion yuan are allocated for industrial construction and 17.89 billion yuan (including the 1.77 billion yuan to be spent on industrial construction by nonindustrial ministries) are allocated for investment by the various service ministries and the Ministries of Agriculture, Water Conservancy, and Forestry.

The allocations of capital investment in transport, telecommunications, municipal utilities, state commerce, education and health, and the agricultural sector, as specified in the Five Year Plan, are shown in Table 11.\*

Total allocation under the Ministry of Railroads is 5.67 billion yuan. Basic construction in the railroad system is to consist of building new lines, improving existing facilities, and increasing the locomotive and rolling stock. In the field of railroad construction investment, 21.5 percent, or 1.2 billion yuan, is to be spent on increasing the locomotive and car park.

\* Table 11 follows on p. 44.

S-E-C-R-E-T

Table 11

Cost of Nonindustrial Capital Construction  
in Communist China  
During the Five Year Plan (1953-57)

| <u>Ministry or Industry</u>                     | <u>Expenditure a/*<br/>(Billion Yuan)</u> | <u>Expenditure<br/>as a Percent<br/>of Total<br/>Expenditure<br/>for Nonindustrial<br/>Capital Construction b/</u> |
|---|---|--|
| Ministry of Railroads                           | 5.670                                     | 32   |
| Building of new railroads                       | 2.365                                     | 13   |
| Improvement of existing<br>railroads            | 1.854                                     | 10   |
| Increasing locomotive<br>and car park           | 1.219                                     | 7  |
| Planning  | 0.232                                     | 1  |
| Ministry of Communications                      | 1.339                                     | 7  |
| Highway construction                            | 0.900                                     | 5  |
| Other   | 0.439                                     | 2  |
| Civil Aviation Bureau                           | 0.101                                     | 0.6  |
| Ministry of Posts<br>and Telecommunications     | 0.361                                     | 2  |
| Local communications                            | 0.739                                     | 4  |
| Agriculture, forestry,<br>and water conservancy | 3.260                                     | 18   |
| Ministry of Agriculture                         | 1.035                                     | 6  |
| Ministry of Water Conservancy                   | 1.400                                     | 8  |
| Weather Bureau                                  | 0.036                                     | 0.2  |
| Ministry of Forestry                            | 0.789                                     | 4  |

\* Footnotes for Table 11 follow on p. 45.

- 44 -

S-E-C-R-E-T

S-E-C-R-E-T

Table 11

Cost of Nonindustrial Capital Construction  
in Communist China  
During the Five Year Plan (1953-57)  
(Continued)

---

| <u>Ministry or Industry</u>                     | <u>Expenditure a/<br/>(Billion Yuan)</u> | <u>Expenditure<br/>as a Percent<br/>of Total<br/>Expenditure<br/>for Nonindustrial<br/>Capital Construction b/</u> |
|---|--|--|
| Culture, education,<br>and health               | 3.080                                    | 17   |
| Commerce, banking,<br>and commodity stockpiling | 1.280                                    | 7  |
| Construction of municipal<br>utilities          | 1.600                                    | 9  |
| Other expenses                                  | 0.460                                    | 3  |
| Total c/  | <u>17.890</u>                            | <u>100</u>   |

---

a. Data are from the Five Year Plan except those for the Ministry of Communications, which are estimated.

b. Totals may not add because of rounding.

c. Total includes the sum of 1.77 billion yuan to be spent on industrial enterprises by nonindustrial ministries. See Table 10,

p. 41, above.

Expenditure of 1.339 billion yuan by the Ministry of Communications is for the development of highways and water transport. It is estimated that 900 million yuan are to be spent for the construction of highways. In addition to the expenditure for highway construction, the allocation of the Ministry of Communications includes a residual of 439 million yuan, a small part of which probably will be used for other phases of highway transport, for example,

- 45 -

S-E-C-R-E-T

S-E-C-R-E-T

highway maintenance equipment, and the balance for water transport, mainly for the purpose of increasing shipping tonnage and developing shipyards.

The Ministry of Posts and Telecommunications was allocated 361 million yuan for capital construction. This is a small amount considering the magnitude of this ministry's duties, and it is believed, therefore, that it is augmented by investment funds at the local level (listed under investment for local communications) to be spent by local government organs. The Chinese Communists have allocated 739 million yuan to investment for local communications. It is believed that this sum is to be spent by local government organs for developing local road transport, water transport, and posts and telecommunications.

Capital construction in water conservancy absorbs the preponderant share of funds for the budget item agriculture, forestry, and water conservancy. The Ministry of Water Conservancy on 26 July 1955 announced that 2.490 billion yuan were to be spent on capital construction in water conservancy during the Five Year Plan period. 37/ It is believed that the bulk of the 1.035 billion yuan allocated to the Ministry of Agriculture is to be spent for water conservancy projects and that most of the 200 million yuan invested by other ministries in agriculture, water conservancy, and forestry also will be spent on water conservancy.

Projects under the Ministry of Water Conservancy include flood control, irrigation, and the development of water resources for hydroelectric power. At present, state investment in water conservancy takes the form primarily of the repair and building of dikes and the building of huge reservoirs. 38/

Investment for capital construction in agriculture other than that which goes to water conservancy goes into hand manufacture of tools; supply of tools; improvement of cooperative organizations; equipment for the preparation and distribution of organic fertilizers, tools, and seeds; land reclamation; state farms; farm tool and tractor stations; animal husbandry stations; the development and distribution of improved seeds and drugs and insecticides; marine products enterprises; cadre training; and the instruction of farmers in improved cultivation practices.

S-E-C-R-E-T

The basic construction investment of 789 million yuan allocated to the Ministry of Forestry apparently will be invested in the lumber industry, probably going into facilities for timber conservation and afforestation.

Capital construction under the item culture, education, and health amounts to 3.08 billion yuan. The expansion of educational facilities will be for the accommodation of planned increases in enrollment, which amount to 127 percent of 1952 enrollment. The plan is to establish 60 new schools of higher education so that by 1957 there will be 208 schools of higher education. In addition, existing schools are to be expanded.

Facilities for the publishing of books, magazines, and newspapers are to be rehabilitated or built. The system of state-operated bookstores is to be expanded. It is planned that within the period of the Five Year Plan, radio transmission capacity is to be increased by 2,174 kw. The motion picture industry is to be developed. Construction of a new developing and printing plant with an annual capacity of 45 million meters is to be started in 1956. The building of a raw film plant with a production capacity of 65 million meters a year and of a new film studio is to be started in 1957. The number of state-operated theaters is to be increased. Culture halls, libraries, and museums are to be built. The number of hospital beds under the central government is to be increased by 77 percent to a total of 244,000 within the period of the Five Year Plan. The number of epidemic-prevention centers, health stations, and district health offices under the central government is to be increased by 65 percent to a total of 17,000 by 1957.

Capital construction investment under commerce, banking, and commodity stockpiling amounts to 1.28 billion yuan. It is believed that the expenditure for commerce will be for storage and distribution facilities. The expenditure for banking doubtless will be for branch banking facilities. It is believed that the expenditure for stockpiling will be for equipment needed in construction.

The item construction of municipal utilities probably covers items which contribute to city improvement and expansion, such as power plants, city roads, bridges, drainage, water supply, and sewage systems.

S-E-C-R-E-T

III. Population and Labor Force.

A. Population Trends.

The population of Communist China totaled 582.6 million people at mid-year 1953, according to the official results of China's first complete census. This total is approximately 20 percent higher than the officially reported total of 487 million in 1950. The sharp change cannot be attributed to natural increase of the population. Instead, it must be explained in terms of statistical inaccuracies, deriving from what seem to have been consistent underestimates of the population made before 1953.

The predominantly rural character of the Chinese population is indicated by the classification of 505.3 million people, or 83.7 percent of the total population, as rural inhabitants. The urban population included 77.3 million people, or 13.3 percent of the total, according to the census announcement. Although not defined by the Chinese, it is believed that the urban population refers to cities with a population of 10,000 or more. Table 12 presents population estimates for selected Chinese cities as of June 1953.

Table 12

Population of Selected Cities in Communist China a/  
1953

| <u>City</u>          | <u>Population<br/>(Million)</u> | <u>City</u>  | <u>Population<br/>(Million)</u> |
|----------------------|---------------------------------|--------------|---------------------------------|
| Shanghai             | 6.2                             | Sian         | 0.8                             |
| Peiping              | 2.8                             | Ch'ang-ch'un | 0.8                             |
| Tientsin             | 2.7                             | Ch'eng-tu    | 0.8                             |
| Mukden               | 2.3                             | Tsinan       | 0.7                             |
| Canton               | 1.6                             | T'ang-shan   | 0.7                             |
| Chungking            | 1.6                             | T'ai-yuan    | 0.7                             |
| Wu-han               | 1.4                             | Fu-shun      | 0.7                             |
| Harbin               | 1.2                             | Hangchow     | 0.7                             |
| Port Arthur - Dairen | 1.2                             | An-shan      | 0.6                             |
| Nanking              | 1.2                             | Ch'ang-sha   | 0.5                             |
| Tsingtao             | 1.0                             | Pen-ch'i     | 0.5                             |
|                      |                                 | Kunming      | 0.5                             |
|                      |                                 | Wu-shih      | 0.5                             |

a. 39/

- 49 -

S-E-C-R-E-T

S-E-C-R-E-T

The total population of the Chinese mainland was distributed by administrative units as follows:

|                                  |            |                        |                    |
|----------------------------------|------------|------------------------|--------------------|
| Peiping Municipality             | 2,768,149  | Kirin Province         | 11,290,073         |
| Tientsin Municipality            | 2,693,831  | Heilungkiang Province  | 11,897,309         |
| Shanghai Municipality            | 6,204,417  | Jehol Province         | 5,160,822          |
| Hopei Province                   | 35,984,644 | Shensi Province        | 15,881,281         |
| Shansi Province                  | 14,314,485 | Kansu Province         | 12,928,102         |
| Inner Mongolia Autonomous Region | 6,100,104  | Tsinghai Province      | 1,676,534          |
| Liaoning Province                | 18,545,147 | Sinkiang Province      | 4,873,608          |
| Shantung Province                | 48,876,548 | Kiangsi Province       | 16,772,865         |
| Kiangsu Province                 | 41,252,192 | Kwangtung Province     | 34,770,059         |
| Anhui Province                   | 30,343,637 | Kwangsi Province       | 19,560,822         |
| Chekiang Province                | 22,865,747 | Szechwan Province      | 62,303,999         |
| Fukien Province                  | 13,142,721 | Kweichow Province      | 15,037,310         |
| Honan Province                   | 44,214,594 | Yunnan Province        | 17,472,737         |
| Hupei Province                   | 27,789,693 | Sikang Province        | 3,381,064          |
| Hunan Province                   | 33,226,954 | Tibet and Changtu Area | 1,273,969          |
| Total                            |            |                        | <u>582,603,417</u> |

No detailed information on the age and sex composition of the census population has been issued by the Chinese Communists. They have, however, announced that men outnumber women, with 107.5 males for every 100 females. This is in contrast with the US, where there are only 98.9 males per 100 females. They have also indicated a high concentration in the younger age groups, reporting that children less than 5 years of age accounted for 15.6 percent of the census population. By way of comparison, the US had only 10.8 percent of its population in that age group in 1950, and Japan had only 13.5 percent for the same year. 40/

The birth rate in China is believed to be between 40 and 45 per 1,000 persons, and no significant decline is expected through 1960. The trend of the death rate, on the other hand, is far more difficult to predict, but, judging from China's past history, it seems likely that the annual average death rate has probably fluctuated between 30 and 50 per 1,000 for the past several generations. It is probable that the death rate has fallen since the Communists came to power, although not so much as they have claimed. Food shortages remain a very serious problem in Communist China, however, and there is no

S-E-C-R-E-T

assurance that the Communist regime can reach, or maintain, a low mortality rate before 1960. Table 13 presents the census population of Communist China projected to 1960.

Table 13

Population of Communist China a/  
1953-60

|             |             |             |             |             |             |             | Million     |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <u>1953</u> | <u>1954</u> | <u>1955</u> | <u>1956</u> | <u>1957</u> | <u>1958</u> | <u>1959</u> | <u>1960</u> |
| 582.6       | 591.3       | 600.2       | 609.2       | 618.3       | 627.6       | 637.0       | 646.6       |

a. Projected at a rate of 1.5 percent.

There is increasing evidence of overpopulation in present-day China. Overpopulation has direct significance for China's economic plans, and there are indications within China that the planners are just now beginning to recognize the seriousness of this threat. Indeed, doubts have been quietly expressed about the ability of China's resources to support such an enormous population. The appearance of articles on birth control in Party-controlled publications, plus the lack of any specific refutations from official sources, indicates that the ground is being prepared for a policy shift on population control.

B. Labor Force.

The key direct figure on the labor force in Communist China is contained in the recently published Five Year Plan which stated that workers and clerical staff totaled 21,020,000 persons in 1952. By 1954 it is estimated that this total had increased to 23,020,000 persons. This employment total is exclusive of the numerically most important segment of the Chinese labor force -- agricultural workers -- as well as of self-employed, handicraft, service, and miscellaneous workers.



S-E-C-R-E-T

Scattered data on these remaining sectors have been fitted into the framework of an estimated 1952 labor force of 300 million persons and a 1954 force of 309 million persons and are presented in Table 14. The implied labor force participation rate of 52.5 percent (in terms of the 1952 population\*) is derived from the age and sex distribution of the population, present labor force policy in Communist China, and comparative data from other Far East countries.

Table 14

Estimated Number of Workers in Communist China  
by Category of Employment  
1952 and 1954

| Category                   | Thousand       |                |
|----------------------------|----------------|----------------|
|                            | 1952           | 1954           |
| Workers and clerical staff | 21,020         | 23,020         |
| Handicraft                 | 10,000         | 10,000         |
| Trade (excluding peddlers) | 5,300          | 5,500          |
| Military                   | 2,500          | 2,500          |
| Public security            | 1,500          | 1,500          |
| Other <u>a/</u>            | 16,680         | 15,980         |
| Subtotal                   | <u>57,000</u>  | <u>58,500</u>  |
| Unemployed                 | 3,000          | 3,500          |
| Agricultural               | 240,000        | 247,000        |
| Total                      | <u>300,000</u> | <u>309,000</u> |

a. The residual includes the following occupations: domestic service, personal service, self-employed, pedicab drivers, junkmen (their employees are included under workers and clerical staff), and professional workers.

\* 1952 population is used because better labor force data are available for that year.

S-E-C-R-E-T

1. Employment in Modern Industry.

The modern industry labor force is equated with the 21,020,000 persons classified as workers and clerical staff in 1952 as noted in the Five Year Plan. Approximately half of the workers were then in private employment. The detailed breakdown of this figure given in the plan is presented in Table 15. The 1954 breakdown is based partially on announced figures and partially on estimates derived from Five Year Plan employment targets and output data.

Table 15

Number of Workers and Clerical Staff  
 in Communist China  
 1952 and 1954

| Sector  | Thousand      |                 |
|---|---------------|-----------------|
|   | 1952          | 1954            |
| Industry  | 5,406         | 6,400 <u>a/</u> |
| Trade   | 3,454         | 3,800 <u>a/</u> |
| Finance   | 305           | 377 <u>a/</u>   |
| Transport, post and tele-<br>communications                     | 716           | 1,000 <u>b/</u> |
| Agriculture, water conservancy,<br>forestry, and weather bureau | 239           | 250 <u>b/</u>   |
| Construction  | 1,021         | 2,000 <u>a/</u> |
| Government organs and people's<br>organizations                 | 1,523         | 1,400 <u>b/</u> |
| Culture, education, and health                                  | 2,282         | 2,500 <u>b/</u> |
| Municipal public utilities                                      | 41            | 60 <u>b/</u>    |
| Private handicraft and transport                                | 6,035         | 5,243 <u>c/</u> |
| Total   | <u>21,020</u> | <u>23,020</u>   |

- a. 41/
- b. Estimated.
- c. Residual.

S-E-C-R-E-T

There is a limited amount of data which may be used to subdivide the 1952 figure of 5.4 million industrial workers. In the absence of official figures on employment in light industry, a tentative estimate was made and is presented with announced data in Table 16. The estimate of employment in light industry is based on the estimated value added by such industries, less profits, divided by an estimated average wage. 42/ The 1954 breakdown is estimated on the basis of changes of output adjusted for productivity increases.

Table 16  
Estimated Number of Persons Employed  
in Industry in Communist China  
1952 and 1954

| Industry  | Thousand      |              |
|---|---------------|--------------|
|   | 1952          | 1954         |
| Heavy industry (chemicals, iron and steel, nonferrous metals, construction materials) | 590 <u>a/</u> | 750          |
| Light industry (including handicraft workshops)                                       | 3,030         | 3,605        |
| Textiles  | 720 <u>b/</u> | 750          |
| Coal mining   | 460 <u>c/</u> | 600          |
| Engineering industries  | 230 <u>d/</u> | 300          |
| Weapons and armaments   | 210 <u>e/</u> | 200          |
| Electric power  | 110 <u>f/</u> | 125          |
| Petroleum.  | 50 <u>g/</u>  | 70           |
| Total   | <u>5,406</u>  | <u>6,400</u> |

a. Employment in 1953 was 700,000. 43/ This figure has been adjusted in light of the announced productivity and production increases in 1953 over 1952.

b. 44/

c. 45/

d. 46/

e. 47/

f. 48/

g. Residual.

S-E-C-R-E-T

2. Employment in Industry.

a. Urban Employment Opportunities.

The industrialization program of the Chinese Communists has improved urban employment opportunities, although underemployment and unemployment have by no means been eliminated. The expansionary elements in regard to job opportunities include growth of industry, commerce, construction, flood relief, and irrigation projects. On the other hand, relocation of industry away from coastal areas, socialization, economy programs, campaigns to increase labor productivity, the Party line on such occupations as ricksha- and cart-pullers and domestic servants, and the elimination of foreign businesses have caused unemployment. The depressive effects of these factors are particularly evident in the large cities; they are not, however, of such magnitude as to offset entirely the improvement in employment opportunities that is a result of the expansionary elements in the economy.

The only announced labor force goal for the Five Year Plan period is the increase of the workers and clerical staff by 4.22 million persons. If the only labor force increase with which the Chinese Communists have to deal is a growth of 2 percent per year in the 1952 nonfarm labor force, 5.8 million additional jobs will be needed. Future prospects then would hinge on the feasibility of the Five Year Plan goal and the absorption of the balance of 1.6 million persons in private or socialized trade, handicrafts, and services. The Five Year Plan goal of employment had already been half met by the end of 1954 and, unless the labor productivity and labor economy programs are extraordinarily effective, it is believed that additional jobs required under the plan will be created.

Even though the number of jobs in the Chinese Communist economy may grow through liberal use of the abundant labor supply, underemployment and peasants' attempts to move out of rural areas constitute grave and continuing problems for the Chinese Communists. In addition, the problem of actual unemployment reached serious proportions in 1955. Floods in late 1954 left peasants without adequate supplies for the winter, and thousands of them swarmed into urban areas to live with relatives or to earn enough to avoid starvation. Also in 1955, light industry and textile mills were forced to curtail operations on account of shortages of raw materials arising from the 1954 floods. The reported good harvest in the fall of 1955 should assist the regime in dealing with both these sources of unemployment.

- 55 -

S-E-C-R-E-T

S-E-C-R-E-T

b. Labor Productivity.

The Chinese Communists have put increasing stress on raising output per worker and on cutting down on excess staff as a means of reducing production costs, raising output, and providing capital. The Five Year Plan stated that productivity has "experienced a great and continuing increase under the Communist regime and that during the Five Year Plan period, 2/3 of the increased production value of State-operated industry will be due to increased labor productivity." 49/

Some of the productivity goals of the Five Year Plan and the National Statistical Bureau's yearly figures on labor productivity are presented in Table 17.

Table 17

Increases in Labor Productivity in Communist China a/

| Sector                        | Five Year Plan Goal<br>(Percentage Increase,<br>1957 over 1952) | NSB <u>b/</u> (Percent-<br>age Increase,<br>1952 over 1951) | NSB (Percent-<br>age Increase,<br>1953 over 1952) | NSB (Percent-<br>age Increase,<br>1954 over 1953) |
|-------------------------------|---|---|---|---|
| State-operated<br>industry    | 64  |   | 13  | 15 <u>c/</u>                                      |
| Ministry of Heavy<br>Industry | 67.9  | Steel 37<br>Nonferrous metals 7<br>Chemicals 42             | 16<br>16<br>26                                    |   |
| Fuel Ministries               | 63.6  | Electric power 12<br>Coal 24<br>Petroleum 35                | 12<br>16<br>17                                    |   |
| Machine Ministries            | 65.2  |   | 29  | 21  |
| Ministry of Textiles          | 10.4  |   | 32  | 10  |
| Ministry of Light<br>Industry | 75.5  | Paper 23<br>Rubber 18                                       |   | 13  |

- a. All increases apply to "large-scale" state and joint state-private enterprises.  
 b. National Statistical Bureau.  
 c. Applies to state and joint state-private.

S-E-C-R-E-T

c. Forced Labor.

As a means of channeling surplus labor into productive work and of reforming recalcitrants, forced labor is taking on increased significance in Communist China. The Communists have announced that "over 83 percent of the prisoners in penal institutions of the country are engaged in agricultural or industrial production." 50/ Defining forced labor in terms of convict labor, however, restricts the meaning to rather narrow limits relative to the total number of involuntary workers in China. In addition to the forced laborers in prison camps, the Chinese Communists force the unemployed, the flood-stricken peasants, and peasants idle in the nonharvest or planting period to work in dike repair, irrigation, and highway construction projects.

The postponement, however, of many of the planned conservancy projects to the second and third Five Year Plans indicates the limitations which shortages of technical personnel and food resources impose on labor-intensive construction projects.

3. Working Conditions.

Controls on Chinese labor, especially industrial workers, have become increasingly severe over the past 5 years. A new set of regulations was promulgated in July 1954, and, although developed mainly for state-operated enterprises, it was clearly intended to serve as an outline for all enterprises. 51/ Among the more significant provisions, control over the movement of workers is sought by requiring each job applicant to furnish certification of his past record, including approved release from his last employment.

At the present time a worker's pay rate in Communist China is determined by three basic factors: (a) type of industry, with highest rates of pay for mining and heavy industry and gradations downward to consumer industries at the bottom of the pay scale; (b) productive capacity of individual plants, with the larger and more efficient plants having a higher wage level; and (c) skill of the individual worker, usually classified by an eight-grade system. 52/ Incentive methods of payment including piecework pay rates, bonuses, and awards are being instituted wherever possible in preference to time rates.

- 57 -

S-E-C-R-E-T

S-E-C-R-E-T

The Chinese Communists until 1955 used a system of computing wages in terms of units of purchasing power. Thus a worker's wages were computed in a given number of units, the value of the unit being based on the price of a market basket of commodities. 53/ There are indications that the wage unit was rigged so as not to reflect the actual increase in commodity prices, with the result that increases in wages lagged behind price increases for consumer goods. 54/ If this proves to have been the case, then real wages of urban workers may have declined in the 1953-55 period.

As regards money wages, it has been announced that the average monthly wage of workers (presumably industrial workers) was from 500,000 to 600,000 old yuan in 1953 -- that is, 50 to 60 yuan in the new currency. 55/ Available information from scattered plants and industries tends to support this range. 56/

C. Education and Technical Training.

When the Communist regime launched its industrialization program in China, it was immediately apparent that one of the most serious obstacles would be the shortage of skilled workers and technicians. The rather modest industrial developments in China before the Communist takeover relied heavily on foreign technicians and managers, with little industrial management experience accruing to the Chinese. The immediate problem of coping with the shortage of technical personnel left the Communists with several courses of action. They could get maximum use from the small number of available technicians and specialists by distributing them according to the priorities of the industrialization program; second, they could organize training programs, both in the schools and on-the-job, to turn out technicians as rapidly as possible; and, finally, they could rely heavily on foreign technicians, using the interned Japanese and White Russian specialists as well as accepting aid from their Soviet allies.

In their haste to advance economic construction, the authorities followed all three courses, giving each a high priority. Japanese technicians and specialists, trapped in China after World War II, helped in the reorganization of production in Northeast China. 57/ Soviet advisers in China have been reported in practically all phases of economic construction, such as superintending projects, advising Chinese managers, or training Chinese workers in the required techniques. 58/ In addition to these technical and managerial advisers, Soviet experts in China include academic personnel assigned to Chinese colleges.

S-E-C-R-E-T

The Chinese also concentrated on expanding their own technical force rapidly. The city of Shanghai sent out over 63,000 skilled workers, technicians, engineers, and management personnel to construction sites throughout China during 1950-54. The factories in Shanghai and An-shan also trained additional skilled workers, who were sent to basic construction sites, usually in the Northeast or Northwest. 59/

The official Chinese Communist estimate of personnel requirements for national economic construction was announced in late 1951. 60/ The Chinese estimated that, over the period of the first Five Year Plan, their economic construction would require an additional 150,000 senior technical and administrative personnel and 500,000 intermediate and junior technical personnel. In addition, the Chinese Communists listed a need for 1.61 million teachers. They also listed a need for 200,000 additional health workers of advanced and intermediate level.

The pressure to train specialists for economic, cultural, and health work has resulted in a rapid expansion of the enrollment in institutions of higher learning. According to Communist claims, a total of 117,000 students were enrolled in colleges and universities in the school year 1949/50. In the 1954/55 year, the enrollment had more than doubled the 1949/50 figure, increasing to a total of 258,000 students. Although there has been an unusually rapid expansion in the enrollment of China's universities and colleges, the 1954 graduating class of 40,300, including 15,000 engineers, was considered by the Ministry of Personnel to be "far from enough to satisfy the growing needs of the country." 61/

In terms of total enrollments, the senior middle schools of Communist China have grown at a slower rate than have either colleges or primary schools. This has resulted in an inadequate reservoir of students prepared for college work. One of the most obvious reasons for this condition has been the shift from emphasis on general education to that on specialization, especially in technical subjects. A more fundamental reason is that, in spite of unprecedented expansion of school facilities, educational opportunities are still severely limited in China.



S-E-C-R-E-T

The most striking evidence of failure in education can be found in the fact that, by the Communists' own estimate, over 80 percent of the Chinese population is illiterate. 62/ And although the Communists claim to have expanded primary schools to an enrollment of 51.5 million students in 1954, this includes, by their own admission, only 62 percent of the total eligible school-age children, leaving some 30 million children completely outside the educational system. 63/

In summary, it is clear (1) that the imperative need to obtain trained workers and technicians quickly has resulted in an excessive emphasis on numbers of graduates, students, and trainees; (2) that this emphasis has not been able to surmount the serious obstacle of the high rate of illiteracy; (3) that higher education, although meeting the decreed requirements of numbers of students processed and indoctrinated, is falling seriously short of quality standards; and (4) that the resort to on-the-job training of workers and administrators, while filling the positions with the specified numbers of trainees, must result in the imposition of heavy responsibilities on the supervisors and administrators and in costly mistakes in the execution of orders and plans by the inadequately trained novices.

S-E-C-R-E-T

IV. Trends in the Economy.

A. Significance of Chinese Communist Statistical Reports.

The trends in nonagricultural production presented in this report are based on research to determine the resources, the productive facilities available to exploit the resources, and the approximate magnitude of year-by-year production, which in most cases substantiate Chinese Communist claims of the output of important commodities. Reliance upon Communist statistics to estimate the absolute magnitude of production is necessary in some cases because of the lack of precise data available from non-Communist sources. The use of Communist announcements offers some advantages in that advance notices of production goals and planned increases of capacity allow time in which to seek data from other sources which might indicate the feasibility of the planned performance. The use of Chinese Communist announcements is not without its drawbacks, however, for such announcements, in some cases, diverge from estimates previously derived exclusively from non-Communist information.

Chinese Communist statistical series probably are much better than any that existed previously for China. Statistical reports are a part of the apparatus of economic controls, and there is much evidence of Chinese Communist efforts to develop and enforce accounting procedures and periodic reporting by all enterprises of any importance. As the state rapidly extends its control directly and indirectly over the economy, the coverage of the statistics available to the Communist government -- if not to the outside world -- is increasing.

The reliability of Communist statistics, aside from the question of outright deception, must depend on Communist cadres that were initially untrained to meet the demands placed upon them. In addition, the development of systematic data for a relatively underdeveloped economy such as China's is enormously difficult. Agricultural production; handicraft output; and the whole miscellany of distributive services, including native transportation, coolie stevedoring, and other middleman functions, depend on the relatively isolated activity of individuals and family units where systematic records of economic activity are lacking.

- 61 -

S-E-C-R-E-T

S-E-C-R-E-T

The extension of centralized control, furthermore, and its concomitant expansion of economic reporting may account for a portion of the claimed production increases since 1949. Economic reports probably have incorporated statements of production from the areas of previously uncounted and unrecorded activities of unorganized farmers, traders, and other private operators as these groups have come either under direct Communist administrative control or under the tax system. The probable resultant overstatement of production increases is difficult to differentiate from actual increases in production. In general, recent Communist statistical reports represent increasingly important data on the Chinese economy [redacted]

50X1  
50X1

[redacted] Moreover, as these statistical reports become available, the opportunities are increasing for cross-checking Communist statements from the points of view of both internal consistency and aggregative analysis.

50X1

B. Gross National Product.

1. By Sector of Origin.

From 1950 to 1960, GNP, in factor prices, is expected to grow at an average annual rate of almost 8 percent compared with an expected rate of about 6 percent for the USSR and 3 percent for the US. This growth rate, as indicated by the indexes in Table 18,\* is not distributed evenly over the period or among the major sectors contributing to the product of the economy.

The average increase in GNP from 1950 to 1952 was about 15 percent. The increase in output for 1953 was 9 percent over 1952. Reduced agricultural output in 1954 restricted the increase in GNP in 1954 to 4.5 percent over 1953. The projected trend from 1954 to 1957 indicates an average annual increase of about 6 percent, with GNP reaching a level in 1957 36 percent higher than in 1952. From 1957 to 1960, GNP is expected to increase at about 4.5 percent a year.

The Chinese Communist emphasis on the industrial development of the economy is demonstrated by the different rates of growth expected for the various sectors. Those sectors directly related to industrialization will more than double output from 1952 to 1960. On

\* Table 18 follows on p. 63.

S-E-C-R-E-T

Table 18

Indexes of Gross National Product of Communist China  
 by Sector of Origin  
 1949-57 and 1960

|   | 1952 = 100 |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|
| Sector  | 1949       | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1960 |
| Agriculture,<br>forestry,<br>fisheries,<br>and farm<br>handicraft | 80         | 86   | 92   | 100  | 101  | 100  | 105  | 101  | 110  | 117  |
| Industry  | 43         | 55   | 74   | 100  | 124  | 142  | 151  | 168  | 187  | 232  |
| Transport<br>and com-<br>munications                              |            | 53   | 77   | 100  | 131  | 160  | 183  | 206  | 229  | 339  |
| Construction  | 23         | 48   | 86   | 100  | 134  | 159  | 176  | 193  | 207  | 262  |
| Trade and dis-<br>tribution<br>services                           | 60         | 69   | 82   | 100  | 112  | 120  | 125  | 134  | 144  | 163  |
| Miscellaneous<br>consumer ser-<br>vices and<br>house rent a/      | 65         | 73   | 85   | 100  | 109  | 115  | 120  | 127  | 135  | 151  |
| Government  |            | 65   | 88   | 100  | 108  | 115  | 124  | 133  | 142  | 174  |
| Gross national<br>product (at<br>factor prices)                   | 68         | 75   | 86   | 100  | 109  | 114  | 121  | 128  | 136  | 155  |

a. Urban services moved with the trade index and rural services with the index for agriculture, forestry, and fisheries.

the other hand, the consumer-oriented sectors are expected to experience only modest increases for the period.

Figure 5\* shows the effect of the different rates of growth upon the composition of GNP by sector of origin. During the period of the first Five Year Plan, modern industry will rise by one-half in its

\* Following p. 64.

S-E-C-R-E-T

contribution to GNP, and the modern sector including transport and state construction will rise from 17 percent to 25 percent of GNP. This trend through 1957 still leaves the modern sector a relatively small share of total output in spite of the industrialization program.

It must be remembered that the changes projected are in terms of Chinese prices for 1952 -- a year in which industrial goods were in short supply and highly priced in relation to agricultural products. As the output of producer goods rises and as demand for agricultural products increases, with agricultural output remaining relatively constant, prices of producer goods are likely to fall in relation to prices of agricultural products. Such a trend in prices would mean that industrial output would not command as large a portion of 1957 output in current prices as is indicated in Figure 6.\*

2. By End Use.

Table 19\*\* presents trends expected for GNP in terms of estimated final sales to consumers, government, and for investment. Based on the estimated allocations of GNP in 1952, an index of GNP at market prices is derived as a second method of computing an index for GNP. The two indexes do not vary significantly in view of the difficulties of obtaining trends in over-all output.

The different rates of growth noted in the preceding section are reflected in the anticipated growth of consumption, investment, and government purchases. As a result, by 1957 (in terms of 1952 prices) consumption will decline from about 73 percent of GNP in 1952 to about 65 percent, and investment will rise from about 15 percent to about 21 percent. Government purchases are expected to increase from about 12 percent to 14 percent.

3. Size of Gross National Product in 1952.

The total GNP of Communist China in 1952 was about 69 billion yuan in the new currency. This represents an increase of 9 billion yuan over previous estimates and results almost entirely from the higher estimate of agricultural output. If the official exchange rate is used to convert Communist China's GNP into dollars

\* Following p. 64.

\*\* Table 19 follows on p. 65.

# COMMUNIST CHINA

## GROWTH AND PROJECTED OUTPUT OF THE ECONOMY, BY SECTOR

1950-60

(1952 constant factor prices)

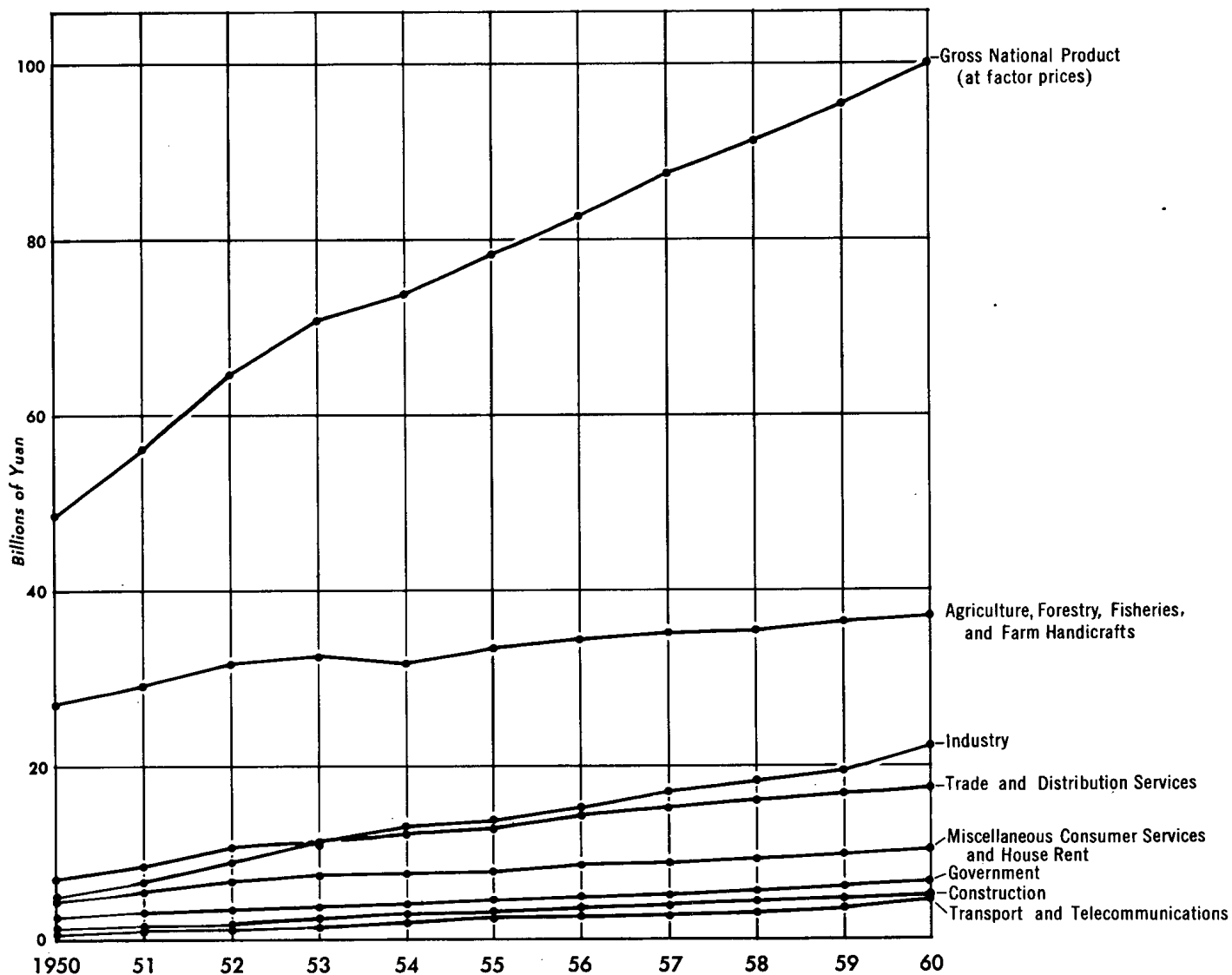


Figure 5

**COMMUNIST CHINA**  
**GROSS NATIONAL PRODUCT, BY SECTOR OF ORIGIN**

1952 and 1957  
*(1952 constant factor prices)*

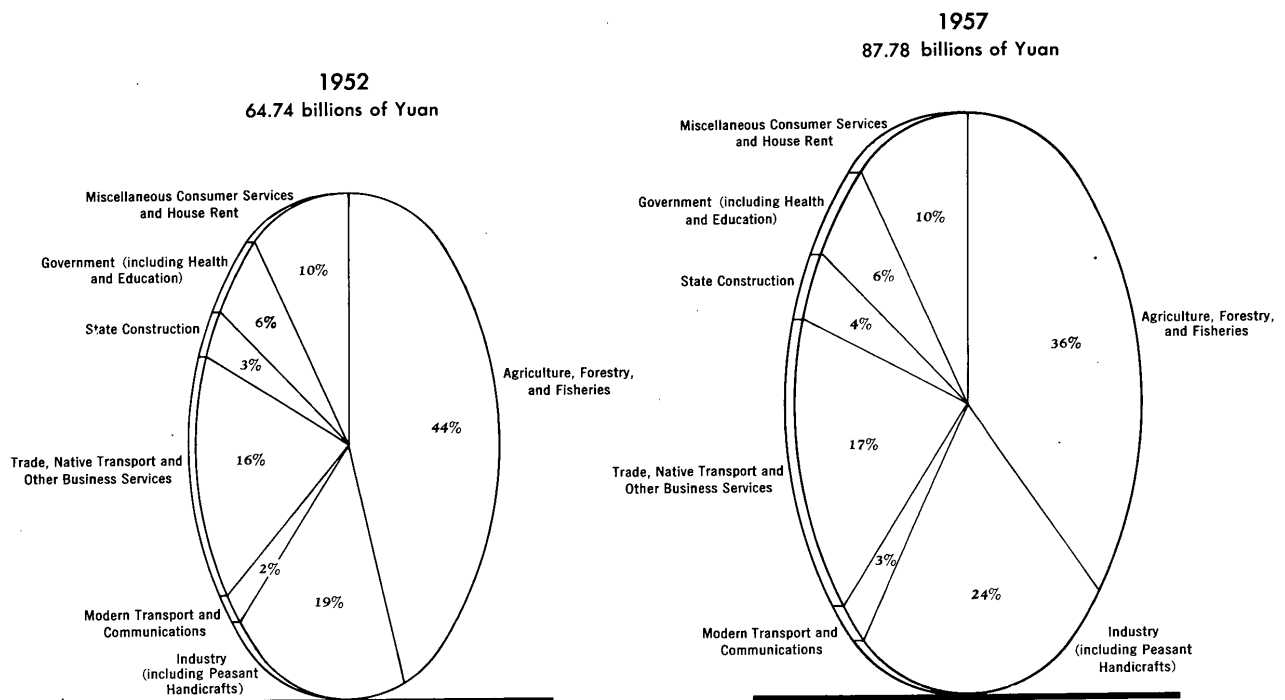


Figure 6

S-E-C-R-E-T

Table 19

Indexes of Gross National Product of Communist China  
 by End Use a/  
 1949-57

|  | 1952 = 100 |      |      |      |      |      |      |      |      |
|--|------------|------|------|------|------|------|------|------|------|
| Category   | 1949       | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 |
| Sales to consumers   | 76         | 83   | 90   | 100  | 103  | 105  | 108  | 114  | 119  |
| Sales to invest-<br>ment   | 42         | 58   | 80   | 100  | 127  | 144  | 153  | 167  | 189  |
| Government pur-<br>chases  |            | 61   | 83   | 100  | 115  | 121  | 133  | 143  | 153  |
| Gross national<br>product, by<br>end use (market<br>prices)        |            | 77   | 88   | 100  | 108  | 113  | 118  | 125  | 133  |
| Gross national<br>product by sec-<br>tor origin<br>(factor prices) |            | 75   | 86   | 100  | 109  | 114  | 121  | 128  | 136  |

a. 1952 prices are used.

the total is \$34 billion. At best, this conversion rate is an average exchange rate for goods entering into foreign trade, and of course it does not reflect the relative prices of US and Chinese goods and services which do not enter foreign trade. Even if the exchange rate were considered the best average conversion rate for total output, it would be inappropriate for direct comparisons of various sectors of the economy.

For these reasons, a conversion rate based on a cross-valuation of the Chinese Communist GNP in terms of Chinese prices and US prices for the year 1952 was constructed. Many problems arise in making such an international comparison of output. The first is the adequacy of the GNP concept for measuring the output of an underdeveloped country such as Communist China. The second qualification springs from discussion of the welfare significance of the GNP concept. The well-being of the Chinese and US populations should not be compared on the basis of GNP alone. Food distribution services in



S-E-C-R-E-T

the US, which increase the market value of foodstuffs, are not required by the Chinese, and US residents are not necessarily better off because their foodstuffs have a greater market value. On the other hand, US output may be understated because GNP does not fully reflect higher quality of goods, greater diversification of production, freedom of consumer choice, and other benefits to the US economy.

To convert Chinese output to US dollars, each sector of the Chinese economy was valued in US dollars, and the output of goods and services in the US in 1952 was valued at Chinese prices. The difficulties of such comparisons are great even when comparing corresponding sectors of GNP. Despite these differences caused by opposing methods of allocation of resources, varying scales of production, and differing levels of technology, the comparisons thus obtained are considered more valid than the general use of the exchange rate as the basis for valuing Chinese output in dollars.

The differences between the sector ratios for the US and for the Chinese bill of goods are moderate except in the case of industry. In the case of the industrial sector the US dollar is worth about 2-1/4 times as many yuan for the US bill of goods as for the Chinese bill of goods. Largely because of this discrepancy, the total GNP is valued at \$65 billion in terms of the average conversion rate for the Chinese bill of goods and at \$25 billion in terms of the average conversion rate for the US bill of goods in yuan. This range is extreme, and no particular conversion rate can be regarded as more meaningful or appropriate than the others.

C. Consumption and Investment.

1. Consumption.

Recent Chinese announcements indicate that the population is increasing by at least 1.5 percent a year, and the increase may have been even greater in recent years. Table 20\* presents an index of estimated per capita availability of consumer goods without consideration of subtractions due to exports or of stocks carried over from one year to the next.

\* Table 20 follows on p. 67.

S-E-C-R-E-T

Table 20

Estimated Per Capita Index of Available Consumer Goods  
in Communist China  
1949-57

1952 = 100

| <u>Commodity</u>                   | <u>1949</u> | <u>1950</u> | <u>1951</u> | <u>1952</u> | <u>1953</u> | <u>1954</u> | <u>1955</u> | <u>1956</u> | <u>1957</u> |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Food                               | 87          | 91          | 94          | 100         | 98          | 94          | 98          | 98          | 98          |
| Clothing<br>(yarn)                 | 52          | 69          | 75          | 100         | 111         | 126         | 108         | 136         | 140         |
| Fuel                               | 65          | 80          | 90          | 100         | 105         | 117         | 125         | 132         | 139         |
| Miscellaneous                      | 58          | 66          | 78          | 100         | 115         | 127         | 130         | 138         | 144         |
| Total for all<br>consumer<br>goods | 79          | 85          | 90          | 100         | 101         | 102         | 103         | 108         | 111         |

The index of per capita availability of food increases from 1949 to 1952, then stabilizes slightly below the 1952 level for the Five Year Plan period. The index demonstrates the extent to which national resources are being diverted to the industrialization program and poses the problem of the maintenance of the same food level in the face of a rising population and increases in income. Increases in production of fuel and textiles and miscellaneous consumer goods, on the other hand, permit greater expenditures for consumer goods other than food. If planned trends up to 1957 are realized, Communist China's ability to export textiles and other consumer goods will be increased.

2. Investment.

The index for investment increases at about 34 percent a year from 1949 to 1952. From 1952 to 1957 the average annual rate of increase is about 13.5 percent. The large increases achieved from 1949 to 1952 and, in part, 1953 probably represent largely the reconstruction and repair of war-damaged plants and equipment. The period 1953 through 1957 indicates the first steps of the Chinese Communists toward the industrialization of the economy. The extremely large increase of 1957 over 1956 reflects the final phase of the first Five Year Plan.

S-E-C-R-E-T

D. Agriculture.

1. Food Production.

A review of the basic factors influencing agricultural production in Communist China indicates that China, with a population nearly four times as large as that of the US, has a cultivated acreage less than half that of the US. The total land under cultivation in China in 1952 is estimated to be roughly 100 million hectares, of which almost 31 million hectares are double cropped. The allocation of the total cropped area of 131 million hectares to individual crops is shown in Table 21.

Table 21

Allocation of Sown Area of Communist China, by Crop  
1952

| <u>Crop</u>                                   | <u>Percent</u> |           |
|---|----------------|-----------|
| Food crop                                     |                |           |
| Rice  | 20             |           |
| Wheat   | 18             |           |
| Soybeans                                      | 8              |           |
| Sweet potatoes                                | 6              |           |
| Other grains                                  | 36             |           |
| Total   |                | <u>88</u> |
| Commercial crop                               |                |           |
| Cotton  | 4              |           |
| Jute, tobacco, sugar<br>cane, and sugar beets | 0.3            |           |
| Oil-bearing crops                             | 4              |           |
| Total   |                | <u>8</u>  |
| Miscellaneous                                 |                | <u>4</u>  |

S-E-C-R-E-T

S-E-C-R-E-T

The Five Year Plan of Communist China states that total production of grain crops in 1952 (including soybeans and sweet potatoes converted to a grain basis) amounted to 163.9 million tons, which is accepted as approximately correct. The 1957 goal for production of grain crops is 192.8 million tons, or 17.6 percent over 1952, which is considered to be far too high. On the basis of prewar yields and of the improvements which might be effected by measures now being instituted by the Chinese Communists, it is believed that the most that could be achieved in the increase of grain crops during the 5-year period is about 11 percent, or a total production in 1957 of 180 million tons. On the basis of the Five Year Plan and the relative emphasis given to increasing production of crops of relatively high yield per acre, it is estimated that the given crop production of 1952 may be increased proportionately for the individual crops as shown in Table 22.\*

US specialists have estimated that a program of agricultural improvement in China for a period of 20 to 25 years could accomplish an increase of food production on the land presently cultivated of approximately 40 percent of present production and that an additional 6 to 8 percent could be added by the cultivation of new land. Thus, assuming that the Communist system of regimentation could accomplish the necessary instruction of peasants in the measures which would yield short-term increases and which require relatively small investment, it is possible that within 5 years or so an increase of 10 million to 15 million tons of food production could be realized on the land presently cultivated. Table 23\*\* shows the relationship between the estimated production of the main food crops and population growth for the years 1949 through 1954 and projected through 1960, as compared with the 1931-37 average. The table reveals that in the best year of agricultural production under the Communists -- 1952 -- the per capita availability of food was equal to only 87 percent of that in 1931-37. In order to attain the prewar level by 1957, an increase in food production of 38 million tons of food, or 23.5 percent over 1952, would have to be realized. This may be compared with the Communist plan to increase the gross value of agricultural output by 23.3 percent over 1952, including an increase over 1952 of 17.6 percent or 31 million tons of food.

\* Table 22 follows on p. 70.

\*\* Table 23 follows on p. 71.

## S-E-C-R-E-T

Table 22

Estimated Yields of Food Crops in Communist China  
1952, 1954, and 1957

| Crop                         | Unit       | 1952                  |                  | 1954  |                  | 1957  |                  |     |
|------------------------------|------------|-----------------------|------------------|-------|------------------|-------|------------------|-----|
|                              |            | Value                 | Index 1952 = 100 | Value | Index 1952 = 100 | Value | Index 1952 = 100 |     |
| Rice                         | Acreage    | Million hectares      | 25.3             | 100   | 24.8             | 98    | 28.0             | 111 |
|                              | Yield      | Kilograms per hectare | 2,530            | 100   | 2,415            | 95    | 2,625            | 104 |
|                              | Production | Million metric tons   | 64.0             | 100   | 60.0             | 94    | 73.5             | 115 |
| Wheat                        | Acreage    | Million hectares      | 21.8             | 100   | 21.8             | 100   | 21.8             | 100 |
|                              | Yield      | Kilograms per hectare | 1,080            | 100   | 1,080            | 100   | 1,125            | 104 |
|                              | Production | Million metric tons   | 23.5             | 100   | 23.5             | 100   | 24.5             | 104 |
| Soybeans                     | Acreage    | Million hectares      | 8.2              | 100   | 8.2              | 100   | 9.8              | 120 |
|                              | Yield      | Kilograms per hectare | 1,152            | 100   | 1,152            | 100   | 1,125            | 98  |
|                              | Production | Million metric tons   | 9.5              | 100   | 9.5              | 100   | 11.0             | 116 |
| Sweet potatoes <sup>a/</sup> | Acreage    | Million hectares      | 7.5              | 100   | 8.2              | 109   | 9.6              | 128 |
|                              | Yield      | Kilograms per hectare | 1,879            | 100   | 1,912            | 102   | 1,875            | 100 |
|                              | Production | Million metric tons   | 14.0             | 100   | 15.7             | 112   | 18.0             | 129 |
| Other grains                 | Acreage    | Million hectares      | 42.9             | 100   | 41.4             | 96    | 47.1             | 110 |
|                              | Yield      | Kilograms per hectare | 1,190            | 100   | 1,190            | 100   | 1,125            | 95  |
|                              | Production | Million metric tons   | 51.0             | 100   | 49.3             | 97    | 53.0             | 104 |
| Total                        | Acreage    | Million hectares      | 105.7            | 100   | 104.4            | 99    | 116.3            | 110 |
|                              | Yield      | Kilograms per hectare | 1,533            | 100   | 1,513            | 99    | 1,548            | 101 |
|                              | Production | Million metric tons   | 162.0            | 100   | 158.0            | 98    | 180.0            | 111 |

a. Potatoes are converted into grain equivalent by multiplying by 0.25.

S-E-C-R-E-T

Table 23

Population, Food Production, and Per Capita Availability  
of Food in Communist China  
1931-37 Average and 1949-60

| Year               | Population<br>(Million) | Population<br>(Index) | Food Production<br>(Million Metric<br>Tons) | Food Production<br>(Index) | Index of Food<br>Availability<br>Per Capita |
|--------------------|-------------------------|-----------------------|---|----------------------------|---|
| 1931-37<br>average | 465.0                   | 100                   | 150   | 100                        | 100   |
| 1949               | 550.3                   | 118.5                 | 135   | 90                         | 76  |
| 1950               | 558.3                   | 120.0                 | 143   | 95                         | 79  |
| 1951               | 566.3                   | 121.9                 | 150   | 100                        | 82  |
| 1952               | 574.4                   | 123.6                 | 162   | 108                        | 87  |
| 1953               | 582.6                   | 125.0                 | 160   | 107                        | 86  |
| 1954               | 591.3                   | 127.2                 | 158   | 105                        | 83  |
| 1955               | 600.2                   | 129.2                 | 167   | 111                        | 87  |
| 1956               | 609.2                   | 131.0                 | 173   | 115                        | 88  |
| 1957               | 618.3                   | 133.0                 | 180   | 120                        | 90  |
| 1958               | 627.6                   | 135.0                 | 182   | 121                        | 90  |
| 1959               | 637.0                   | 137.0                 | 186   | 124                        | 91  |
| 1960               | 646.6                   | 139.1                 | 191   | 127                        | 91  |

For the realization of an increase of food production sufficient to keep pace with the increase in population the Chinese Communists rely mainly on the extension of relatively minor measures of improvement. It therefore seems unlikely that the goals for increased food production will be reached. The best that could be achieved in the way of increased production of grain crops during the Five Year Plan, it is believed, would be a 9- to 11-percent increase over 1952. Furthermore, it is believed that improvements more long term in nature (such as irrigation, flood control, and the opening up of new land) and the extension of minor improvement measures together might realize a further increase in production of grain crops of possibly another 6 percent by 1960. This would still leave the per capita availability of food, on the basis of projected increases in population, at a level approximately 10 percent below the 1931-37 average.

- 71 -

S-E-C-R-E-T

S-E-C-R-E-T

2. 1955 Food Situation.

[redacted] in Communist China during the spring and summer of 1955 indicated a serious food shortage followed by grain rationing in the urban areas. The state council issued grain rationing orders along with other orders designed to extract larger grain deliveries from the peasants and to move the available food thus obtained to the cities, industrial centers, and towns. The rationing system became operative in cities and towns, and in industrial and mining areas before the end of November. 64/

50X1

In Vice Premier Chen Yun's speech of 21 July 1955 he stated that the production of grain in 1954-55 totaled 169.5 million tons. 65/ It is estimated, however, that the total production of grain in 1954-55 was about 158 million tons. The difference of 11 million tons may be attributed in part to the possibility that the Communists, in expanding their production base, included formerly unreported areas and grain reserves carried over from previous years. A general padding of statistics for political purposes is also a possibility. A subsequent decree by the Chinese Communists announcing a lowering of grain procurement quotas for the next 3 years 66/ would seem to indicate, however, that the 1954 production was less than the officially announced 169 million tons.

On the basis of the 1954-55 grain production of 158 million tons, the supply available for food would have totaled 110 million tons, or an annual per capita availability of 186 kilograms. This would have provided, statistically, a daily caloric intake of 1,781 calories per capita, that is, some 10 percent below the pre-war average daily caloric intake of around 1,967 calories. In comparison with other countries of Asia the 1955 per capita caloric intake of Communist China was lower than that of other Eastern countries with the exception of North Vietnam and India.

3. Principal Commercial Crops.

Under the land utilization pattern in China the largest proportion of cultivated land is devoted to the principal food crops, with relatively small shares divided among the commercial crops -- cotton, tobacco, sugar beets and cane, vegetable oil seeds, hemp, silk, and animal husbandry. Thus a relatively small conversion of land from grain to commercial crop production, or increases in cultivation of commercial crops on new land, results in relatively large percentage increases in acreage and production of commercial crops.

- 72 -

S-E-C-R-E-T

S-E-C-R-E-T

Within the limits of the total cultivated acreage of about 134 million hectares (including double-cropped areas) in 1955 and the possibility of expanding cultivated acreage by about 1.5 percent per year, it is believed possible that substantial increases can be achieved in both cultivated acreage and yields of commercial crops without compromising the projected increase of food crops. The Five Year Plan for increased production of commercial crops, however, does not appear to be completely related to possible acreage increases within the total prescribed acreage limits which have been postulated. The announcements of the Five Year Plan goals for production of commercial crops are shown in Table 24.

Table 24

Officially Announced Production of Commercial Crops  
in Communist China  
1952, 1954, and 1957 (Plan)

| Crop          | Million Metric Tons |       |              |   |
|---------------|---------------------|-------|--------------|---|
|               | 1952                | 1954  | 1957<br>Plan | Planned Increase<br>1957 over 1952<br>(Percent) |
| Cotton        | 1.30                | 1.24  | 1.635        | 25.4  |
| Jute and hemp | 0.305               | 0.323 | 0.365        | 19.7  |
| Cured tobacco | 0.22                | 0.24  | 0.39         | 76.6  |
| Sugar cane    | 7.10                | 8.73  | 13.15        | 85.1  |
| Sugar beets   | 0.470               | 0.50  | 2.135        | 364.4   |

Besides increasing the acreage sown to grain, cotton, jute and hemp, tobacco, and sugar cane and sugar beets, an increase of 2.1 million hectares in acreage sown to oil seeds is planned, this latter constituting nearly 10 percent of the planned increase of cultivated acreage during the 5-year period, which is believed unlikely of accomplishment. The production of cotton in Communist China is estimated by US specialists on the basis of acreage, yields, the relationship of raw cotton to cotton yarn production and of available yarn to cloth production, the number of operable spindles and looms in cotton mills, and the production of yarn per spindle and cotton cloth per loom. Such a procedure results in production



S-E-C-R-E-T

figures which are considerably below those announced by the Chinese Communists. A comparison of the two sets of data is shown in Table 25.\* It is clear from the comparison in Table 25 that the Communists' claims were excessive for the amounts of raw cotton available to produce the stated amounts of yarn. It is apparent, however, that the Communists recognized this disproportion by 1955 when the various claimed production figures for 1954 reflected adjustments to more appropriate mutual proportions although raw cotton production is still somewhat excessive for the amount of yarn indicated.

E. Industry.

The Chinese economy for the period 1949-60 may be characterized by two major features: first, the period of recovery from the war years, 1949-52, and, second, the inauguration of a program to develop the industrial base of the economy, 1953-60. It would appear that the Chinese Communist recovery programs were, in general, successful, and by 1952 the output of major industrial commodities met or exceeded the peak pre-Communist levels of output. Similarly, the Chinese Communists appear to have achieved some success toward their goal of developing heavy industry.

Chinese Communist statistical reports substantiate three major trends in the economy. First, the reports demonstrate large increases in industrial output and in the growth of the share of total output originating in industry. Second, they indicate the more rapid growth of heavy industry relative to consumer goods. Finally, these reports show the growing proportion of industrial output originating in the areas of the economy which are dominated by the state.

From 1949 to 1952 large increases in industrial output were achieved, reflecting the integration of the economy under one government. The indexes presented in Tables 26 and 27\*\* show that in the first 2 years of their industrialization program the Chinese Communists made substantial progress in developing industrial output, achieving increases of about 24 and 14.5 percent for 1953 and 1954, respectively, when measured by value-added indexes and 21 and 14 percent when measured by gross value of production indexes.\*\*\*

\* Table 25 follows on p. 75.

\*\* Tables 26 and 27 follow on pp. 76 and 77, respectively.

\*\*\* Continued on p. 78.

S-E-C-R-E-T

Table 25

Comparison of US Estimates and Communist Claims of Production of Raw Cotton, Cotton Yarn,  
and Cotton Cloth in Communist China  
1949-54

| Year               | Thousand Metric Tons |                            |                |                            |   |                            |
|--------------------|----------------------|----------------------------|----------------|----------------------------|---|----------------------------|
|                    | Raw Cotton           |                            | Cotton Yarn    |                            | Cotton Cloth<br>(Million 40-Yard Bolts) |                            |
|                    | US<br>Estimate       | Chinese Communist<br>Claim | US<br>Estimate | Chinese Communist<br>Claim | US<br>Estimate                          | Chinese Communist<br>Claim |
| 1949 a/<br>1949/50 | 492.4                | 444.0                      | 322.4          | 321                        | 72.5                                    | 32                         |
| 1950               |                      | 705.9                      |                | 430                        |   | 50                         |
| 1950/51            | 672.8                |                            | 437.9          |                            | 96.6                                    |                            |
| 1951               |                      | 1,043.4                    |                | 478                        |   | 64                         |
| 1951/52            | 734.4                |                            | 520.5          |                            | 112.1                                   |                            |
| 1952               |                      | 1,292.0                    |                | 656                        |   | 112                        |
| 1952/53            | 829.6                |                            | 621.2          |                            | 131.0                                   |                            |
| 1953               |                      | 1,176.6                    |                | 741                        |   | 127                        |
| 1953/54            | 843.5                |                            | 644.0          |                            | 135.6                                   |                            |
| 1954               |                      | 1,243.2                    |                | 835                        |   | 153                        |

a. The Chinese Communist claims are for the calendar years 1949-54; US estimates are for crop years, 1 July to 30 June, for the years 1949-54.

S-E-C-R-E-T

S-E-C-R-E-T

Table 26

Index of Value Added by Industry in Communist China  
1949-60

|   | 1952 = 100       |             |             |             |             |             |             |             |             |             |             |             |
|---|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|   | Estimated Actual |             |             |             |             |             | Projected   |             |             |             |             |             |
|   | <u>1949</u>      | <u>1950</u> | <u>1951</u> | <u>1952</u> | <u>1953</u> | <u>1954</u> | <u>1955</u> | <u>1956</u> | <u>1957</u> | <u>1958</u> | <u>1959</u> | <u>1960</u> |
| Industry (excluding peasant handicraft)   | 43               | 55          | 74          | 100         | 124         | 142         | 151         | 168         | 187         | 199         | 214         | 232         |
| Industry (excluding individual handicraft)                                      | 41               | 53          | 73          | 100         | 125         | 144         | 155         | 173         | 194         | 207         | 223         | 244         |
| Heavy industry  | 31               | 49          | 71          | 100         | 132         | 158         | 177         | 199         | 227         | 248         | 271         | 303         |
| Light industry  | 48               | 59          | 75          | 100         | 115         | 130         | 138         | 142         | 156         | 164         | 173         | 183         |
| Modern industry<br>(excluding all handicrafts but including military end items) |                  | 53          | 72          | 100         | 126         | 146         | 159         | 178         | 200         | 215         | 232         | 256         |
| Modern industry<br>(excluding all handicrafts and military end items)           | 37               | 53          | 73          | 100         | 126         | 149         | 161         | 181         | 205         | 220         | 238         | 262         |

S-E-C-R-E-T

S-E-C-R-E-T

Table 27

Index of Gross Value of Production in Communist China  
1949-57

|                                     | 1952 = 100  |             |             |             |             |             |             |             |             |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                     | <u>1949</u> | <u>1950</u> | <u>1951</u> | <u>1952</u> | <u>1953</u> | <u>1954</u> | <u>1955</u> | <u>1956</u> | <u>1957</u> |
| Industrial Output                   |             |             |             |             |             |             |             |             |             |
| Chinese Communist figures <u>a/</u> | 39          |             | 78          | 100         | 131         | 154         | 162         |             | 198         |
| CIA estimate                        | 43          | 54          | 74          | 100         | 121         | 138         | 143         | 158         | 175         |
| Heavy Industry                      |             |             |             |             |             |             |             |             |             |
| Chinese Communist figures           | 29          |             |             | 100         | 138         | 163         | 184         |             | 227         |
| CIA estimate                        | 30          | 50          | 71          | 100         | 134         | 155         | 171         | 190         | 214         |
| Light Industry                      |             |             |             |             |             |             |             |             |             |
| Chinese Communist figures           | 45          |             |             | 100         | 128         | 148         | 148         |             | 180         |
| CIA estimate                        | 48          | 56          | 76          | 100         | 116         | 129         | 129         | 143         | 157         |

a. Figured from other indexes on the basis of 40 percent for heavy industry in 1952.  
Chinese Communist figures for industrial output exclude individual handicraft production.

S-E-C-R-E-T

S-E-C-R-E-T

Increases in output for 1955 to 1957 are expected to be smaller, averaging about 10 percent a year for industry excluding farm handicraft. The rate of industrial growth is expected to decline still further from 1957 to 1960 to about 8 percent a year. The decline is due in part to the greater necessity for increases in industrial capacity as the basis for increases in production and to the much slower increases in output of agricultural raw materials.

A comparison of the indexes for heavy industry with those for light industry indicates the greater emphasis placed upon heavy industrial development by the Chinese Communists. Value-added indexes indicate that the output of heavy industry may triple over the period 1952-60, whereas the output of light industry will be less than double.

The two sets of indexes presented in Tables 26 and 27 are not strictly comparable. The value-added indexes, constructed net of intraindustry sales, measure only the final contribution of industry to the economy. The gross value indexes, on the other hand, include some, if not all, intraindustry transactions. To facilitate a comparison of the production estimates employed to project the value-added indexes with Chinese announcements, indexes based on CIA production estimates and available 1952 prices have been calculated.

The discrepancy between Chinese Communist claims and the CIA estimate of the gross value of industrial output may be explained in part by differences in the product mix and prices used for the construction of the two indexes. For the period 1952-57 the differences between the Chinese and the CIA figures stem largely from the greater growth claimed by the Chinese in the light industries than is credited by CIA.

Expanding economic reporting, differences in classification, and the weighting system employed by the Chinese Communists probably have resulted in an inflation of the announced index. The expansion of state control over food processing and distribution, with the concomitant extension of reporting, and the change in the classification system used for the handicraft industry are likely to have caused the index to rise more rapidly than actual output. Whereas it is not possible to compare the price weights used in the two indexes, it appears that the Chinese index is more sensitive to changes in the output of more heavily taxed commodities. It is felt, as a result of the foregoing, that the CIA index more accurately reflects the growth experienced by the light industries.

- 78 -

S-E-C-R-E-T

S-E-C-R-E-T

The relatively small difference between the indexes for heavy industry result largely from different estimates of the output of machine industries. The Chinese Communists claim these industries increased output by 65 percent in 1953 and 13 percent in 1954. The increase from 1954 to 1957 is to be about 8 percent a year. Such a growth pattern can be explained only by the rapid multiplication of simpler types of machine tools in 1953 and 1954, followed by a diversion of resources to production of more complex types of equipment and machinery.

1. Engineering Industries.

Although the Chinese Communists claim that output of the engineering industries has risen 14 times from 1949 to 1954, it is admitted that these industries are still largely limited to the production of parts and to assembly, repair, and manufacture of small and simple machinery and equipment. The Five Year Plan calls for many construction projects to diversify as well as to augment the capacity of the engineering industries to produce more complete units and more complicated types of machines. The Five Year Plan admits the Chinese Communists' dependence on the USSR for 50 to 70 percent of the equipment needed for the 156 Soviet-aid construction projects, which are the "core" of the Five Year Plan, and for 40 percent of the equipment for the industrialization program.

The orientation of the Five Year Plans, present and future, is toward the indigenous production of a full range of producer goods for further industrial expansion. Table 28\* gives production figures included in the current plan for major items of the engineering industries for 1952 and projected for 1957. The productive capacity of other key items planned for 1957 or 1960 is as follows: metallurgical and mining machinery, 171,000 tons; power generating equipment, 800,000 kw; trucks, 90,000 (capacity in 1960); and tractors, 15,000 (1960 capacity of a tractor plant to be commissioned in 1959). 67/

The first Five Year Plan also records the state council intention for the machine industry to begin the trial or actual production of many more complex machine products, including the following: (a) 1,000-meter blast furnaces, each with a capacity of

\* Table 28 follows on p. 80.

S-E-C-R-E-T

Table 28

Output of Major Engineering Industry Products  
 in Communist China  
 1952 and 1957

| Product   | Unit                              | 1952          | 1957<br>(Plan) | 1957 Compared<br>with 1952<br>(Percent) |
|---|-----------------------------------|---------------|----------------|---|
| Steam boilers<br>(steam-generating<br>capacity) | Metric tons<br>per hour           | 1,222         | 2,734          | 224                                     |
| Steam turbines                                  | Kw                                | Not available | 84,500         | Not applicable                          |
| Water turbines                                  | Kw                                | 6,664         | 79,500         | 1,193                                   |
| Internal combustion<br>engines                  | Units                             | 1,528         | 10,630         | 696                                     |
| Generators                                      | Horsepower                        | 27,600        | 260,200        | 942                                     |
|   | Units                             | 746           | 2,938          | 394                                     |
| Electric motors                                 | Kw                                | 29,700        | 227,000        | 765                                     |
|   | Units                             | 91,147        | 135,515        | 149                                     |
| Transformers                                    | Kw                                | 639,000       | 1,048,000      | 164                                     |
|   | Kilovolt<br>amperes               | 1,167,000     | 2,610,000      | 224                                     |
| Metal-cutting machine<br>tools a/               | Units                             | 13,734        | 12,720         | 93                                      |
|   | Metric tons                       | 16,298        | 29,292         | 180                                     |
| Two-wheel hand plows                            | Units                             | 5,000         | 689,000        | 13,611                                  |
| Locomotives                                     | Units                             | 20            | 200            | 1,000                                   |
| Passenger cars                                  | Units                             | 6             | 300            | 5,000                                   |
| Freight cars                                    | Units                             | 5,792         | 8,500          | 147                                     |
| Merchant ships                                  | Units                             | 84            | 1,347          | 1,604                                   |
|   | Displacement<br>in metric<br>tons | 21,485        | 179,111        | 834                                     |
| Trucks  | Units                             | None          | 4,000          | Not applicable                          |
| Bicycles  | Units                             | 80,000        | 555,000        | 694                                     |

a. According to the Five Year Plan, the number of metal-cutting machine tools to be produced in 1957 is less than that of 1952 but the aggregate tonnage will be increased by 80 percent. The technical quality as well as the cutting capacity of these machine tools to be produced in 1957 is planned to be much better than those produced in 1952. In addition, the number of different types of these machine tools to be produced in 1957 is to be increased, the output of small machine tools is to be cut; and more and more large-scale, comparatively modern machine tools are to be produced in 1957.

S-E-C-R-E-T

350,000 tons of pig iron per year; (b) 185-ton open-hearth furnaces; (c) coke-oven equipment with a production capacity of 300,000 tons per year; (d) 675-hp diesel engines; (e) hydroelectric generators with 3,000- to 12,500-kw capacity; (f) thermal electric generators of 2,500- and 6,000-kw capacity; (g) transformers of 154,000 volts and 30,000 kilovolt amperes; (h) 4-ton trucks; (i) locomotives of the most up-to-date design; (j) coastal freight steamers of 7,450 displacement tons; (k) 37-hp tractors; (l) combine grain harvesters; (m) excavators of 3-cubic-meter capacity; (n) 100-ton overhead traveling cranes; (o) cement plants with an annual capacity of 300,000 tons of cement; (p) coal-mining equipment for vertical mine shafts capable of processing 900,000 tons of coal per year; (q) textile mill equipment capable of printing and dyeing 3 million bolts of cloth per year; (r) equipment to process 2,000 tons of sugar cane daily; (s) microscopes with magnifying power of 1,500; (t) X-ray machines; and (u) 142 types of metal-cutting machine tools of up-to-date design.

Some of the more important of the Soviet-aid projects which are reported to have been finished or are scheduled for completion under the sponsorship of the First Ministry of Machine Building within the span of the current Five Year Plan include: the No. 1 Northeast Machine Tool Plant and the No. 2 Machine Plant, the Mukden Pneumatic Tool Plant, and the Northeast No. 7 Electrical Machinery Plant, all in Mukden; the Northeast Precision Measuring and Cutting Tool Plant, the Northeast No. 4 Electrical Machinery Plant, the Harbin Electric Meter and Apparatus Plant, and the Harbin Boiler Plant, all in Harbin; the No. 1 Automobile Plant in Ch'ang-ch'un with a planned production capacity of 30,000 trucks per year; the Fu-shun Mining Machinery Plant; the T'ai-yuan Heavy Machinery Plant; and the Ching-wei Textile Machinery Plant at Peiping. 68/ Two other major plants which are to be started within the current Five Year Plan but which will not be in production until the second Five Year Plan are the No. 2 Motor Vehicle Plant and the No. 1 Tractor Plant, with planned annual production capacities of 60,000 trucks and 15,000 54-hp tractors, respectively. 69/

The success of this ambitious Five Year Plan for the machine industry will depend largely upon the importation of equipment, the completion of a number of Soviet-aid construction projects, and the assimilation of advanced industrial techniques. Although notable increases in the value of output apparently have been achieved by the machine building industry, the gross value of output was little more



S-E-C-R-E-T

than 6 percent of total industrial output in 1954 and will continue at the same rate. Because the substantial investment allocated to the engineering industries embodies the drastic reorganization required to overcome these weaknesses in product mix and in technology, the value of output is expected to increase only moderately in the last 3 years of the plan. Greater increases may be expected after 1957.

2. Armaments Industry.

Although the Chinese Communist armaments industry is not yet capable of meeting all the equipment requirements of the Chinese Communist Armed Forces, it is believed to be proceeding apace with a program of gradual modernization. The government apparently is still concentrating on the production of infantry regiment equipment such as small arms, machineguns, and mortars as well as some light artillery.

Table 29\* gives both estimated production and production capacity for ammunition and indicates that, although estimated production decreased radically after 1953 (Korean Armistice), capacity has increased and will continue to do so through 1960. Estimated minimum production of ammunition for 1954-60 was calculated on the basis of roughly one-third of estimated capacity. In anticipation of or in the event of war, it is believed that actual production could be quickly expanded to the capacity figure.

Table 29 shows, in general, the estimated production of artillery, mortars, machineguns, small arms, and armored vehicles for 1950-60. The estimated increases in production of artillery, mortars, and machineguns through 1955 are considered necessary in the light of requirements of the Chinese Communist Armed Forces, which are in process of standardizing weapons and equipment. The increases are further considered possible because of reported increases in the number of arsenals,\*\* because of increased labor efficiency brought about by Soviet training and guidance at production points, and because of imports of Soviet machines.

Using the estimated production for the years 1953-55 the requirements\*\*\* for all the weapons produced except artillery and

\* Table 29 follows on p. 83.

\*\* Five new arsenals were reported under construction in 1952-53. 70/

\*\*\* The estimate of requirements is based on order of battle and estimated tables of equipment of the Chinese Communist Armed Forces. 71/

50X1

S-E-C-R-E-T

Table 29  
Estimated Output of Armaments and Munitions in Communist China  
1949-60

| Category               | Unit        | 1949   | 1950   | 1951   | 1952    | 1953    | 1954    | 1955    | 1956    | 1957    | 1958    | 1959    | 1960    |
|------------------------|-------------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ammunition (all types) | Metric Tons |        |        |        |         |         |         |         |         |         |         |         |         |
| Production             |             | N.A.   | 41,000 | 47,000 | 54,000  | 54,000  | 22,000  | 23,000  | 24,000  | 25,000  | 26,000  | 28,000  | 29,000  |
| Capacity               |             | 36,000 | 41,000 | 47,000 | 54,000  | 62,000  | 65,000  | 68,000  | 71,000  | 75,000  | 79,000  | 83,000  | 87,000  |
| Artillery              | Pieces      |        | 200    | 200    | 1,000   | 1,200   | 1,400   | 1,600   | 1,600   | 600     | 600     | 600     | 800     |
| Mortars                | Pieces      |        | 800    | 1,000  | 5,000   | 5,800   | 6,700   | 7,700   | 3,000   | 3,000   | 3,000   | 3,000   | 3,000   |
| Machine guns           | Pieces      |        | 2,000  | 2,200  | 10,000  | 11,600  | 13,300  | 15,300  | 16,000  | 5,000   | 5,000   | 5,000   | 5,000   |
| Small arms             | Pieces      |        | 36,000 | 43,000 | 207,000 | 234,000 | 265,000 | 265,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| Armored vehicles       | Units       |        | 0      | 0      | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 300     |

S-E-C-R-E-T

S-E-C-R-E-T

machine guns would be fulfilled from indigenous production. Thus the production of weapons except artillery and machineguns will be cut back in 1956 and the production of the latter items cut back in 1957.

There is little doubt that the restoration of plant facilities by the installation of Soviet equipment following 1952, combined with the advice and training given by Soviet experts, has resulted in an improvement in the quality of output. 73/

50X1  
50X1

Ammunition production in Communist China has been limited to the production of ammunition for the following listed weapons, but the munitions industry is capable of production of other ammunition items presently imported from the Soviet Bloc.

|                         |                      |   |
|-------------------------|----------------------|---|
| 105-mm howitzer         | 37-mm AA gun         | 90-mm rocket launcher                     |
| 76-mm gun               | 120-mm mortar        | 57-mm recoilless rifle                    |
| 75-mm gun               | 81- and 82-mm mortar | Rifle and submachinegun<br>ammunition     |
| 70-mm infantry howitzer | 60-mm mortar         | Land mines<br>Hand grenades (AT and hand) |

The Chinese Communist production of ammunition for these weapons is estimated to be sufficient to meet peacetime requirements for the period 1954-60 but not sufficient, even at the estimated 1960 capacity, to meet requirements equal to those for the Korean War in 1952. It is believed, however, that the Chinese arsenals will have the capacity by 1956-57 to be self-sufficient in the production of light weapons such as small arms, machineguns, light mortars, light artillery, and special weapons such as rocket launchers and recoilless rifles.

It is estimated, however, that even by 1960 the Chinese Communists will not be able to produce the heavy artillery, anti-aircraft artillery, tanks, and self-propelled guns required during time of war. By 1957, Communist China may have the facilities for producing some heavy artillery and anti-aircraft artillery and may have the beginnings of a tank industry by 1959. Nevertheless, the production of these items probably will take place at the expense of a cutback in the production of light weapons because heavy weapons will be produced in the same arsenals in which light artillery and

- 84 -

S-E-C-R-E-T

S-E-C-R-E-T

mortars are now produced. For the production of limited peacetime requirements it is estimated that Communist China will be self-sufficient in all categories of conventional weapons by 1960.

3. Electric Power.

During the current Five Year Plan, Chinese Communist planning envisages an increase in total electricity output capacity of 4.1 million kw, or 2.05 million kw over the 1952 capacity, and a planned output in 1957 of 15.9 billion kwh. This is expected to be accomplished by undertaking 92 power station projects, among which are included 15 thermal power plants, each with a generating capacity of 50,000 kw, and by the renovation and expansion of existing plants, most significant of which is the renovation of the Fengman hydroelectric station to achieve a total power generating capacity of 560,000 kw. <sup>75/</sup> Table 30 shows the estimated production of electric power for the years 1952-60.

Table 30

Estimated Capacity and Production of Electric Power  
in Communist China  
1952-60

| <u>Year</u> | <u>Capacity<br/>(Million kw)</u> | <u>Production<br/>(Billion kwh)</u> |
|-------------|----------------------------------|-------------------------------------|
| 1952        | 2.05                             | 7.1                                 |
| 1953        |                                  | 9.0                                 |
| 1954        | 2.58                             | 10.8                                |
| 1955        | 2.95                             | 12.3                                |
| 1956        |                                  | 14.0                                |
| 1957        | 4.10                             | 15.9                                |
| 1958        |                                  | 18.3                                |
| 1959        |                                  | 20.7                                |
| 1960        | 6.11 <u>a/</u>                   | 23.4                                |

a. Refers only to capacity on which construction has started but will not have been completed at the end of 1957.

S-E-C-R-E-T

Current plans for construction of power plants necessitate continued reliance on imports of power equipment from the USSR, Czechoslovakia, East Germany, and Hungary. <sup>76/</sup> In order to fulfill the planned installed capacity goal for 1957, it will be necessary to import 61 percent of the necessary generating equipment.

In the past 2 years the Chinese Communist government has conducted the training of 11,000 skilled workers for the power industry in 12 technical schools, and 10,000 additional workers are to be trained during the course of the Five Year Plan.

4. Coal.

Communist China's coal industry appears to be capable of meeting the needs of domestic consumers, including the armed forces, through 1960. This capacity is expected to be achieved by undertaking 179 above-norm coal-mining construction projects and an unknown number of below-norm projects. The large projects include the construction of 31 enterprises, each of which is designed to produce more than 1 million tons of coal a year. Planned output of coal by the end of 1957 is expected to be about 50 million tons greater than that of 1952, then amounting to 113 million tons. <sup>77/</sup> Table 31 shows the reported and estimated production of coal for the years 1952-60.

Table 31

Estimated Capacity and Production of Coal  
in Communist China  
1952-60

|             | <u>Thousand Metric Tons</u> |                   |
|-------------|-----------------------------|-------------------|
| <u>Year</u> | <u>Capacity</u>             | <u>Production</u> |
| 1952        | 79,200                      | 63,500            |
| 1953        | 84,200                      | 69,000            |
| 1954        | 92,200                      | 80,000            |
| 1955        | 105,200                     | 92,700            |
| 1956        | 119,200                     | 103,000           |
| 1957        | 133,100                     | 113,000           |
| 1958        |                             | 120,000           |
| 1959        |                             | 126,000           |
| 1960        | 157,000                     | 133,000           |

S-E-C-R-E-T

During the first Five Year Plan, the Chinese Communists plan to install 11 new modern coal-washing plants, with a total planned capacity of 17 million tons of washed raw coal a year, in order to improve the quality of coking coal needed by the metallurgical industry for the production of metallurgical coke. 78/ These plants are expected to be in production by 1958, thus greatly increasing the volume of washed coal available for coking for metallurgical use.

5. Ferrous Metals.

The capacity for production of pig iron in Communist China is to be increased by 2.8 million tons and crude steel by 2.53 million tons during the current Five Year Plan. When all metallurgical projects, either completed or started before the end of 1957, have been put into operation, total capacity for production of pig iron is expected to be increased by 5.75 million tons and crude steel by 6.1 million tons per year. 79/

The major emphasis in the ferrous metals field will be placed on the further expansion of the An-shan Iron and Steel Works, which is scheduled to complete 48 projects of construction and rehabilitation during 1953 to 1960. The increased productive capacity of the plant will enable it to produce annually 2.5 million tons of pig iron, 3.22 million tons of crude steel, and 2.48 million tons of rolled steel. 80/ Construction of the Wu-han and Pao-t'ou iron and steel centers also will begin during the first Five Year Plan. In addition, reconstruction and expansion work to be completed before 1957 will be conducted at the Chungking Steel Plant, Tientsin Steel Works, T'ang-shan Steel Works, Pen-ch'i Iron and Steel Company, Ma-an-shan Iron Works, and Lung-yen Iron Works. 81/ Table 32\* presents the estimated production of ferrous metals for the years 1952-60.

The raw material resources of Communist China are estimated to be adequate to support an iron and steel industry much larger than the one planned for 1960. Improvement in the quality of raw materials and in technology has been responsible for production gains and improved quality of pig iron and crude steel. The quality of finished steel, although somewhat dependent on whether emphasis is on increased tonnage or quality, apparently is improving.

\* Table 32 follows on p. 88.

S-E-C-R-E-T

Table 32

Estimated Production of Ferrous Metals in Communist China  
1952-60

| Product            | Thousand Metric Tons |       |       |        |        |        |        |        |        |
|--------------------|----------------------|-------|-------|--------|--------|--------|--------|--------|--------|
|                    | 1952                 | 1953  | 1954  | 1955   | 1956   | 1957   | 1958   | 1959   | 1960   |
| Pig iron           | 1,870                | 2,230 | 3,030 | 3,450  | 3,800  | 4,200  | 4,550  | 4,950  | 5,900  |
| Crude steel        | 1,350                | 1,760 | 2,200 | 2,600  | 3,100  | 3,800  | 4,200  | 4,400  | 5,000  |
| Finished steel     | 1,110                | 1,487 | 1,722 | 1,927  | 2,292  | 3,045  | 3,139  | 3,504  | 4,234  |
| Metallurgical coke | 2,860                | 3,600 | 4,540 | 5,200  | 5,900  | 6,685  | 7,000  | 7,400  | 8,300  |
| Iron ore           | 4,058                | 6,233 | 8,408 | 10,583 | 12,758 | 14,933 | 17,108 | 19,283 | 21,458 |
| Tungsten a/        | 15.8                 | 17.4  | 19    | 20.5   | 22.1   | 23.7   |        |        |        |
| Manganese ore      | 89.4                 | 105.1 | 129.6 | 145.2  | 165.9  | 186.4  | 202.9  | 219.8  | 251.3  |
| Molybdenum b/      | 0.60                 | 0.63  | 0.67  | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   |

a. Concentrates, 65 percent WO<sub>3</sub>.b. Metal content based on a 75 percent concentrate of molybdenite MoS<sub>2</sub>.

S-E-C-R-E-T

S-E-C-R-E-T

6. Nonferrous Metals.

The major emphases on nonferrous metals during the current Five Year Plan are the stress on geological surveying for new ore deposits and the expansion and mechanization of existing mines, smelters, and refineries. The most important construction project now under way is at the Ko-chiu Tin Mine (Yunnan Province), which is the largest tin producer and supplies about 80 percent of total tin output in Communist China. 82/

Assuming that extensive geological surveying is continued throughout Communist China and that the current influx of Soviet Bloc material and technical assistance in the field of mining and prospecting is continued, it is estimated that Communist China by 1960 will be self-sufficient in the production of fluorspar, salt, pyrites, and possibly lead and that it will continue to have substantial export surpluses of tin, antimony, and mercury but will continue to be dependent on imports of copper and aluminum. With the possible exceptions of copper, aluminum, and tin, the quality of most nonferrous metal products is considered to be about standard. Estimated production of nonferrous metals in Communist China is shown in Table 33.\*

7. Petroleum.

On 6 July 1955, Li Fu-ch'un, Chairman of the National Planning Commission, in his presentation of the Five Year Plan announced that "current production of the petroleum industry is very low, falling far below actual needs." 83/ Estimated production of crude petroleum and shale oil in 1954 was 790,000 tons, whereas estimated demand was approximately 1.7 million tons, thus forcing Communist China to import about 1 million tons from the Soviet Bloc.

The Five Year Plan goal for production of crude petroleum recently was reported to be set at approximately 2 million tons by the end of 1957. This goal is believed to be doubtful of achievement, although not impossible, because it would require doubling the present estimated refining capacity within the next 2 years, which indeed seems to be the plan. There are still no indications, however, that Communist China will be self-sufficient in the production of refined petroleum at least before 1960. Table 34\*\* shows the estimated and projected production of petroleum products for 1952-60.\*\*\*

\* Table 33 follows on p. 90.

\*\* Table 34 follows on p. 91.

\*\*\* Continued on p. 92.

S-E-C-R-E-T



Table 33

Estimated Production of Selected Nonferrous Metals and Minerals in Communist China  
1952-60

| Product                     | Thousand Metric Tons |       |       |       |       |       |       |       |       |
|-----------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|                             | 1952                 | 1953  | 1954  | 1955  | 1956  | 1957  | 1958  | 1959  | 1960  |
| Copper <u>a/</u>            | 8                    | 11    | 12.6  | 12.9  | 13.2  | 13.6  | 13.9  | 14.2  | 14.6  |
| Tin <u>b/</u>               | 9                    | 10    | 12    | 13    | 15    | 17    | 18    | 20    | 22    |
| Lead <u>c/</u>              | 7                    | 12.3  | 22.2  | 22.5  | 22.8  | 23.1  | 23.4  | 23.8  | 24    |
| Zinc <u>d/</u>              | 4.4                  | 6.6   | 8.6   | 10.3  | 11.9  | 13.6  | 15.3  | 17    | 18.7  |
| Antimony <u>d/</u>          | 10                   | 11    | 12    | 13    | 15    | 15    | 16    | 17    | 17    |
| Mercury <u>e/</u>           | 3                    | 5     | 7     | 9     | 11    | 13    | 14    | 15    | 16    |
| Aluminum <u>d/</u>          | 0                    | 0     | 0     | 0     | 0     | 3     | 5     | 10    | 30    |
| Fluorspar                   | 5                    | 10    | 15    | 17.5  | 20    | 22.5  | 25    | 27.5  | 30    |
| Pyrites                     | 55                   | 55    | 60    | 65    | 70    | 70    | 75    | 75    | 80    |
| Salt (including handicraft) | 4,945                | 5,400 | 5,900 | 6,400 | 6,900 | 7,500 | 8,000 | 8,500 | 9,400 |

- a. Metallic copper from scrap and refined ores.
- b. Crude metal averaging about 99 percent tin.
- c. Metallic lead from scrap and refined ores.
- d. Metallic content of produced ores.
- e. Flasks of 76 pounds net, pure mercury.

S-E-C-R-E-T

Table 34

Estimated Production of Petroleum Products in Communist China a/  
1952-60

| Product                       | Thousand Metric Tons |             |             |             |             |             |             |             |             |
|-------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                               | <u>1952</u>          | <u>1953</u> | <u>1954</u> | <u>1955</u> | <u>1956</u> | <u>1957</u> | <u>1958</u> | <u>1959</u> | <u>1960</u> |
| Crude oil (natural and shale) | 436                  | 628         | 790         | 984         | 1,200       | 1,400       | 1,700       | 2,000       | 2,400       |
| Gasoline                      | 133                  | 176         | 217         | 240         |             |             |             |             |             |
| Kerosine                      | 43                   | 65          | 78          | 101         |             |             |             |             |             |
| Diesel fuel oil               | 22                   | 33          | 38          | 48          |             |             |             |             |             |
| Lubricating oil               | 16                   | 26          | 30          | 35          |             |             |             |             |             |
| Residuals b/                  | 289                  | 414         | 489         | 635         |             |             |             |             |             |

a. Estimated production of refined products for 1952-55 includes yield from imported crude oil.

b. Includes residual fuel oil, asphalt, coke, and miscellaneous residual products.

S-E-C-R-E-T

S-E-C-R-E-T

## 8. Chemicals.

The ever-increasing industrial and agricultural demand for chemicals in Communist China apparently is planned to be met primarily by the expanding production of existing plant facilities and by imports rather than by the construction of completely new plants. This expansion seems to be centered in the Northeast and East China, where most of Communist China's chemical fertilizer and industrial chemical production facilities are located. The Chinese Communists have announced that by 1960 the capacity for production of chemical fertilizer is to be increased to 910,000 tons per year. 84/ It is estimated that about 600,000 tons of this capacity will be devoted to the production of ammonium sulfate. 85/

Soviet assistance will also be rendered in expanding the rubber and pharmaceutical industries. According to the announced Five Year Plan, 4 rubber plants will be reconstructed and 1 constructed in the Northeast, North China, and East China. In conjunction with the development of the rubber industry, 1 carbon black plant will be constructed in the Southwest and 1 in the Northeast. In the pharmaceutical industry, Soviet assistance will be instrumental in the designing and building of 2 pharmaceutical plants, 1 in the Northeast and the other in the North of China. 86/ Table 35\* shows the estimated production of selected chemical and rubber products for 1952-60.

The quality of chemical and rubber products has been the target of much criticism, and special emphasis is now being placed on improving the quality of these products.

## 9. Cement.

By the end of 1957, cement production is to be increased to about 6 million tons per year. 87/ This goal probably will be overfulfilled by about 400 thousand tons primarily because of the capacity increases planned for 1955-57. As a result, the cement industry will be able to meet the increasing domestic demands for cement throughout the current Five Year Plan. Production of cement has been increased rapidly through more efficient operating methods, but at the same time the general level of quality of the cement produced has deteriorated. Table 36\*\* shows the reported and estimated production of cement for 1952-60.

\* Table 35 follows on p. 93.

\*\* Table 36 follows on p. 94.

- 92 -

S-E-C-R-E-T

S-E-C-R-E-T

Table 35

Estimated Production of Selected Chemical and Rubber Products in Communist China  
1952-60

| Commodity                           | Thousand Metric Tons <sup>a/</sup> |       |        |       |       |        |       |       |        |
|-------------------------------------|------------------------------------|-------|--------|-------|-------|--------|-------|-------|--------|
|                                     | 1952                               | 1953  | 1954   | 1955  | 1956  | 1957   | 1958  | 1959  | 1960   |
| Calcium carbide                     | 8.0                                | 10.0  | 12.0   | 15.0  | 18.0  | 21.0   | 24.0  | 27.0  | 30.0   |
| Synthetic ammonia (as N)            | 28.8                               | 40.6  | 51.9   | 62.0  | 72.0  | 82.2   | 92.3  | 102.5 | 112.5  |
| Refined naphthalene                 | 0.727                              | 0.915 | 1.155  | 1.270 | 1.400 | 1.540  | 1.700 | 1.860 | 2.020  |
| Chlorine                            | 6.9                                | N.A.  | N.A.   | N.A.  | N.A.  | N.A.   | 10.0  | N.A.  | N.A.   |
| Refined benzol                      | 18.85                              | 23.7  | 28.8   | 32.8  | 36.2  | 40.0   | 43.8  | 48.2  | 53.0   |
| Toluol                              | 4.08                               | 5.14  | 6.46   | 7.100 | 7.80  | 8.60   | 9.45  | 10.40 | 11.45  |
| Phenol, crude                       | 0.975                              | 1.155 | 1.455  | 1.600 | 1.760 | 1.940  | 2.180 | 2.400 | 2.640  |
| Caustic soda                        | 79                                 | 89.27 | 116.05 | 129   | 142   | 154    | 171   | 190   | 210    |
| Sulfuric acid                       | 146.0                              | 198.5 | 231.0  | 308.0 | 367.0 | 420.0  | 485.0 | 585.0 | 615.0  |
| Soda ash                            | 192                                | 222.7 | 309.6  | 365.1 | 420.5 | 476    | 540   | 610   | 690    |
| Nitric acid                         | 9.4                                | 14.0  | 22.0   | 25.1  | 29.4  | 33.3   | 37.3  | 41.5  | 45.8   |
| Ammonium nitrate                    | 7.5                                | 22.5  | 27     | 32    | 37    | 44     | 59    | 74    | 89     |
| Ammonium sulfate                    | 181                                | 225.8 | 298.1  | 370   | 440   | 504    | 580   | 702   | 734    |
| Motor vehicle tires<br>(1,000 sets) | 418                                | 475   | 575    | 650   | 680   | 760    | 800   | 900   | 1,000  |
| Rubber footwear<br>(million pairs)  | 61.69                              | 75.88 | 84.22  | 90.0  | 100   | 108.31 | 115   | 120   | 125    |
| Penicillin (billion units)          | 45.9                               | 459   | 1,515  | 2,100 | 4,500 | 8,700  | 9,000 | 9,500 | 10,000 |

a. Unless otherwise specified.

S-E-C-R-E-T

S-E-C-R-E-T

Table 36

Estimated Capacity and Production of Cement  
in Communist China  
1952-60

| <u>Thousand Metric Tons</u> |                 |                   |
|-----------------------------|-----------------|-------------------|
| <u>Year</u>                 | <u>Capacity</u> | <u>Production</u> |
| 1952                        | 4,830 a/        | 2,860             |
| 1953                        | 5,100           | 3,900             |
| 1954                        | 5,480           | 4,600             |
| 1955                        | 6,000           | 5,300             |
| 1956                        | 6,400           | 5,700             |
| 1957                        | 7,190           | 6,400             |
| 1958                        |                 | 6,800             |
| 1959                        | 8,430 b/        | 7,200             |
| 1960                        |                 | 7,600             |

a: Assumes that production was 59 percent of installed capacity in 1952 and 84 percent of installed capacity in 1954.

b. Refers to the planned capacity after all projects started in the Five Year Plan period are completed -- estimated to be 1959 for the cement industry.

10. Light Industry.

Production estimates for leading commodities in light industry including textiles are given in Table 37.\* The difficulties now being encountered in raising the output of light industry are shown by the official figures for output in the years 1952 to 1955. The gross value of output of textiles and other light industry commodities is claimed to have increased by 28 percent in 1953 over 1952, but the increase dropped to 15 percent in 1954 over 1953. The real crisis in increasing production of light industry, however, is shown by the increase slated for 1955, which is expected to be no higher than output in 1954.

\* Table 37 follows on p. 95.

S-E-C-R-E-T

S-E-C-R-E-T

Table 37  
 Estimated Production of Commodities in Light Industry in Communist China  
 1949-60

| Commodity                               | Unit                  | 1949  | 1950  | 1951  | 1952  | 1953  | 1954  | 1955     | 1956     | 1957  | 1958  | 1959  | 1960  |
|---|-----------------------|-------|-------|-------|-------|-------|-------|----------|----------|-------|-------|-------|-------|
| Cotton yarn a/                          | Thousand metric tons  | 321   | 430   | 478   | 656   | 741   | 835   | 726      | 835      | 907   | 952   | 1,000 | 1,050 |
| Cotton cloth b/<br>(machine-made)       | Million linear meters | 1,251 | 1,927 | 2,465 | 3,829 | 4,365 | 4,932 | 4,932    | 5,257    | 5,583 | 5,862 | 6,155 | 6,463 |
| Machine-made paper                      | Thousand metric tons  | 107   | 139   | 239   | 372   | 428   | 556   | 606      | 631      | 655   | 672   | 684   | 693   |
| Cigarettes                              | Thousand crates       | 1,625 | 1,885 | 2,030 | 2,650 | 3,604 | 3,784 | 4,440 c/ | 4,570 c/ | 4,700 |       |       |       |
| Vegetable oils                          | Thousand metric tons  |       |       | 458   | 724   | 890   | 941   | 960      | 1,160    | 1,552 |       |       |       |
| Sugar (machine-made)                    | Thousand metric tons  | 107   | 129   | 162   | 249   | 269   | 314   | 418      | 498      | 686   |       |       |       |
| Flour (excluding hand-<br>milled flour) | Thousand metric tons  | 1,283 | 1,219 | 1,886 | 2,990 | 3,439 | 3,738 | 3,920    | 4,276    | 4,670 |       |       |       |

a. Excludes homespun yarn.

b. Excludes cloth made entirely from homespun yarn.

c. Planned increases which may not in fact be achieved. Cigarette output in particular probably is falling behind the 1954 plan, and 1955 output probably will be lower by 180,000 cases.

S-E-C-R-E-T

S-E-C-R-E-T

This sharp decline in the growth of light industry is due primarily to the shortage of cotton, tobacco, and other agricultural raw materials. According to figures given by Chia To-fu, Minister of Light Industry, in connection with the announcement of the Five Year Plan, 88/ the rate of utilization of equipment in 1954 was less than one-third for tobacco and match plants, about 50 percent among oil and fats plants and flour mills, and about 60 percent among leather plants. In state-owned textile mills the rate of utilization in 1954 was claimed to be 96 percent but was to drop to 76 percent in 1955 because of the poor cotton crop in 1954. In the light of this limitation on output of light industry and the official predisposition against increasing imports of raw materials for consumer goods industries, the small amount of investment in light industry as against heavy industry is understandable.

The greatest emphasis in the food-processing industries is given to machine-made sugar and -- presumably to secure added exports -- to meat processing. Of 34 big new food-processing enterprises scheduled for the first Five Year Plan, 18 are sugar refineries and 9 are meat-packing plants. Oil-extracting and flour plants already are said to be operating at half of capacity and little emphasis is being given to investment in these industries. 89/ The slow rate of annual increases projected for 1955 to 1957 is obvious from the production estimates in Table 37.\*

Absolute decreases in output of cotton yarn, gunny bags, and cigarettes for 1955 compared with 1954 highlight the impact of the shortage of agricultural raw materials. Chia To-fu's speech 90/ specifically stated that the large increase in the output of consumer goods in 1953 was due to the bumper harvest of crops in 1952 and that the flood in 1954 would have a serious impact on output of light industry in 1955. A serious situation was admitted with respect to the quality of output of light industry, 91/ obviously one of the costs of the production increases given in Table 37.

F. Transport and Telecommunications.

1. Transport.

a. General.

Transport routes in Communist China are concentrated in the eastern half of the country, converging primarily on such large

\* P. 95, above.

S-E-C-R-E-T

economic and population centers as Mukden, Peiping, Shanghai, Hankow, and Canton. The industrial region in the Northeast is particularly well served by internal transport routes. New route construction into western areas, presently served largely by primitive means of transport, is being increasingly emphasized in an attempt to develop unexploited resources and increase the effectiveness of central government control.

Since the Communists gained control of the China mainland in 1949, transport service as a factor of demand has shown marked increases in performance, paralleling to a great extent the growth of the industrial sector of the economy. By 1954, total traffic of tons originated was indicated to be more than double the 1950 performance.

By 1953 railway traffic had equaled the annual rate of ton-kilometer performance of the previous peak year of 1945 under the Japanese. Inland water traffic, although increasing at a rate greater than railroad traffic, had reached a level only somewhat less than half previous peak performance by 1954. By 1960 this deficiency is expected to be overcome.

Highway transport remains of little significance in terms of total transport performance. It is, however, quite significant in the long-haul movement of goods in the western provinces, as is indicated by the growing volume of traffic carried annually. Civil air transport has not yet attained previous levels of performance. The probable addition of new air routes to adjacent countries of Southeast Asia and the prospective acquisition of better performing Soviet aircraft, however, are expected to facilitate progress in the future. Despite the disruption of regular coastal services which followed the Communist acquisition of control over China, Chinese merchant marine performance has grown considerably, although as yet the fleet remains well below pre-Communist levels. Nevertheless, the basic reorientation of China's foreign trade toward the Soviet Bloc, accompanied by an increased use of railroads for foreign trade and the disruption of regular services in the Formosa Straits, is likely to impede the growth of Chinese coastal shipping.

The growing performance of Communist China's transport system since the Communists gained control of the government has been the product of many factors -- a growing demand for the service, increasing investments, and greater operating efficiency. Outstanding among these have been the increasing requirements generated by the



S-E-C-R-E-T

industrialization program, without which transport performance could not progress.

b. Rail.

(1) Pattern and Adequacy of Operations.

Railroads in Communist China especially have borne the burden of increasing economic activity, particularly in industrial areas. Manchuria, with about 9 percent of China's area, has more than half of the rail mileage and originates far more traffic per capita than the remainder of China. The Peiping - Tientsin area and the regions around Tsingtao, Shanghai, Hankow, and Canton are also important, but most of China as yet generates little rail traffic.

As is evident, Chinese rail operations consist largely of the movement of a few bulk commodities from a relatively small number of places of origin to a few principal destinations. Coal, the largest single item shipped, comprises about one-third of total tonnage. Foodstuffs are also a major traffic commodity, followed by metals, construction materials, wood, and ores. Iron and steel products such as plates and rails are becoming of increasing importance, whereas petroleum, in contrast to the situation in most other nations, is still a relatively minor item.

It is readily apparent that the Chinese have embarked on a major program of construction. It is noteworthy, moreover, that in view of the large commitments of capital resources necessary to implement such a program, more than 20 percent of total railroad investment during the Five Year Plan is to be devoted to the manufacture of rolling stock and motive power. This apparently large-size allocation is testimony of the progressively tightening freight car and locomotive situation in China as well as of an intention to prevent its becoming a brake on economic growth. Based on [redacted]

50X1

50X1

[redacted] Chinese Communist announcements, it is estimated that in 1954 the Chinese possessed some 3,420 locomotives, 6,300 passenger cars, and 73,000 freight cars. 92/

(2) Investment.

Since 1949, when the Chinese Communists had only 21,700 kilometers (km) of operable railroad line, they have allocated

- 98 -

S-E-C-R-E-T

S-E-C-R-E-T

a large part of the available investment resources to the expansion of the rail system and to bolstering existing facilities. Considerable progress has been made. By the end of 1955, about 25,500 km of track will be operable, and plans call for construction of 3,100 km more by the end of 1957.

During the Five Year Plan, 5.67 billion yuan, or about 70 percent of the new capital investment in transport and telecommunications, is to be allocated for rail transport. Of this, 2.4 billion yuan is to be used in new line construction, with the major part of this effort being concentrated in the western provinces of China. Extension of the rail system into regions hitherto inadequately served by modern transport apparently is designed mainly to exploit undeveloped economic resources and to a lesser extent to provide more effective political control over greater areas of population. In addition, it will enlarge the logistic capability of the railroads and significantly add to the total length of operable track by 1960. 93/

A prime example of this effort is the construction of the 2,800-km section of track begun in 1953, which is to extend westward from Lanchou, via Yumen and Urumchi, to the Chinese border, where it will connect with a line from Alma-Ata on the Turkestan-Siberian railroad. In 1956, at the present rate of progress, the line is expected to reach Yumen and to be in a position to facilitate the more rapid exploitation of petroleum resources in the area. 94/ The new line connecting Pao-t'ou in Inner Mongolia with the Trans-Siberian, across Outer Mongolia, was completed in 1955.

A great deal of the construction effort also has been directed toward strengthening the established rail system. During the Five Year Plan, 1.85 billion yuan is to be allocated for improvement of existing lines. According to the 1954 railroad plan, 95/ 50 percent of the funds invested by the state for railroads were to be used to strengthen existing installations of the railroads and to add new wagons and locomotives. Line increases on existing installations in 1954 were reported to total 280 km. 96/ In 1955 the size and number of such projects were to be greatly increased. On three lines alone, an aggregate of 240 km of double-tracking was to be completed, and another 2,700 km were to be either surveyed or designed for similar construction.

S-E-C-R-E-T

(3) Operating Efficiency.

Since the Communists gained control over the China mainland in 1949, the railroads have shown progressive gains in performance, consistent with the requirements of a growing economy. By 1953, turnaround time was reduced from 4.7 to 4 days, where it has apparently leveled off. By 1954 the average tons loaded per loaded car had reached 31.6, an increase of 3.3 tons over 1950. 97/ The significance of this achievement is apparent when it is realized that the increase in the average carload of coal by 1.3 tons in 1954 over 1953 was equivalent to loading, on the average, an additional 6,500 tons in 24 hours. 98/

By 1953, freight traffic more than tripled the performance of 1949, when traffic was at an estimated low of 48.2 million tons originated on account of economic and political disorganization following the civil war. As of 1954, when tons originated reached an estimated 183 million, however, there were indications that the railroads were operating under an increasing strain, which might soon become acute for both the economic and military sectors of China. 99/

Whereas the magnitude of annual increases in terms of tonnage has been growing, the proportionate growth during recent years has become smaller. Tons originated have fallen from a 20-percent increase in 1953 over 1952 to a planned 13.6-percent increase in 1955 over 1954. Progress in reducing turnaround time is not likely to continue, but tons loaded per loaded car should continue to increase somewhat, chiefly because of the increased introduction of larger capacity freight cars. These trends suggest that the Chinese apparently have reached a definite turning point in the development of railroad transport. Further appreciable progress by the railroads can be accomplished only through a program of additional capital investment, designed to increase both physical route capacity and the availability of rolling stock and motive power. 100/

c. Highways.

(1) Pattern and Adequacy of Operations.

Motor transport in Communist China is used most frequently for short-distance, intercity freight movement. Highway transport performance in 1954 increased almost sevenfold over 1950.

- 100 -

S-E-C-R-E-T

S-E-C-R-E-T

The extent of progress in road transport is indicated by the fact that its share of total tons originated by all carriers in China has grown from about 6 percent in 1950 to over 16 percent in 1954, and performance by 1960 should be at a level 3 times that of 1954.

The road network was expanded from 78,000 km in 1950 to 140,000 km by the end of 1954, mainly by extending new motorable roads into areas formerly served only by coolie and animal transport. 101/ At present the greater part of this road net is not capable of supporting truck traffic throughout the year.

Motor transport also has greatly facilitated the growth of commercial centers in rural areas not served directly by rail or waterways. New feeder roads which join many scattered farming communities to the transport network have facilitated the marketing of commodities previously dependent on animal and coolie carriers. Construction of new roads into border areas as well as in mining and industrial regions is expected to bring the total highway length in China to 158,000 km by 1960.

Increasing the vehicle park has also been a prime goal which has met with considerable success. Mainly as a result of large imports of vehicles from the Soviet Bloc, the motor truck inventory has grown from 40,000 units in 1950 to some 67,000 units in 1954. 102/ Moreover, the continued import of vehicles from similar sources, coupled with domestic manufacture beginning in 1957, is expected to bring the total truck park to 150,000 units by the end of 1960. 103/

## (2) Investment.

It is estimated that, during the Five Year Plan, about 900 million yuan of the allocation to the Ministry of Communications will be used for highway construction. In addition, a major share of the 730 million yuan allocated for "local communications" is to be used in local highway construction. The 1955 plan provides for the survey and construction of an additional 23 roads, mainly in industrial and mining areas or into national minority regions. 104/ These projects will add 4,500 km to China's highway network during 1955. 105/ Some idea of investment in inventory can be obtained from the plan to produce domestically 4,000 vehicles by 1957. 106/

- 101 -

S-E-C-R-E-T

S-E-C-R-E-T

(3) Operating Efficiency.

The efficient utilization of highway transport is hampered to a large extent by physical restrictions such as low-capacity bridges, numerous ferries, and inadequate road construction and maintenance. Lack of adequately trained personnel also has been a problem. Although the technological innovations necessary to overcome physical limitations have not been forthcoming to an appreciable degree, 107/ considerable effort has been directed toward reducing inefficient hauling. Provincial transport companies were established under the central control of the government, and a rigid system of traffic control was introduced to allocate trucking properly. 108/ Administrative reorganization, coupled with the introduction of heavier loading vehicles, undoubtedly resulted in some improvement, but commodity distribution is such that trucks are still required to operate empty more than half the time.

The need for more technically trained personnel was realized by the Chinese Communists as early as 1952, 109/ but the building of adequate training facilities, for the most part, is still in the planning phase. Technical advice provided in many cases by the USSR, however, overcomes this deficiency to some extent.

d. Inland Water.

(1) Pattern and Adequacy of Operations.

Inland water operations have steadily improved since the Communists assumed control of China. Freight movement, in terms of ton-kilometers, was four times greater in 1954 than in 1950, and tons originated grew at a somewhat greater rate because of a progressively decreasing average length of haul. 110/ River traffic has not, however, yet approached prewar levels. Continued emphasis on this medium of transport and the consequent gains envisioned should bring performance close to prewar levels by 1960, when it is estimated that some 48 million tons of cargo will be originated. Nevertheless, with the constantly growing role of the railroads, it is considered that inland water transport will never again be as important to China in terms of percentage of total traffic as it was in the 1930's.

- 102 -

S-E-C-R-E-T

S-E-C-R-E-T

In general, inland water transport in China fulfills its usual role of carrying bulk cargoes where speed is not of major importance. The inland waterway system of China is one of the most extensive in the world, with about 95,000 km of inland waterway routes now open to navigation, although most are suitable only for shallow draft vessels. 111/ The essentially local nature of the traffic is demonstrated by the average length of haul of the modern water transport sector of only 370 km in 1954, despite the great length of such main routes as the Yangtze River. Inclusion of local junk traffic which on the extensive Yangtze system carries 85 percent of the traffic would lower the average length of haul considerably.

The composition of waterway traffic is shifting from agricultural cargoes, which are becoming relatively less important though still significant, to industrial traffic, which has been increasing. Between 1951 and 1953, for example, agricultural cargoes accounted for over half of the freight movement on the Yangtze River, but decreased from 40 to 30 percent of the total inland waterway traffic in Communist China. 112/

Little change in the composition of the river fleet has occurred since the Chinese Communists came to power. The self-propelled fleet remains small, both actually and relatively, and is estimated to total about 750 vessels, 113/ ranging from 4,000 gross register tons (GRT) passenger-cargo vessels to smaller tugs and steam launches. The nonpowered fleet still consists mainly of a great number of small junks, which, in the aggregate, have a freight capacity of over 3 million tons and account for about 85 percent of the total inland water transport. 114/ On the Yangtze River, especially, tug-barge units are replacing to some extent the traditional junk on longer haul routes.

(2) Investment.

The Communist regime has developed an impressive program for the rehabilitation and improvement of its inland waterways. Of the 1.339 billion yuan allocated to the Ministry of Communications for capital investment during the Five Year Plan it is estimated that about 440 million yuan is for water transport, but the allocation to inland water transport cannot be determined specifically. Appropriations for waterway construction in 1954 were 74 percent higher than in the previous year and reportedly will increase by 35 percent in 1955. 115/

S-E-C-R-E-T

Before 1954, relatively little investment in vessels was devoted to new vessel construction, most of the investment going for the purchase of second-hand craft, salvage work, and rehabilitation of the existing fleet. Since 1954, however, more emphasis has been placed on new construction.

The Yangtze River apparently is receiving particular attention. Appropriations for construction projects on this river in 1953 were four times the 1952 amount, 116/ and planned investment during 1955 is scheduled to increase about 70 percent over the 1954 level. 117/

Significantly, the Chinese Communist government, in an effort to reduce its own burden, has decided that local authorities must finance inland water transport improvements. The directive to this effect issued in November 1953 by Chou En-lai 118/ does not seem to have brought the desired results, however, for local officials apparently still are relying on the central administration for required funds.

(3) Operating Efficiency.

Chinese Communist statements claim sharp rises in the operating efficiency of the river fleet. Voyage time has been greatly reduced, in some instances from one-third to one-half, by operating vessels on scheduled runs. The efficiency of tugs has been improved by the substitution of the pushing method for the traditional means of towing of barges, with a resultant increase in speed and decrease in fuel consumption. 119/ Barge transport efficiency has been further improved by routing the barges through the entire voyage, instead of transshipping cargo several times.

Labor productivity also appears to be improving, although shortages of trained personnel persist. Efforts are being made to reduce administrative duplication and organize traffic operations more efficiently. Remarkable improvement is claimed in some areas in cargo-handling efficiency 120/ through the use of mechanical equipment in place of manual operations. 121/

In addition to increasing the efficiency of water transport, the Chinese have directed some effort to making the cost of river transport more attractive to shippers. Substantial reductions.

S-E-C-R-E-T

in freight rates during the first 3 years of Communist control apparently indicate an intention to reestablish the prewar competitive status of inland water transport. 122/

e. Coastal Shipping.

(1) Pattern and Adequacy of Operations.

Despite the irregularities and disruptions in Communist China's coastal trade, traffic carried in Chinese vessels during 1954 123/ represented an eightfold increase over 1950. 124/ The growth of merchant shipping since 1949, however, has been hampered by the extensive loss of merchant shipping tonnage to the Nationalists and the radical shift in international trade routes from sea to rail through the northeast, which accompanied the re-orientation of China's foreign trade toward the Soviet Bloc.

Additions to the coastal fleet, coupled with continuing efforts to increase its utilization, are expected to raise performance by 1960 to roughly 50 percent above the 1954 level.

Operations of Communist China's ocean fleet are confined to serving the domestic coastal trade. Chinese Nationalist interdiction of coastal shipping activity has diminished and is at present effective only in the Taiwan Strait area. In the Yellow Sea and the Gulf of Chihli (Po Hai) the Chinese Communists are able to operate unobstructed trunk and feeder passenger and freight routes servicing all coastal ports north of Wenchow. The largest segment of the coastal fleet is concentrated in this area, and a smaller segment of the coastal fleet operates from Canton in South China to Swatow and ports in the Liuchow Peninsula-Hainan Island area.

The domestic operations of the powered merchant fleet are considerably augmented by a large number of small ocean-going junks and, to a limited extent, by chartered foreign shipping. The Chinese Communists are completely dependent upon foreign registered vessels, both Bloc and non-Bloc, for longer international waterborne trade.

Apparently the available Chinese Communist fleet, augmented by specialized foreign registered vessels, is able to handle present tonnage requirements. Between 1950 and 1954, with salvage



S-E-C-R-E-T

efforts, foreign purchase, and new construction the Chinese Communist merchant fleet increased from about 79 vessels of 175,000 GRT to about 111 units of 278,000 GRT. 125/ The coastal fleet had grown by mid-1955 to some 120 vessels of 295,000 GRT. A fleet of 350,000 to 400,000 GRT by 1960 is believed to be within Chinese capabilities, but this would still be less than half the size of the merchant tonnage possessed by the Nationalist Chinese in 1949.

Communist China has few good harbors. Dairen, Tientsin - Taku - Hsin-k'ang, Tsingtao, Shanghai, Swatow, and Canton - Whampoa, which combined can discharge some 115,000 tons daily, possess 66 percent of the total cargo-handling capacity of Chinese ports. Yin-k'ou, Ch'in-huang-tao, Yen-t'ai, Yin-hsien, Wenchow, Foochow, Amoy, Fort Bayard (Chan-chiang), Hai-k'ou, and Yu-lin, all of relatively minor size, are important as terminals of domestic coastal trade. Amoy and Foochow, opposite Taiwan, are currently of singular importance as possible staging areas for an offshore island offensive against the Nationalist Chinese.

(2) Investment.

Investment in China's merchant marine service apparently has been devoted in large part to modernizing the existing fleet and to improving port facilities. In 1954 the government allocated nearly 10 million yuan to increase port mechanization 126/ in a significant attempt to replace less efficient cargo-handling procedures.

(3) Operating Efficiency.

A comparison of the growth indexes for the merchant marine inventory and its performance show that great strides have been made in increasing the utilization of the coastal fleet. Efforts have been directed toward a more efficient use of labor by the mechanization of cargo handling at ocean terminals and by closer supervision of traffic operations. 127/ The consistent fulfillment of performance plans, in some cases by substantial margins, indicates progress in this direction inasmuch as targets apparently are integrated with plans for increasing efficiency.

S-E-C-R-E-T

f. Air.

(1) Pattern and Adequacy of Operations.

Air transport in Communist China as yet plays a very limited role in freight movement, but it is important in the movement of officials and high-value, low-tonnage cargo. Despite the acquisition in 1955 of the latest transport types (Il-12's and Il-14's) from the USSR, air transport operations are limited.

During 1954 the unduplicated basic civil air network of Communist China comprised approximately 15,700 route kilometers flown by two airlines -- CPAC\* and the Sino-Soviet enterprise, SKOGA.\*\* 128/ With the withdrawal of the USSR from SKOGA at the end of 1954, the Chinese undertook to fly the entire network. Flights radiate from Peiping via Hankow or Sian to Chungking, Kunming, Nan-ning, Canton, and Shanghai. There are routes to the USSR via Sinkiang Province and Mongolia to Irkutsk and Alma-Ata.

The inventory of the Chinese civil air fleet, composed of various types of craft acquired from diverse sources, is still well below pre-Communist levels. By the withdrawal of the USSR from joint ownership in SKOGA, the Chinese obtained the 15 Li-2 aircraft provided by the USSR as its share in the company. The civilian fleet -- consisting of these aircraft, the existing CPAC fleet, aircraft abandoned by the Nationalists, and additionally acquired Li-2's -- totaled about 50 2-engine transports in mid-1955, a considerable reduction over the 92 aircraft, some of which were 4-engine types, available in 1948. The regularization of civil air operations throughout the Bloc has led to the Chinese acquisition of new Soviet aircraft, probably the better performing Il-14.

(2) Investment.

During the Five Year Plan, 101 million yuan are to be invested in civil aviation. The end use of this allocation cannot be determined, but some money will be spent for additions to equipment. Equipment received from the USSR following its withdrawal from SKOGA reportedly is being paid for on a long-term basis. The requirement for new aircraft which will accompany expected route expansion will doubtless be met by the same source and on similar terms.

\* Chinese People's Aviation Corporation.

\*\* Soviet-Chinese Joint Stock Company for Aviation.

S-E-C-R-E-T

(3) Operating Efficiency.

Operating efficiency of civil air transport in Communist China is believed to have suffered by the conflict in ideologies between the US-trained managerial group that defected from the Nationalists and the Soviet-influenced Peiping organization.

2. Telecommunications.

Telecommunications facilities in Communist China are concentrated in the most industrialized and densely populated eastern part of the country, with Peiping as the hub. Industry and government consume about 80 percent of the basic telephone and telegraph service.

Postal volume has been increasing about 12 percent a year and probably will continue this rate of increase. Although 25 percent of the country reportedly lacked postal service in 1954, at the anticipated rate of expansion it is estimated that all of Communist China will have postal service by 1960.

Expansion of communications is being approached with energy and determination, but there are still many deficiencies which must be overcome before an adequate plant is established. Although during the Five Year Plan 361 million yuan are allocated to the Ministry of Posts and Telecommunications, this sum does not appear adequate to provide for the announced expansion program. Communist China still has to import over 80 percent of her needed equipment, and there is a deficiency of managerial and technical personnel. Although some sectors of the communications system will have shown a large growth by 1960, communications facilities in Communist China still will require improvement in order to serve the economy adequately.

- 108 -

S-E-C-R-E-T

S-E-C-R-E-T

V. Foreign Trade and Economic Relations.

The foreign trade of Communist China has been constantly increasing with the countries in the Sino-Soviet Bloc. In 1950, 25 percent of the total Chinese trade was with the Bloc, and by 1954 the figure had risen to 80 percent. The Chinese Communists announced that total exports and imports in 1954 amounted in value to 8.47 billion yuan and in volume to over 9 million tons. <sup>129/</sup> Based on this reported amount of foreign trade, Table 38 and Figure 7\* have been prepared from announcements by the Chinese.\*\*

Table 38

Imports and Exports of Communist China a/  
1954

|                     | Million US \$  |                |                    |
|---------------------|----------------|----------------|--------------------|
| Area                | <u>Imports</u> | <u>Exports</u> | <u>Total Trade</u> |
| Sino-Soviet Bloc    |                |                |                    |
| USSR                | 1,205          | 625            | 1,830              |
| European Satellites | 370            | 320            | 690                |
| Far East            | 40             | 200            | 240                |
| Total               | <u>1,615</u>   | <u>1,145</u>   | <u>2,760</u>       |
| Non-Bloc countries  | 360            | 330            | 690                |
| Grand total         | <u>1,975</u>   | <u>1,475</u>   | <u>3,450</u>       |

a. 130/

\* Following p. 110.

\*\* In the absence of US-Communist China trade and currency remittances carried on directly in yuan and US dollars, there is no genuine rate of foreign exchange between the two currencies for trade purposes. The rate of exchange used to convert the yuan value of Communist China's foreign trade into US dollars is the average between the buying and selling rates for sterling remittances in Canton. The sterling rate is consistent with the remittance rate for other Free World currencies in Canton. Use of this sterling cross-rate permits conversion of yuan into dollars through a currency which actually is exchanged directly into Chinese yuan.

- 109 -

S-E-C-R-E-T

S-E-C-R-E-T

The import surplus of \$500 million shown in Table 38 arose primarily because trade with the USSR showed an imbalance against Communist China. It is probable that during 1954 Communist China imported military equipment from the USSR which was financed by a loan of as much as \$500 million. 131/ Trade with the European Satellites resulted in a Chinese import surplus of about \$50 million, reflecting the settlement of previous balances in China's favor. Exports to Far Eastern members of the Bloc consisted of trade items (25 percent) and military and economic aid (75 percent) furnished by Communist China to North Korea and the Viet Minh. 132/

Chinese Communist exports continue to reflect the predominance of agriculture and the extractive industries in China's economy. Industrial production such as pig iron, cement, and light manufactures provides a small surplus for export, but most industrial output is returned to the domestic economy. The Chinese announced that in 1954 the export of light industrial products amounted to about \$60 million. 133/

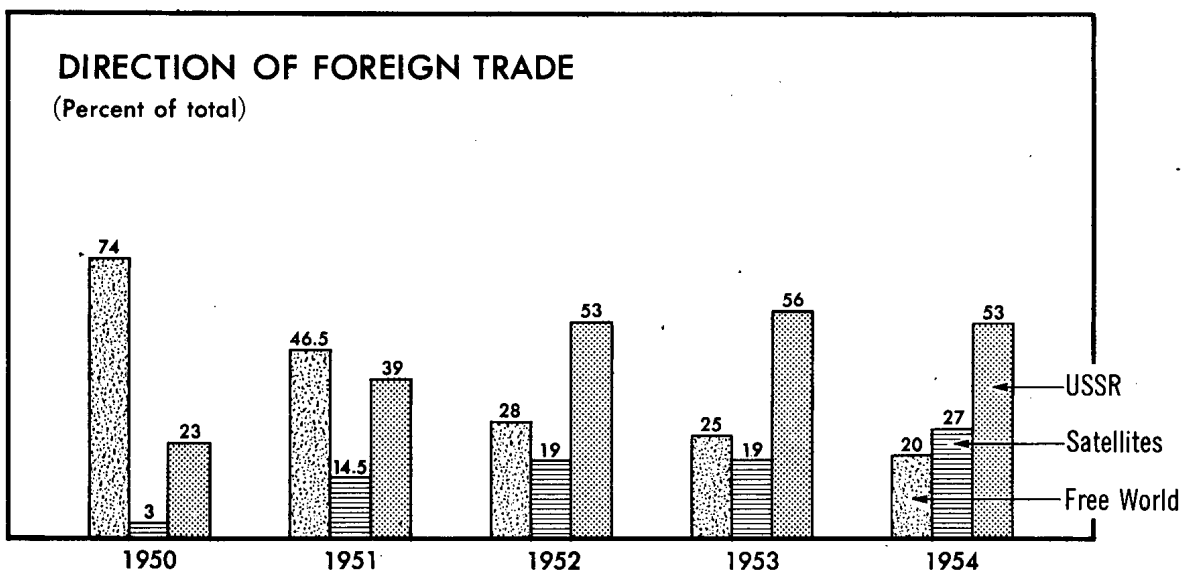
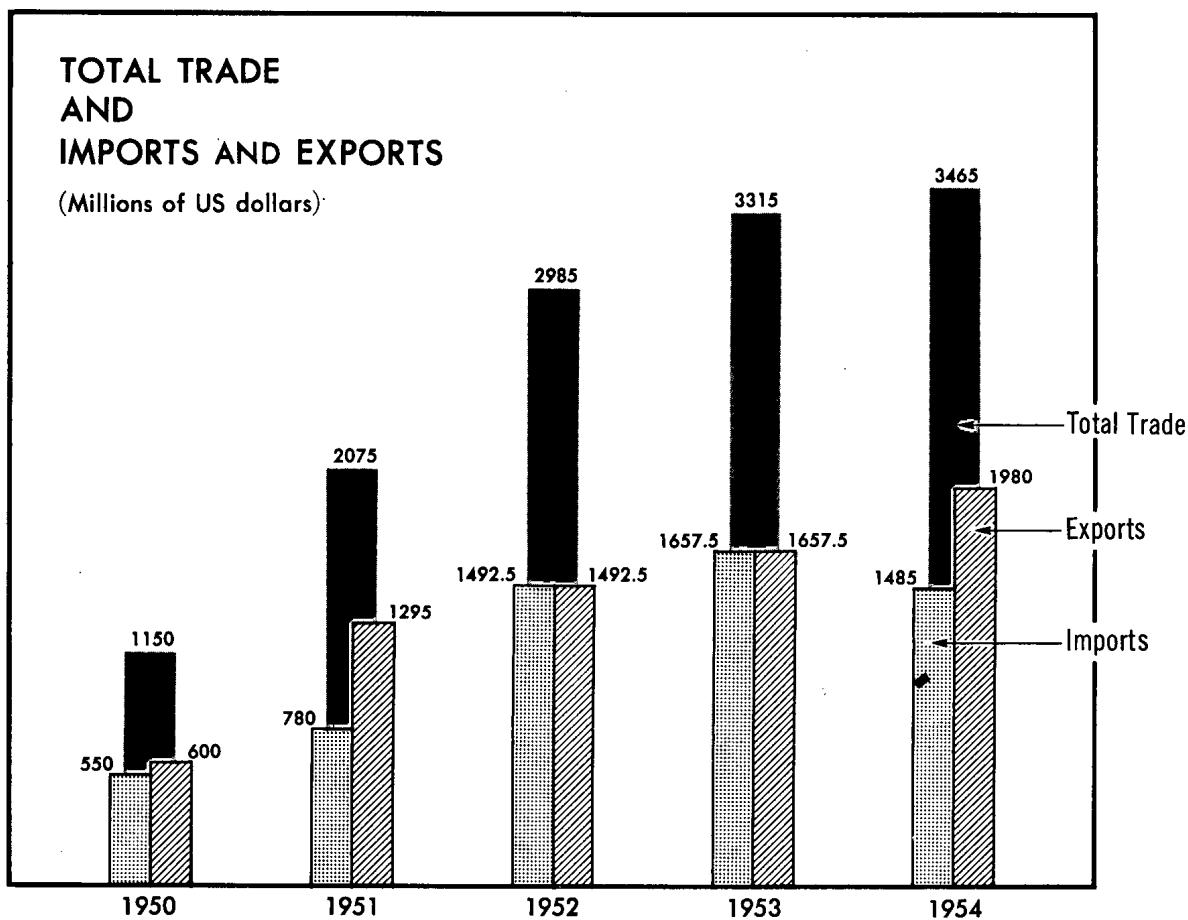
The Chinese Communist claims that 88.5 percent of total imports in 1954 consisted of products for industrial and agricultural production 134/ reflect the avowed policy of restricting consumer goods imports in order to maximize the rate of industrialization. This claim, however, omits reference to military goods, which probably are concealed in the industrial products category.

The Chinese Communists reported that during the first 8 months of 1955, total foreign trade increased nearly 13 percent over the comparable period in 1954. The increase with non-Bloc nations was reported to be 23 percent, whereas the increase with Sino-Soviet Bloc nations was slightly more than 10 percent. 135/

The estimate of Communist China's foreign trade through 1960 depends on the export potential. If the recent growth rate (1952-54) in total trade of 8 percent per year were maintained, the value of trade in 1957 would total \$4,400 million and in 1960, \$5,400 million. The Chinese Communists have announced, however, that trade in 1957 will increase 67 percent over the 1952 (yuan) value of trade. 136/ Considering the possibilities of increasing production and marketing of exportable surpluses in conjunction with the Five Year Plan trade goal, a reasonable average rate of growth is believed to be 4 percent, which is more in line with the 1954 increase in trade. The value of trade in 1960, at this rate of growth, would total \$4,300 million.

# COMMUNIST CHINA FOREIGN TRADE

1950-54



50X1

25287 6-56

Figure 7

S-E-C-R-E-T

Communist China carries on approximately 80 percent of its trade with the Soviet Bloc, 53 percent with the USSR alone, and depends almost entirely on the Bloc for its essential imports of industrial and military products. As Communist China's planned annual requirements of industrial equipment amount to only about 0.5 percent of the Soviet GNP or 1.5 percent of Soviet production of industrial equipment, it is probable that the USSR could supply most of these goods without difficulty. In any event, the phasing of these requirements over a period of years allows the USSR to make provision for the requirements in its plans. Recent trends suggest that Soviet food imports from China are more likely to grow rather than diminish.

The USSR granted Communist China loans of \$60 million per year for 5 years beginning in 1950, to be repaid in 10 annual installments beginning in 1954. Since 1953, several assistance agreements with the USSR have been concluded by Communist China to increase the aid begun in 1950 and to assure the continued flow of capital goods. In addition to the Soviet technical assistance agreements, the USSR in 1954 agreed to extend loans to China totaling \$130 million. <sup>137/</sup> The Soviet unwillingness to extend larger credits undoubtedly influences the scope of the Chinese Communist Five Year Plan, although this is fundamentally determined by the Chinese Communists' own capabilities. Nevertheless, if the USSR does not extend sufficient credit to satisfy China, then China may be tempted to seek Free World credit. In general, however, China now appears to be satisfied with present Bloc assistance and, in turn, has even undertaken to extend aid to North Korea and the Viet Minh.

Some shift away from trade with the Bloc may be expected if trade controls are relaxed. If Free World and Bloc prices of industrial equipment are compared, however, it appears that Communist China's terms of trade with the Free World during 1950-54 in general would have been but slightly more advantageous than trade with the Bloc. The elimination of trade controls, therefore, would not result in an important diversion of Chinese trade from the Soviet Bloc to the Free World because of price differentials.

Communist China's total trade with the Free World has declined steadily from \$965 million in 1951 to \$690 million in 1954. On a physical volume basis, however, trade dropped sharply in 1951 and then began to increase. As the total trade of Communist China increases, it is likely that trade with the Free World also will maintain an upward trend. In 1954, Communist China's major non-Bloc

S-E-C-R-E-T

trading partners, in terms of total value of trade turnover, were the UK (including Hong Kong), Japan, Ceylon, West Germany, and Pakistan. The goods provided by these countries were such items as basic chemicals, fertilizers, pharmaceuticals, raw textiles, rubber, coconut oil, paper products, textile machinery, and some manufactured goods. Although the prospects for increasing trade seem to be favorable, the stories of tremendous trade opportunities between Communist China and the Free World, and especially with Japan, are perhaps misleading. The Japanese have estimated that this trade probably could be increased from the 1954 high of \$60 million to a total value of only \$140 million by 1957. The Japanese demands would conflict to only a limited extent with Communist China's domestic and Bloc requirements, but the continuation of Japanese controls on many capital goods exports to Communist China will tend to hamper the growth of this trade. If trade controls are relaxed, there is a possibility that Sino-Japanese trade relations would show the biggest gains because Japan is a ready market for Chinese exports (rice, soybeans, coal, iron ore, and salt) and Communist China is interested in obtaining Japanese machinery, metal products, and fertilizers. The major limiting factor over such a trade development would be Communist China's ability to increase production while maintaining the present volume of exports to the Bloc in order to satisfy its trade and aid obligations with its Bloc partners.

The reduction of US controls from complete embargo to COCOM levels would enable Communist China (1) to obtain a net increase in its total export volume by exporting to the US commodities that it cannot export elsewhere and (2) to obtain better prices for other export products owing to the resultant increase in world market demand. Within 2 years, Communist China possibly could increase its net export earnings by \$60 million if it had free access to the US market.

The European Satellites have contributed less than the USSR to the development of Chinese Communist industry, but their help has nevertheless been substantial. Exports of industrial items to Communist China seem to have had a high priority in the European Satellites, particularly in Czechoslovakia, East Germany, Hungary, and Poland, where entire plants have been built for export to Communist China. Cranes, excavators, trucks, power generating equipment, diesel engines, telecommunications equipment, machine tools, ballbearings, and farm and mining machinery are on the list for delivery to Communist China. These goods and equipment are being shipped to Communist China

- 112 -

S-E-C-R-E-T



S-E-C-R-E-T

in fulfillment of barter trade protocols, which are signed each year by Communist China with each of the European Satellites. As a result of this continuing increase in European Satellite technical aid, it is clear that Communist China has been able to fill an important gap in its industrialization program caused by the continued shortage of its own technical manpower.

On 23 November 1953, Communist China and North Korea signed a 10-year economic and cultural cooperation agreement. In 1954, North Korea placed a value of 3 trillion "old" yuan (about \$125 million) on Chinese Communist goods delivered in 1954 under this agreement, whereas the value of Soviet material and technical aid to North Korea was \$105 million. [redacted] Chinese Communist goods consist of about 45 percent industrial materials (coal, steel, construction materials, and transport equipment) and 55 percent consumer goods (food, clothing, and newsprint). <sup>138/</sup> The estimated value of the Chinese Communist aid, however, is estimated to be about \$60 million to \$70 million.

50X1

In 1954, Communist China sent at least 1,825 engineers and technicians to North Korea to work in various industrial establishments. It is estimated that about 65,000 civilian laborers also were sent to North Korea. In addition, large numbers of Chinese Communist troops were used on land reclamation projects and to rehabilitate the North Korean railroad system. <sup>139/</sup>

North Korean exports to Communist China are limited to minerals, marine products, and electricity, the latter being by far the most important. During 1946 to 1950, Manchuria was supplied with approximately 0.9 billion kwh of electricity per year, or one-half of the total electric power generated by the Suiho Power Station (1950 capacity, 400,000 kw). <sup>140/</sup> Assuming that Communist China is still receiving approximately one-half of Suiho's electric power output, it is possible that in 1956, when Suiho probably will have been restored to its 1944 capacity of 600,000 kw, Communist China will receive as much as 1.35 billion kwh from North Korea.

Although the total value of Communist China's aid to North Korea in 1954 exceeded that of the USSR, its impact on the North Korean economy probably is not so great. It appears that most of the Soviet aid is designed for the reconstruction of basic industries, whereas the bulk of Communist China's aid is in the form of consumer goods, construction materials, and transport facilities.

- 113 -

S-E-C-R-E-T

S-E-C-R-E-T

Most of the foreign trade of the Democratic Republic of Vietnam to date has been with Communist China. The total volume of all Chinese Communist exports known to have been received by the Viet Minh during 1954 is estimated at a minimum of 30,000 tons. Communist China has supplied and is supplying the Viet Minh with considerable material and technical aid. In December 1954, Communist China promised to send the Viet Minh 10,000 tons of rice as well as 5 million meters of cloth, 141/ most of which probably have been delivered. In late December 1954 the Chinese Communists and the Viet Minh also reached agreement on Chinese assistance in the restoration of transport and communications lines, postal and communications services, and water conservancy projects. 142/ Under the agreement the Chinese Communists were also to supply the necessary experts and technicians.

In the past the most important and significant aid rendered to the Viet Minh by the Chinese Communists has been military aid. In early 1954 there were indications of increased military aid, estimated to be as high as 3,000 to 4,000 tons per month in volume. 143/ [redacted] Chinese Communist and Viet Minh violations of the Indochina truce agreement soon after the agreements were signed. Between 21 July and 20 August 1954 alone, it is estimated that some 3,000 tons of military supplies were shipped to North Vietnam from China. 144/ There is evidence that this level of shipments of all goods was maintained during 1955.

50X1  
50X1

In July 1955, on the occasion of Ho Chi Minh's visit to Peiping, it was announced that Communist China was making a gift of 800 million Chinese yuan (new currency -- equivalent at the official exchange rate to about \$338 million) for the reconstruction of railroads, river docks, highways, and bridges and for the restoration and construction of textile mills, tanneries, papermills, and factories for such things as medical equipment, electrical equipment, and agricultural implements. 145/ It also was stated that both countries would "cooperate fully with each other on the technical personnel" sent to the Viet Minh and that the Viet Minh also would "dispatch workers as apprentices to certain enterprises in China." The figure mentioned probably covers past aid -- at least the aid under the December 1954 agreements -- as well as present and future aid. The 800-million-yuan figure, like the similar 1953-57 Chinese Communist grant to North Korea for postwar reconstruction, is indicative of the high political value placed by Communist China on the rehabilitation and orientation of its Far Eastern partners, a project which involves the allocation of materials and manpower that could be used in China's own development program.

- 114 -

S-E-C-R-E-T

S-E-C-R-E-T

APPENDIX A

METHODOLOGY

The estimates of production and of production trends made in this report consist first of estimates of physical output of commodities or services. Second, with the use of price data, industrial indexes by value are calculated, grouping related commodities into larger aggregates. Finally, major sectors of the GNP are combined in terms of estimated value added for the subsectors.

I. Production Estimates.

Production trends for the commodities and services listed in the Chinese Communist Five Year Plan for both the official Communist figures and the CIA estimates are given in the text and tables of the report.\*

A. Agriculture.

The Five Year Plan presents claimed production for 1952 and the 1957 targets for food and technical crops. Miscellaneous crops are estimated by cultivated area rather than output. Communist claims for total food output are made for 1949-54. Absolute figures for food crops (rice, wheat, and soybeans) and for technical crops (cotton, tobacco, sugar cane, sugar beets, peanuts, sesame, and rapeseed) can be derived from the National Statistical Bureau reports for 1953 and 1954.

Previous CIA estimates of agricultural production were extrapolated trends from the pre-Communist years. The estimates of the output of food crops, particularly, made on this basis are far below the Communist claims. It is felt that the pre-Communist estimates understated output because of limited statistical coverage. When adjustments are made in the light of the probable understatement of prewar output, the Communist figures for total output of food crops in 1952 are considered reasonable. The trend in the Communist series from 1949 to 1952, however, almost certainly involves

\* CIA estimates are made when official Chinese statistics are not considered valid

50X1

- 115 -

S-E-C-R-E-T

S-E-C-R-E-T

increased coverage more than it represents actual increases in production, and so a different trend is estimated based on weather conditions and other evidences of actual output. The 1954 figures for food crops claim an increase of 3 percent over 1952, but this trend is considered unlikely in view of the serious floods in 1954. The 1954 claims may overstate actual production because of increased use of stocks and other factors. An alternative hypothesis would be that Communist figures for 1952 are still understatements of actual output and the 1954 claimed output represents further statistical coverage of the agricultural sector. Within the total for food crops it is believed that the claims for wheat output are too low and that the output of rice and potatoes is somewhat overstated.

Estimates of cotton production based on requirements for yarn production, estimated rates of home consumption, and estimates of native yarn production result in output figures for 1952 that are well below the Communist claims and slightly below the Communist figure for 1953. The 1949 and 1950 figures in official claims for cotton output probably are understated.

The average annual increase expected in the output of food crops is estimated to be about 2 percent a year. The 1955 output of food crops is estimated to be 2 percent over the 1952 level, reflecting the floods of 1954 and the unusually favorable crop year in 1952. Targets for increases in cotton and other industrial crops are more feasible as the percentage of total crop land planted to these crops is relatively small and industrial requirements probably will lead to priorities in fertilizer and other means of increasing production. In the absence of detailed information on industrial crops other than cotton, the general trend in cotton output is used for this whole category of agricultural output.

Trends in production of livestock and meat, vegetables, and other miscellaneous crops are moved with the food crops index in the absence of data that permit separate production indexes for these categories.

B. Industry.

Estimates of production of industrial commodities have been evaluated in the light of known capacity in pre-Communist periods and of new plants added since that time

[Redacted]

50X1  
50X1

S-E-C-R-E-T

[REDACTED]

50X1

[REDACTED] For the most part, however, Communist production claims, though usually somewhat higher than totals arrived at by plant-by-plant study, appear reasonable in view of the likelihood that some production capacity has not been covered in plant-by-plant studies for the industry concerned. [REDACTED]

50X1

[REDACTED]

50X1  
50X1

[REDACTED] The production series necessarily reflects, in part, improved coverage in statistical reporting for the commodities concerned during the period from 1949 to 1954. To this extent, indexes based on trends in production of these commodities would overstate the industrial growth that actually has taken place.

50X1

Projections for production through 1957 are made in the light of announced targets for the Chinese Communist Five Year Plan, but these targets are evaluated and changed where indicated by progress of construction projects in the industries concerned.

## II. Industrial Indexes.

Table 39\* presents output indexes for industrial groupings. All the indexes shown are based on physical output except weapons, petroleum, metals, engineering items, chemicals, and rubber products. In the case of engineering output, an index based on Chinese Communist claims for the gross value of output of the machine industries is used except for 1950 and 1951. These years were interpolated on the basis of physical production trends weighted by available 1952 prices and by an estimated breakdown of value added within the engineering industries. For 1956 and 1960 the estimates are based on the average rate of annual increase between 1954 and 1957. Indexes of nonferrous metals, ferrous metals, chemicals, and rubber products were projected by estimated gross value of physical output in 1952 prices. Prices for some nonferrous metals were estimated in terms of world prices, and for\*\*

\* Table 39 follows on p. 118.

\*\* Continued on p. 120.

S-E-C-R-E-T

S-E-C-R-E-T

Table 39

Indexes of Production of Industrial Commodities in Communist China  
1949-57 and 1960

| Commodity                             | 1952 = 100 |      |      |      |      |      |                     |                   |                   |                   |
|---------------------------------------|------------|------|------|------|------|------|---------------------|-------------------|-------------------|-------------------|
|                                       | 1949       | 1950 | 1951 | 1952 | 1953 | 1954 | 1955<br>Preliminary | 1956<br>Projected | 1957<br>Projected | 1960<br>Projected |
| Energy                                |            |      |      |      |      |      |                     |                   |                   |                   |
| Electric power                        | 60         | 64   | 81   | 100  | 126  | 152  | 173                 | 197               | 235               | 330               |
| Solid fuels                           | 49         | 64   | 80   | 100  | 109  | 126  | 146                 | 162               | 178               | 209               |
| Petroleum                             | 18         | 32   | 79   | 100  | 128  | 154  | 198                 | 222               | 244               | 286               |
| Metals                                |            |      |      |      |      |      |                     |                   |                   |                   |
| Nonferrous                            | 41         | 62   | 78   | 100  | 129  | 157  | 173                 | 221               | 237               | 286               |
| Ferrous                               | 12         | 37   | 65   | 100  | 131  | 156  | 174                 | 204               | 260               | 361               |
| Engineering                           | 13         | 35   | 52   | 100  | 165  | 186  | 201                 | 218               | 236               | 298               |
| Electrical equipment<br>and machinery | 27         | 43   | 58   | 100  | 138  | 152  | 169                 | 181               | 206               | 367               |
| Chemicals                             | 16         | 44   | 77   | 100  | 125  | 167  | 195                 | 225               | 254               | 366               |
| Rubber products                       | 53         | 52   | 89   | 100  | 121  | 137  | 147                 | 162               | 178               | 220               |
| Construction materials                |            |      |      |      |      |      |                     |                   |                   |                   |
| Cement                                | 23         | 48   | 86   | 100  | 134  | 159  | 176                 | 193               | 207               | 262               |
| Forestry products                     | 70         | 100  | 100  | 100  | 124  | 138  | N.A.                | N.A.              | 177               | N.A.              |
| Fuelwood                              | 87         | 100  | 100  | 100  | 100  | 100  | 100                 | 100               | 100               | 100               |
| Industrial wood                       | 58         | 65   | 90   | 100  | 167  | 211  | 200                 | 200               | 200               | N.A.              |

S-E-C-R-E-T

S-E-C-R-E-T

Table 39  
 Indexes of Production of Industrial Commodities in Communist China  
 1949-57 and 1960  
 (Continued)

| Commodity                     | 1952 = 100 |      |      |      |      |      |                     |                   |                   |                   |
|-------------------------------|------------|------|------|------|------|------|---------------------|-------------------|-------------------|-------------------|
|                               | 1949       | 1950 | 1951 | 1952 | 1953 | 1954 | 1955<br>Preliminary | 1956<br>Projected | 1957<br>Projected | 1960<br>Projected |
| Food processing               |            |      |      |      |      |      |                     |                   |                   |                   |
| Vegetable oils<br>and oilcake | N.A.       | N.A. | 63   | 100  | 123  | 130  | 133                 | 160               | 109               | 214               |
| Flour                         | 61         | 58   | 90   | 100  | 115  | 125  | 131                 | 143               | 156               | N.A.              |
| Sugar, refined                | 43         | 52   | 65   | 100  | 108  | 121  | 148                 | 200               | 276               | N.A.              |
| Cigarettes                    | 61         | 71   | 77   | 100  | 136  | 143  | 136                 | 160               | 177               | N.A.              |
| Paper                         | 29         | 39   | 64   | 100  | 115  | 149  | 163                 | 180               | 176               | N.A.              |
| Salt                          | 50         | 86   | 90   | 100  | 109  | 119  | 129                 | 139               | 152               | 190               |
| Pyrites                       | 73         | 91   | 91   | 100  | 100  | 109  | N.A.                | N.A.              | 136               | N.A.              |
| Cotton textiles               |            |      |      |      |      |      |                     |                   |                   |                   |
| Cotton yarn                   | 49         | 66   | 73   | 100  | 113  | 127  | 111                 | 127               | 138               | 160               |
| Cotton cloth (machine)        | 44         | 68   | 88   | 100  | 108  | 128  | 146                 | 155               | 162               | 188               |
| Handicraft cloth              | 27         | 34   | 43   | 100  | 119  | 130  | 114                 | 121               | 131               | 151               |
| Defense                       |            |      |      |      |      |      |                     |                   |                   |                   |
|                               |            | 61   | 70   | 100  | 104  | 65   | 69                  | 60                | 48                | 54                |
| Munitions                     |            | 76   | 87   | 100  | 100  | 41   | 43                  | 44                | 46                | 54                |
| Weapons                       |            | 19   | 70   | 100  | 116  | 134  | 145                 | 105               | 54                | 54                |

S-E-C-R-E-T

S-E-C-R-E-T

some chemicals in terms of comparable price ratios with US prices for similar commodities, where Chinese prices were not available. Available prices for machinery and equipment were limited, but the use of a gross value index for machinery and equipment makes such prices unnecessary. The petroleum index is based on estimated gross value per ton of petroleum products extracted from natural and shale oil per ton, including estimates for imported natural crude oil less the estimated value of the imported crude.

III. Sector Indexes.

An estimate of GNP for Communist China in 1952 at current prices is the basis for aggregating industry indexes into major sectors.

A. Agricultural Sector.

Income originating in agriculture was obtained by adjusting the official figure for gross farm output (49.39 billion yuan) in the following manner. Gross agricultural output was revalued in terms of estimated price received by farmers, including the value of home processing. This estimated value of farm output is about 40 billion yuan, 82 percent of the official figure. The higher official valuation is believed to be based on the city price for unprocessed grain or on the producer price for the equivalent in processed grain, both of which include a transport and trade markup and, in the case of market sales, a processing charge as well.

Estimates of farm consumption of agricultural materials (especially feed, seed, and waste) and of materials purchased from nonfarm sectors were deducted.

The estimate of value added in agriculture is described in the note to Table 40.\*

B. Nonagricultural Sector.

Income originating in the nonagricultural sector is presented in Table 41\*\* and provides a control figure for income originating in industry, construction, trade, transportation, and government (30.33 billion yuan). A series of independent estimates of the components\*\*\*

\* Table 40 follows on p. 121.

\*\* Table 41 follows on p. 124.

\*\*\* Continued on p. 125.



S-E-C-R-E-T

Table 40

Output and Income for the Agricultural Sector of Communist China  
1952

| Billion Yuan in Current Prices  |              |  |              |
|---|--------------|--|--------------|
| Gross farm income   |              | Gross cash income e/                   | 10.20        |
| Value of farm production a/*  | 34.08        | Less:                                  |              |
| Subsidiary industry   | 5.79         | Cash purchases of production materials | -5.19        |
| Less:   | <u>39.87</u> | Net cash income                        | 5.01         |
| Imputed value of home production materials including seed, feed, and waste b/ | 4.77         | Taxes f/                               | 3.63         |
| Cash purchases of production materials other than investment items c/         | 3.19         | Investment g/                          | 2.00         |
|   | -7.96        | Imputed value of home consumption h/   | 21.27        |
| Value added by farm output  | 31.91        | Income originating in farm output      | <u>31.91</u> |
| House rent d/   | 1.68         | Income originating including rent      | <u>33.59</u> |
| Total farm income   | <u>33.59</u> |  |              |

\* Footnotes for Table 40 follow on p. 122.

S-E-C-R-E-T

Table 40

Output and Income for the Agricultural Sector of Communist China  
1952  
(Continued)

---

a. Gross agricultural output at farm prices including home processing. This estimate was obtained in the following manner:

1. The value of gross agricultural output (48.39 billion yuan) at unspecified prices, broken down between farm and subsidiary output, was obtained from Chinese Communist announcements.

2. The value of food crop production (26.13 billion yuan) at unspecified prices was computed on the basis of Communist announcements that taxes on food crops were less than 7 percent of the value of food crops and less than 13 percent of total gross agricultural output.

3. Food crop output was estimated at 164 million metric tons, in terms of grain equivalents.

4. The ratio of the estimated value of food crop output to the quantity of food crop output in metric tons is taken to be the average price of food crops implicit in Communist announcements.

5. This implicit price was compared to data on retail prices and farm procurement prices. While a sample of farm procurement prices averages about 65 percent of the city retail price, the implicit price is 87 percent of the average percent of the city retail price (or 159,300 yuan per metric ton). The price implicit in the Communist announcements is probably, therefore, either the city retail price for unprocessed grain or the producer price for the equivalent in processed grain and includes both home processing and also some transport, distribution, and additional processing costs.

6. The imputed value of home processing for grain consumed on the farm was assumed to be 20 percent of the farm procurement price for grain. On this basis average farm prices, including home processing, are about 72 percent of the city retail prices and 83 percent of the implicit prices given in the Communist figures. Allowing for the fact that home processing probably is less important for meat and nonfood crops than for grain,

S-E-C-R-E-T

Table 40

Output and Income for the Agricultural Sector of Communist China  
1952  
(Continued)

it was estimated that the average farm price including home processing was about 80 percent of the price implicit in Communist announcements.

7. The gross value of farm output including home processing was, therefore, estimated at 80 percent of the value given in Communist announcements. The value of subsidiary income in Communist announcements was used without adjustments.

b. Estimated to be about 14 percent of the value of farm crops at farm procurement prices.

c. Estimated to be 8 percent of the value of farm and subsidiary output on the basis of a study of rural income in Shantung Province.

d. Rent is estimated to be 5 percent of total farm income and 11 percent of urban income on the basis of income and expenditure studies.

e. Gross farm cash income (10.20 billion yuan) equals total cash purchases in rural areas (15.42 billion yuan [redacted] - see Table 44, p. 131, below, less the expenditure of persons classified as rural but not primarily employed in agriculture (estimated to be 5.42 billion yuan on the basis of employment data), plus estimated cash savings of 2 percent.

f. Taxes on food crops are given as less than 7 percent of gross agricultural output. Taxes on all crops are estimated at 9.1 percent of gross output. This estimate exceeds the figure for agricultural taxes included in the Chinese Communist budget by more than 1 billion yuan, reflecting the difference between the tax accounting price and the farm price used for valuing farm output.

g. Estimates at 2 billion yuan a year in the Chinese Communist press.

h. Obtained by deducting the imputed value of home-produced materials (4.77 billion yuan), gross farm cash income (10.20 billion yuan), and the value of agricultural taxes (3.63 billion yuan) from gross farm output (39.87 billion yuan).

50X1

S-E-C-R-E-T

S-E-C-R-E-T

Table 41  
Income Originating in the Nonagricultural Sector  
of Communist China  
1952

| <u>Billion Yuan in Current Prices</u>  |              |
|--|--------------|
| Retail sales   | 27.67        |
| Sales to government<br>for investment  | 8.13         |
| Sales to government<br>for services and military<br>establishments                 | 8.36         |
| Total sales  | <u>44.16</u> |
| Less:  |              |
| Purchases from farmers   |              |
| Taxes  | 3.63         |
| Cash purchases   | 10.20        |
| Gross value added for<br>producing sectors,<br>transport, trade,<br>and government | <u>30.33</u> |
| Rent <u>a/</u>   | 2.37         |
| Consumer services<br>including those in<br>rural areas by<br>nonfarmers <u>b/</u>  | 2.45         |
| Income originating   | <u>35.15</u> |
| Total output   | <u>35.15</u> |

a. 11 percent of income after subtracting total government income of 13.63 billion yuan.

b. Based on consumption expenditures for transport, medical, educational, and recreational services; for domestic and personal services the expenditures are based on estimated labor force in these occupations.

- 124 -

S-E-C-R-E-T

S-E-C-R-E-T

of this broad sector have been made assuming certain markups for trade and for commodity taxes. The sum of the individual estimates (presented in Table 42) can be compared to this over-all control figure. The more detailed estimates were necessary to move the indexes on the basis of commodity estimates.

Table 42

Income Originating in the Nonagricultural Sector  
(Excluding Consumer Services and Rent)  
of Communist China  
1952

Billion Yuan in Current Prices

---

| Sector   | Gross Value<br>(Including Indirect Taxes) | Value Added  |
|--|---|--------------|
| Modern industry<br>(except food processing)                | 17.66                                     | 6.37         |
| Food processing<br>(including meat<br>slaughtering)        | 8.52                                      | 1.00         |
| Handicraft (except food<br>processing)                     | 3.47                                      | 0.77         |
| Total industry   | <u>34.32</u>                              | <u>9.44</u>  |
| Modern transport<br>and telecommunications                 |   | 1.19         |
| Trade, native transport,<br>and other business<br>services |   | 10.96        |
| Construction   |   | 1.95         |
| Government   |   | 3.87         |
| Indirect taxes   |   | 4.00         |
| Total  |   | <u>31.41</u> |

S-E-C-R-E-T

The sum of the individual value-added estimates in Table 42 is 3.5 percent higher than the control figure for those sectors presented in Table 41. This difference is of such a small magnitude that the value-added estimates lend support to the control figure derived from the end-use estimate.

The sum of computed gross values of industrial commodities was 16 percent lower than the official figure for gross industrial production. The difference between the sum of the estimates and the official figure probably is due for the most part to the fact that part of handicrafts output could not be directly measured and that the producer prices derived from wholesale prices may have been too low. The official figure was therefore accepted as a measure of gross industrial output. The independent estimate of value added by trade was based on estimated markdowns of available city market prices and on a breakdown of expenditures based on data of state trading charges as percentages of total net commodity turnover in state trade.

For purposes of weighting indexes of output by sector of origin to estimate changes in GNP, the percentages of the total in Table 42 were applied against the control figure of 30.33 billion yuan.

Estimates of components of the nonagricultural sector are as follows:

1. Industry.

Wherever possible, the gross value of output of the components of the modern sector was obtained by pricing the physical output of industrial commodities and services. Considerable data are available on the output of leading commodities in the modern industrial sector. These production figures are subject to error but are quoted regularly in the Chinese Communist press and in many cases can be compared to prewar data and with data on available plant facilities. Price quotations for producer goods are fewer and less representative than those for agricultural commodities and consumer goods. In the case of some metals, world prices were used to determine the price of domestic output because a substantial portion of the output of these metals is exported. Other industrial subgroups could not be priced at all, and their gross value had to be estimated in indirect ways.

S-E-C-R-E-T

Value added for the various components was obtained in three different ways: (1) the direct valuation of wages and other factor costs; (2) the deduction of purchases of materials, transport services, and the like, from gross value; and (3) the use of pre-Communist Manchurian analogy. In order to obtain a measure of factor cost, the approximate value of indirect taxes was subtracted from total value added on the basis of commodity tax rates.

Direct estimates of gross value and costs were made for cotton textiles, electric power, and iron and steel. The gross value of output for coal, petroleum, nonferrous metals, ferrous metals other than iron and steel, industrial chemicals, cement, rubber products, cigarettes, paper and pulp, and printing was directly estimated, but the percentage of gross value that is value added is based either on an analogy to Manchurian industry in 1941 or on independent estimates. Engineering output was valued on the basis of a Communist statement that it constituted 5.2 percent of industrial output in 1952. Weapons and ammunition were valued in dollars and then converted on the basis of an estimated yuan-dollar ratio for such output. Gross value of miscellaneous textiles, ceramics other than cement, and chemicals other than industrial chemicals was estimated on the basis of their probable value in relation to those commodities within the general industry.

The absence of production information for some components of the food industries and the lack of an adequate basis upon which to allocate the output among modern industry, handicraft workshops, and individual handicraft restricts the usefulness of the food-processing measures. The indexes of flour, edible vegetable oils, and refined sugar were employed to project the food sector to 1960. The weights used were as follows: flour, 1.01 billion yuan, vegetable oils, 5.66 billion yuan; sugar, 2.99 billion yuan; and wine, grain polishing, and miscellaneous food-products, represented by the flour index, 4.13 billion yuan. Individual handicraft is estimated to account for 2.5 billion yuan by value in these categories.

Table 39\* presents the production indexes used and Table 43\*\* the gross value and the value-added weights used to derive gross value and value-added indexes for industrial output.

---

\* P. 118, above.

\*\* Table 43 follows on p. 128.

S-E-C-R-E-T

Table 43

Valuation of Industrial Production in Communist China  
1952

| Billion Yuan in Current Prices |                    |                    |
|--------------------------------|--------------------|--------------------|
| <u>Industry</u>                | <u>Value Added</u> | <u>Gross Value</u> |
| Metals                         |                    |                    |
| Nonferrous                     | 0.11               | 0.17               |
| Ferrous                        | 1.25 <u>a</u> /*   | 1.96               |
| Energy                         |                    |                    |
| Coal                           | 0.80               | 1.10               |
| Petroleum                      | 0.21               | 0.35               |
| Electric Power                 | 0.71               | 0.87               |
| Engineering                    | 0.63               | 1.41               |
| Military end items             | 0.20               | 0.68               |
| Food processing                |                    |                    |
| Modern                         | 0.29               | 2.50               |
| Handicraft workshops           | 0.41               | 3.50               |
| Industrial chemicals           | 0.07               | 0.27               |
| Rubber products                | 0.16               | 0.39               |
| Cement and limestone           | 0.10               | 0.19               |
| Lumber                         | 0.21               | 0.72               |
| Salt                           | 0.12               | 0.85               |
| Paper and pulp                 | 0.23               | 0.35               |
| Textiles                       |                    |                    |
| Cotton yarn                    | 0.45               | 2.33               |
| Cotton cloth (machine)         | 0.26               | 1.39               |

\* Footnotes for Table 43 follow on p. 129.



S-E-C-R-E-T

Table 43

Valuation of Industrial Production in Communist China  
1952  
(Continued)

| Billion Yuan in Current Prices |                    |                    |
|--------------------------------|--------------------|--------------------|
|                                | <u>Value Added</u> | <u>Gross Value</u> |
| Cotton cloth (handicraft)      | 0.31               | 1.59               |
| Other textiles (yarn index)    | 0.36               | 1.44               |
| Cigarettes                     | 0.22               | 1.15               |
| Printing <u>b/</u>             | 0.17               | 0.64               |
| Matches                        | 0.07               | 0.18               |
| Total                          | <u>7.34</u>        | <u>24.03</u>       |

- a. Including value added for metallurgical coke.  
b. Machine-made paper index used.

2. Individual Handicraft.

To estimate trends in the output of individual handicraft, the gross value series available from Communist aggregate figures was used for 1949, 1952-54, and 1957. The years 1950 and 1951 were interpolated on the basis of gross value for consumer goods from the industrial index. The year 1955 was assumed constant in relation to 1954, and a constant rate of increase from 1955 to 1957 was projected to 1960. Value added was estimated from sample data, and labor force income was assumed to be 30 percent of the gross value of output or 2.19 billion yuan in 1952.

3. Modern Transport and Telecommunications.

The index for modern transport was derived from an estimated value added per ton-kilometer and per passenger-kilometer for rail, highway, and water transportation. To this was added an index of estimated gross revenue for posts and telecommunications with a value-added weight of 0.14 billion yuan. The value added for modern transport and communications totaled 1.43 billion yuan in 1952.

S-E-C-R-E-T

4. Construction, Government, and Other Services.

Value added by construction was estimated from wages and the relation of profits to wages and projected by the index for cement output. An index for government services was constructed from budget data for nonmilitary government administration and deflated by a price index. For military expenditures, trends in the number of men under arms were used against estimated 1952 budget expenditures for pay and allowances. Miscellaneous consumer services and urban house rent were projected by the trade index, and rural house rent was projected by the index for agriculture.

III. Indexes by End Use.

Table 44\* presents estimates of GNP by end use and summarizes the estimates introduced in Table 40 and Table 41.

The end-use estimate of Communist China's GNP in 1952 is calculated from: announced retail sales, the government budget, the imputed value of farm home consumption, and estimates of house rent and miscellaneous services. Announced retail sales include sales to consumers, sales of production materials to peasants, and goods sold to enterprises for their own use (which is reported as not large). These totals are subdivided into urban and rural sales. The budget forms the base for estimates of government investment and government purchases. The imputed value of farm home consumption is estimated indirectly by subtracting the value of imputed home production materials and cash income (based on the rural retail sales figure) from the estimated value of farm output at farm prices. Finally, the estimate of house rent and miscellaneous consumer services was made on the basis of typical rural and urban consumption expenditures together with an estimate of the portion of the labor force in these personal consumer services.

A. Index of Consumer Goods.

The index of estimated final sales to consumers is based on allocations of output by value which is also consistent with reported consumption patterns in rural and urban areas. The components of the index are as follows: food, 64.0 percent, projected by the food crops index; clothing, 9.8 percent, projected by the

---

\* Table 44 follows on p. 131.

S-E-C-R-E-T

Table 44

Estimated Gross National Product in Communist China  
 by End Use  
 1952

Billion Yuan in Current Prices

Consumption expenditures

Consumer goods

|  |       |       |  |
|--|-------|-------|--|
| Farm imputed home consumption <u>a</u> / <sup>*</sup>  |       | 21.27 |  |
| Cash purchases by farmers and<br>others in rural areas | 15.42 |       |  |

Less:

|   |      |  |  |
|---|------|--|--|
| Purchases of raw materials,<br>tools, and investment items<br>by farmers <u>b</u> / |      |  |  |
| Investment items  | 2.00 |  |  |
| Raw materials for agriculture<br>and supplementary industry                         | 3.19 |  |  |

|   |             |       |  |
|---|-------------|-------|--|
| Subtotal nonconsumption cash<br>purchases | <u>5.19</u> | -5.19 |  |
|---|-------------|-------|--|

|  |              |  |       |
|--|--------------|--|-------|
| Cash purchases in rural areas<br>of consumer goods | <u>10.23</u> |  | 10.23 |
| Cash purchases in urban areas <u>b</u> /           |              |  | 12.25 |

|                                      |  |              |       |
|--------------------------------------|--|--------------|-------|
| Total purchases of consumer<br>goods |  | <u>43.75</u> | 43.75 |
|--------------------------------------|--|--------------|-------|

Consumer services (other than government-  
supported)

|                       |       |      |  |
|-----------------------|-------|------|--|
| House rent <u>c</u> / | Rural | 1.68 |  |
|                       | Urban | 2.37 |  |

\* Footnotes for Table 44 follow on p. 132.

S-E-C-R-E-T

Table 44

Estimated Gross National Product in Communist China  
by End Use  
1952  
(Continued)

Billions Yuan in Current Prices

|  |              |                    |
|--|--------------|--------------------|
| Miscellaneous consumer services                                  | 2.45         |                    |
| Total consumer services  | <u>6.50</u>  | 6.50               |
| Total consumption expenditures                                   |              | <u>50.25</u> 50.25 |
| Government expenditures  |              |                    |
| Investment   | 8.13         |                    |
| Military expenditures  | 5.01         |                    |
| Education, health, and propaganda<br>including student subsidies | 1.78         |                    |
| Administrative expenditures                                      | 1.57         |                    |
| Total government expenditures                                    | <u>16.49</u> | 16.49              |
| Private investment on farms                                      | 2.00         | 2.00               |
| Total GNP at market prices                                       |              | <u>68.74</u>       |

a. Obtained by deducting the imputed value of home-produced materials (4.77 billion yuan), gross farm cash income (10.20 billion yuan) and the value of agricultural taxes (3.63 billion yuan) from gross farm output (39.87 billion yuan).

b. Investment estimated at 2 billion yuan a year for peasants out of own income (from the Communist press). 8 percent of the value of farm and subsidiary output is estimated to be purchases of materials for current production (based on a study of Shantung rural income).

c. Based on income and expenditures studies of rural and urban areas, rent in rural areas is estimated at 5 percent of net farm income and in urban areas 11 percent of urban income.

S-E-C-R-E-T

yarn index; fuel, 2.0 percent, projected by indexes for fuelwood, kerosine, and coal; tobacco, 3.0 percent, projected by the cigarette index; wine and other food products, 3.0 percent, projected by the food crop index; and miscellaneous (including printing), 3.7 percent, projected by the paper index.

B. Index for Investment.

The aggregate index for investment is composed of an index for investment goods, the trade index, and the index for agricultural output. The investment component of GNP may be subdivided as follows: private farm investment, 2.00 billion yuan; government investment, 8.13 billion yuan. The latter is estimated to include the following: basic construction, 4.55 billion yuan; increased inventories, 2.40 billion yuan; and capital repairs, 1.18 billion yuan.

The index for investment goods, employed to project basic construction and capital repairs, is a weighted composite of steel, cement, lumber, and engineering output. The indexes for agricultural output and trade, used to project private farm investment and inventories, respectively, are described above.

C. Index for Government Purchases.

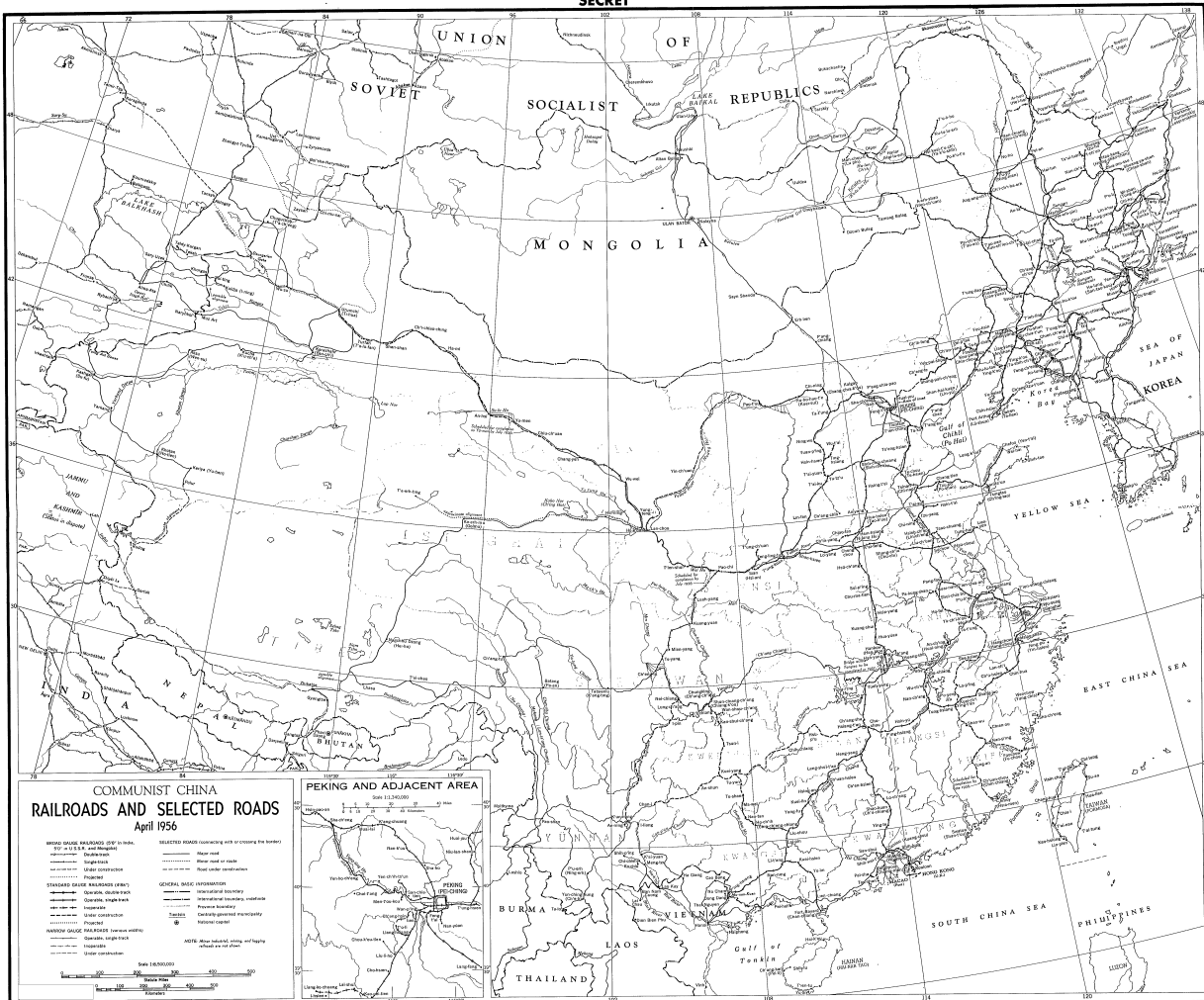
The composite index for government purchases is constructed from an index for military expenditures and an index for nonmilitary expenditures. The four components of the latter and their respective 1952 values are as follows: administrative expenditures, 1.31 billion yuan; cultural expenditures, 0.29 billion yuan; educational expenditures, 0.57 billion yuan; and medical expenditures, 0.26 billion yuan. The components of the index for military expenditures and their 1952 weights are as follows: personnel, 1.77 billion yuan; weapons and ammunition domestically produced, 0.68 billion yuan; weapons and ammunition imported, 0.54 billion yuan; petroleum, 0.34 billion yuan; electrical equipment, 0.29 billion yuan; and transport and telecommunications, 0.28 billion yuan.

**Page Denied**

Next 9 Page(s) In Document Denied



**SECRET**



**SECRET**



**SECRET**

**SECRET**