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INTELLIGENCE MEMORANDUM

ESTIMATED ECONOMIC GAINS TO THE SOVIET BLOC  
IN NORTH VIETNAM

CIA/RR IM-402

25 October 1954

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FOREWORD

This memorandum outlines generally the level of economic activity in the territories of Indochina placed under Viet Minh control by the Geneva Conference. Estimates are made of the extent of agricultural self-sufficiency and of the level of activity of industry, principally of mining, textiles, cement, and transportation. The trading structure of the North Vietnam area is outlined as it functioned before and during the recent hostilities. The probable benefits to the Soviet Bloc of the inclusion of the Viet Minh area within the Bloc are discussed. A comparison is drawn between the prospects for development of North and South Vietnam into self-sustaining economic entities. An estimate of probable economic developments through 1957 is made.

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Indochina: Natural Resources and Processing Centers  
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CIA/RR IM-402  
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ESTIMATED ECONOMIC GAINS TO THE SOVIET BLOC  
IN NORTH VIETNAM\*

Summary and Conclusions

The partitioning of Vietnam, decided upon at the Geneva Conference 21 July 1954, has split a natural economic entity into two parts. The area now to be controlled by the Viet Minh has relatively greater potentialities for developing a viable partially industrialized economy, because it is richer in coal and mineral resources; already possesses cement, textile, and food-processing industrial installations; and, in addition, has fair possibilities of establishing self-sufficiency in food production. South Vietnam, on the other hand, is an almost exclusively agricultural economy, with an exportable rice surplus and rubber plantations producing for export, but with very little in the way of mineral resources and with few industrial facilities of consequence except rice mills, rubber factories, distilleries, and shipyards.

Reports of the 1954 "5th month" rice crop in North Vietnam, which may have been as low as 50 percent of normal, indicate that there may be the worst famine in this area since 1945. The consequent reduction of at least 25 percent of the total 2.4 million tons of rice produced from the two annual rice crops in 1953 would reduce per capita availability from indigenous production to about 97 kilograms. Since domestic requirements are estimated at 200 to 250 kilograms per person per year, North Vietnam must either

\* The estimates and conclusions contained in this memorandum represent the best judgment of the responsible analyst as of 15 September 1954. This memorandum does not include any estimate of possible gains to the Viet Minh from their acquisitions from North Vietnam residents and institutions of holdings of old French-issued Indochinese piaster currency.

\*\* The 5th month crop, harvested in May, is the first crop of the year.

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

\*\*\*\* Crop production figures are in terms of paddy rice, whereas consumption is in terms of milled rice (which represents a 75-percent extraction rate).

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suffer severe restriction of consumption or receive imports up to 500,000 tons of rice from other areas, including Communist China, which is not in a position to supply such an amount readily. North Vietnam normally obtains grain from South Vietnam and has only limited potentialities for increasing indigenous production and availability of food through long-term improvements in agriculture and methods of distribution.

North Vietnam has the essential resources for small-scale industrial development and for sizable exports of coal, nonferrous metals, and cement. It contains most of the known mineral resources of Indochina, but except for coal these had not been developed to significant proportions for purposes of industrialization under the French.

Generally, the inclusion of the Viet Minh areas into the Soviet Bloc will not mean the addition of any vitally important natural resources of which the Bloc does not already control adequate supplies. Any substantial production from North Vietnam's mineral resources other than coal can be made available to the Bloc only at the cost of considerable investment in transportation, mining, and processing facilities.

Communist China will receive more benefit from the inclusion of the area in the Soviet Bloc since important additional supplies of cement and coal will become available to it, as well as a convenient railroad route for facilitating exploitation of Southwest China's tin and copper resources and for importing equipment for further development of that area. The two railroad links with South China, when restored, will assist North Vietnam's development and facilitate possible future transport of military supplies from the Bloc.

North Vietnam's proved iron reserves are estimated at only 5.7 million tons, and iron mining was developed mainly for the purpose of export of iron ore to Japan. Only small amounts were processed into iron and steel products, in local native furnaces, the cement plant, and the Bac Son iron and steel plant. Unless further geological surveys prove otherwise, North Vietnam will not have the indigenous resources for an adequate iron and steel industry.

Production of ferroalloy metals, notably manganese, tungsten, and chrome, from the important deposits of North Vietnam has virtually ceased since World War II. Under stable conditions it



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is possible that as much as 10,000 tons each in metal content of marketable manganese and chrome and 700 tons of tungsten ore may be produced per year by 1957 for export to the Soviet Bloc. These are relatively unimportant, however, in comparison with reserves and production in the Bloc. Manganese and chrome may be of future importance to the Bloc for bartering purposes, or when Communist China's requirements exceed exploitation of its own deposits. Of the nonferrous minerals, North Vietnam has reserves of zinc, bauxite, and tin which would be of little significance in the Bloc supply position but perhaps would be of some use in improving North Vietnam's trade position. The zinc smelter at Quang Yen, if restored, would be of possible benefit to Communist China, which has inadequate facilities for the conversion of zinc ore to metal. Possibly 8,000 tons of zinc metal and 1,250 tons of tin metal in concentrates may be produced per year by 1957.

The phosphate industry in North Vietnam will be of great value to the Viet Minh in its future program to increase food production, particularly in view of the fact that there is a phosphate fertilizer factory in Haiphong. North Vietnam is not self-sufficient in salt, and, pending expansion of the existing salt field, the large population probably will require imports.

The estimated reserves of coal in North Vietnam are 20 billion tons. The local Indochina market has been comparatively limited, and coal has been an important export, especially to Japan. The accretion of the Indochina coal mines and reserves to the Soviet Bloc adds to Soviet resources a significant volume of high-grade anthracite coal (with lesser amounts of bituminous and lignite), which is particularly well located for transportation by water to China and other Asiatic countries and well adapted to supplement and complement the coal presently being mined in China.

The acquisition by the Viet Minh regime (in May 1955) of the Haiphong Cement Plant, the largest cement producer in Southeast Asia, with an installed annual capacity of 400,000 tons, will provide a relatively significant source of supply to Communist China, whose requirements for cement for immediate construction purposes are substantial.

The centers of the electric power industry in North Vietnam are at Hanoi and Haiphong and total 41,000 kilowatts (kw), or three-fourths of the total North Vietnam capacity of 55,000 kw. Indications, however, are that the electric power facilities have

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not recently been utilized at nearly their optimum capacity and that a significant portion of the supply has been for lighting and electric fans. Although a considerable hydroelectric potential exists, a total capacity of less than 1,000 kw is currently installed at 1 zinc mine and 2 tin mines. The installation of other than the smallest units in the immediate future is unlikely, because of the costs and time involved.

Most of the basic needs of the population of North Vietnam, as regards consumer goods, are met through the efforts of local artisans, although the two cotton mills of Indochina, producing cotton fabrics, yarn, and cotton blankets, are located in North Vietnam. Raw cotton supplies have been obtained entirely from imports, recently from the US.

North Vietnam contains no industrial production facilities which can be considered important or significant to the machine-building production of the Soviet Bloc as a whole. Although the area is well endowed with both material and human resources for greater industrialization, the machine-building industries are still in the planning or rudimentary stages.

The weapons and ammunition industry of North Vietnam is very limited, production techniques having been largely improvised. It is evident that total production has met only a fraction of past Viet Minh needs.

North Vietnam possesses the base of a well-developed transportation system involving railroads, highways, and water, which should be adequate for any immediate exploitation of the resources now under its control. Rehabilitation of the area's railroad system, particularly to Communist China and also to the Soviet Bloc, will be expedient both strategically and economically. The chief requirements for these purposes will be railroad construction equipment and rolling stock, and the relatively small amounts needed are within the capability of Communist China and the USSR to supply. By connecting the Chinese railroad system to that of North Vietnam north of Lang Son, the Bloc will establish through rail service from the USSR through Communist China to the Southeast Asian Communist frontier. The restoration of the Haiphong-Lao Kay line to Yunnan Province in Southwest China will probably receive high priority as a means of further developing and exploiting the tin and copper resources of Yunnan Province in Communist China.

Combat destruction and widespread sabotage have accounted for much of the decline of the rapid communications services of North

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Vietnam, and intercity wire-line facilities are almost nonexistent today. In order to restore the existing facilities so that they can meet the immediate requirements of the Viet Minh regime, the regime will have to obtain from the Soviet Bloc trained manpower, communications and electric power equipment, some heavy machinery items, and raw and finished materials.

The total population of North Vietnam in 1954 is estimated to be about 14 million, or about 56 percent of the population of all Vietnam. Nearly 70 percent of the population reside in the Red River delta or coastal areas, which make up only about a quarter of the land area of North Vietnam. About 90 percent of the population is dependent on agriculture for a livelihood, but many of those persons working in the mines or industrial installations are part of an agricultural population, appearing to work in the plants only to supplement their agricultural income. Most of the industrial labor force is semiskilled or unskilled. With only meager facilities for the training of skilled workers, the withdrawal of French technicians will create for North Vietnam the problem of a severe shortage of skilled and managerial personnel.

The economic organization of the Viet Minh regime is typical of that of a Communist state, and the policy of the regime in general appears to follow closely the lines of Mao Tse-tung's procedure in China in applying the principles of Marxism-Leninism to domestic conditions. North Vietnam may be expected to emulate Communist China's example of the last several years in the implementation of planned economic development on the Soviet model. Technical assistance from Communist China or other Bloc countries will be required to accomplish such development.

North Vietnam has been a deficit area in respect to foreign trade. During the postwar period, 1949 through 1951, North Vietnam controlled only 6 percent of the exports and 22 percent of the imports of Indochina as a whole. The pattern of external trade no doubt will be oriented toward the Soviet Bloc and will follow the typical one of an underdeveloped area dependent on a few basic commodities in trade. Grains, coal, and cement accounted for more than three-fourths of the value of exports from North Vietnam during 1936 through 1938, while textiles and metal manufactures represented more than three-fifths of all imports. The Viet Minh has received material aid from Communist China since at least early 1950, and it has been fairly well established that Chinese Communist personnel have been operating with the Viet Minh.

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Though the Viet Minh Communist policy is not known, the Communists may consider this area important enough to encourage some industrialization, requiring the importation of capital goods from the Soviet Bloc and increasing, though not significantly, the drain upon Bloc resources.

Of the two areas of Vietnam, North Vietnam possesses by far the greater potential for a viable industrial economy with its well-balanced resource base even though it needs technical aid and investment funds to develop it, and even though the rice deficit probably will render it dependent upon some grain imports to support its population.

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I. Introduction.

The conditions for normal production and economic development have not existed in North Vietnam since prior to 1941. The Japanese wartime occupation was followed by Chinese occupation at the end of World War II, and from 1946 to the time of the French defeat the area was the field of a civil war between the Viet Minh forces and the French and French-supported Vietnamese government.

Under French rule in Indochina the development of heavy industry was not encouraged, mainly because it would compete with interests of the homeland. In the northern area industrial activity was limited to the exploitation of the coal resources and deposits of some metallic minerals and to the development of agricultural and mineral processing plants and a few factories producing consumer goods for local use. These facilities are located primarily in the Red River delta area, which the French forces controlled during the hostilities, and which has always been the major source of agricultural production in North Vietnam. Since these resources were denied to the Viet Minh forces, they had to rely upon Communist China and the Soviet Bloc for economic and military support and on clandestine procurement of grain and medical supplies in French-controlled areas. Now that the Viet Minh, as a result of the Geneva agreements, is about to obtain control of the economic resources of Vietnam north of the 17th Parallel, it is important to assess the economic assets of the area in the new context

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(a) of the association of the Democratic Republic of Vietnam (DRV) with the Soviet Bloc, and (b) of the prospective exploitation and development of the resources of North Vietnam under Communist methods of planning and economic control. It is also of interest to examine the relative prospects of the DRV and of South Vietnam in respect to the viability of the two areas as separate entities.

II. Productive Resources.

A. Agricultural Output in 1953 and Trends since 1946.

Agriculture, the mainstay of the Indochinese economy, provides a livelihood for about 90 percent of the total population of the country. Rice is the principal crop as well as the main staple of diet and the chief export. North Vietnam currently does not produce enough rice to support its estimated population of 14 million, while the southern part of Vietnam produces a surplus for export. Historically the North has always depended upon the South to make up its deficit, particularly in times of drought. In 1953 the estimated per capita production of milled rice in North Vietnam was 126.2 kilograms (kg)\* while on the basis of the 1953-54 estimated crop, the per capita production for South Vietnam alone was approximately 255.3 kg. 1/\*\* The yearly rice requirements have been estimated to be between 200 and 250 kg per capita. 2/ Because rice production in the North is not sufficient to support the estimated population of 14 million, a poor harvest -- such as not infrequently occurs in the Red River delta -- would further aggravate the situation and would necessitate the importation of even greater quantities of rice. This rice could be made available in the course of normal trade with South Vietnam or otherwise from Communist China at the expense of the latter's own consumption. As a matter of fact, the entire area of North Vietnam underwent a dry winter in 1953-54, and the majority of the spring crops appear to have been severely damaged. 3/ There are prospects that the "5th month" crop of rice may be as low as 50 percent of normal, which would mean the worst crop since the famine year of 1945. 4/ According to information currently available this would mean a reduction of at least 25 percent of the total normal crop (there are two rice crops) or an approximate estimated production of 1,810,000 tons of rice for 1954, or a per capita production of approximately 97 kg.

\* See Table 4, p. 12, below.

\*\* Footnote references in arabic numerals are to sources listed in the Appendix.

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The observed eating habits of the northern Vietnamese cast considerable light on their varying standards of living from season to season and year to year. Prior to the main harvests, when the rice supply from the previous crop is exhausted and the new harvest has not yet come in, there appears to be recurring death and famine. In general, the Tonkin peasant eats only 2 meals per day, and only in times when the workload is heavy does he eat 3 substantial meals a day. When food runs short and little work has to be performed, he attempts to adapt himself by eating only once a day, sleeping long hours, and reducing as much as possible his expenditure of energy. He eats, if not to satisfaction, at least enough to keep fit when work requires during certain times of the year. When there is scarcity, he consumes anything he can find which is edible, which besides normal kinds of food includes worms, water insects, locusts, flies, ant eggs, snails, herbs, and other forest products. Undernourishment is common in the area, and localized famines occur frequently.

Thus the average food supply position of North Vietnam is relatively disadvantageous compared with that of South Vietnam. It is believed, however, that rice production may be increased somewhat in North Vietnam within a year or two, if peace is maintained and if intensive irrigation, other agricultural improvement programs, and conversion of other lands to rice are undertaken by the Viet Minh regime. Increased production and controlled distribution of chemical fertilizers (utilizing phosphate from the mines near Lang Son and Lao Kay) would, for example, help to boost production. North Vietnam, however, has a lower potential for increased rice production than South Vietnam.

Other major food crops produced in North Vietnam include corn, sugar, sweet potatoes, and manioc. Table 1\* shows the production of the principal agricultural commodities for the years 1937-41 and 1946-53. It will be noted that rice and sugar production have increased slightly over the years, while corn production has decreased drastically from 225,000 tons in 1937 to 64,000 tons in 1953. The cultivation of corn was promoted by the French to satisfy fodder requirements of metropolitan France, and over 80 percent of the total Indochina prewar crop was exported. <sup>5/</sup> It may well be that the acreage devoted to the production of this

\* Table 1 follows on p. 9.

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Table 1

Estimated Production of Rice, Corn, Sugar, Sweet Potatoes, and Manioc  
in North Vietnam  
1937-41 and 1946-53

Thousand Metric Tons

<u>Year</u>	<u>Rice <sup>6/</sup> (Paddy)</u>	<u>Corn</u>	<u>Sugar <sup>7/</sup> (Raw)</u>	<u>Potatoes <sup>8/</sup></u>	<u>Manioc <sup>9/</sup></u>
1937	2,240	225	22.4	N.A.	N.A.
1938	2,240	225	22.4	N.A.	N.A.
1939	2,176	225	22.4	131	45
1940	2,208	117	23.4	N.A.	N.A.
1941	2,176	117	23.4	N.A.	N.A.
1946	1,834	102	N.A.	N.A.	N.A.
1947	2,279	59	N.A.	N.A.	N.A.
1948	2,240	59	N.A.	N.A.	N.A.
1949	2,122	59	28.0	150	45
1950	2,238	59	27.7	150	45
1951	2,412	64	27.3	150	45
1952	2,412	64	27.3	150	45
1953	2,356	64	27.3	150	45

commodity may be converted to some other food crop which would be more acceptable to the indigenous population and would supplement the main diet of rice. Kidney beans and soybeans, as possible alternative crops, are reported to be even now the most important source of protein in the Indochinese diet after rice and fish. <sup>10/</sup> In any case, it is evident that the low average food balance of North Vietnam based on indigenous production need not be regarded as an irremediable condition.

Other agricultural commodities produced in North Vietnam include peanuts and peanut oil, sesame seed and oil, soybeans, tea, cottonseed oil, castor beans and oil, tobacco, and raw cotton. Peanut production, which reached an estimated peak of 9,696 tons <sup>11/</sup> in 1940, dropped to 4,927 tons <sup>12/</sup> in 1953. Tobacco production dropped from an estimated 4,162 tons in 1939 to 1,805 tons in 1953. Tea production dropped from an estimated prewar average of 7,120 tons <sup>13/</sup> to an estimated production of

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5,340 tons 14/ in 1953. Table 2 indicates that fuelwood production in North Vietnam is now approximately one-third of what it was in 1938, while industrial wood production is now one-fourth of what it was then.

Table 2

Estimated Production of Fuelwood and Industrial Wood  
in North Vietnam  
1938, 1940, and 1950-52

Year	Thousand Cubic Meters	
	Fuelwood <u>a/ 15/</u>	Industrial Wood <u>b/ 16/</u>
1938	614	385
1940	614	385
1950	327	78
1951	277	88
1952	233	98

a. The geographical breakdown for fuelwood was calculated from a total fuelwood production for Vietnam which was broken down for the area above and below the 17th Parallel on the basis of prewar and postwar population estimates for these areas.

b. The geographical breakdown for industrial wood is based on a total industrial wood production for Vietnam which was broken down for the area above and below the 17th Parallel on the basis of the total controlled forest acreage in Vietnam during the prewar period. It was estimated that about 40 percent of the total industrial wood produced in Annam was produced north of the 17th Parallel, based on numerous vegetation and forestry maps.

Livestock raising has been a minor factor in Indochinese agriculture, and meat is relatively unimportant in the diet. 17/ In the past, fish has supplied the bulk of animal protein. Table 3\* indicates

\* Table 3 follows on p. 11.

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that total estimated production of meat in North Vietnam in 1951 was one-fifth of 1935-39 average production. Footnote a of Table 3 also shows the considerable drop in the fish catch. Unless general fishing conditions have changed radically, the reported 60,000-ton salt water fish catch for 1930 in the Gulf of Tonkin and Northern Annam, together with the potential for increased raising of fresh water fish in ponds, may serve as some indication of the program which may be resorted to by the Viet Minh regime to increase this important source of food for the Indochinese diet.

Table 3

Estimated Production of Meat  
in North Vietnam a/ 18/  
1935-39 and 1949-51

Item	Thousand Metric Tons			
	1935-39 Average	1949	1950	1951
Beef	11	2	2	2
Carabao	11	1	1	1
Pork	100	13	22	22

a. The data on fish catch in Indochina and North Vietnam are extremely sparse. It has been reported that 60,000 tons of salt water fish was the catch for the Gulf of Tonkin and Northern Annam and it was estimated that the salt and fresh water catch for Vietnam in 1940 was 180,000 tons. 19/ In 1953 the Embassy estimated that this catch had been reduced to 30,000 tons.

Table 4\* shows the principal items in the estimated production of food per capita in North Vietnam in 1953. It will be observed that these figures are based on production only and do not allow for exports, imports, stocks, and nonfood uses. As a partial picture of food resources per capita in North Vietnam, Table 4 suggests that on the whole the average availability of food per capita will not be sufficient to support the population at its previously accustomed level

\* Table 4 follows on p. 12.

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of sustenance. This problem, however, could be overcome with improved methods of distribution, increased food production, and grain imports.

Table 4

Per Capita Production of Principal Items of Food  
in North Vietnam a/  
1953

<u>Item</u>	<u>Kilograms per Capita</u>
Rice (Milled)	126.2
Corn	4.6
Sugar (Raw)	2.0
Sweet Potatoes	10.7
Manioc	3.2
Peanuts (Shelled)	.24
Sesame	.08
Soybeans	.16
Meat	1.6
Fish	2.1

a. Does not include wheat flours, pulses, white potatoes, fats and oils, vegetables, fruits, poultry, eggs, and milk which in 1951-52 in Indochina as a whole were estimated to be about 170 kilograms per capita. 20/ The above data are based solely on production and do not include estimates of stocks, trade, or nonfood uses. Only processed fish are included; unprocessed, fresh water fish are not included.

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B. Industrial Output.\*

1. Ferrous Metals.

a. Iron Ore.

As of 1951, the total well-established iron ore reserves in Indochina are estimated to be only 5.7 million tons. 21/ The few deposits which have been economically significant in the past are all located north of the 17th Parallel, primarily in the Thai Nguyen area (21°35' N - 105°57' E). The ores of this deposit are of high grade, containing from 55 to 66 percent iron, but are rather limited in quantity. Iron mining in Indochina after 1936 was developed largely for the export of iron ore to Japan. In fact, aside from small quantities consumed by local cement plants, native furnaces, and the Bac Son iron and steel plant, Japan has been the chief historical consumer. Table 5 illustrates the relatively small production of iron ore in Indochina. 22/

Table 5

Production of Iron Ore in Indochina a/  
1937-45

Metric Tons			
<u>Year</u>	<u>Amount</u>	<u>Year</u>	<u>Amount</u>
1937	33,000	1942	63,000
1938	130,000	1943	80,600
1939	134,700	1944	22,000
1940	32,400	1945	7,900
1941	52,400		

a. Iron content, 50 to 70 percent.

Postwar iron ore production has been of very minor significance. Although the French had ambitious plans for expanding iron mining, the continuation of hostilities in the area of the iron ore deposits prevented the execution of these plans. The value of

\* See the map, Indochina: Natural Resources and Processing Centers, 1954, inside back cover.

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Indochina's iron ore resources to Communist China and/or to the Soviet Bloc is questionable.\* Unless further geological surveys prove otherwise, North Vietnam cannot be regarded as a significant source of iron ore for itself or for any of the Bloc countries.

b. Iron and Steel.

Indochina's very small iron and steel industry, as well as the basic raw materials for it, lies north of the 17th Parallel. Other than negligible native iron furnaces, the only known production of pig iron and steel was from a plant at Bac Son (21°53' N - 106°21' E), which was operated in 1942, 1943, and 1944 by the French Tonkin Coal Mining Company. Production at this plant varied from 1,100 tons of pig iron in 1942 to a high of 2,900 tons of pig iron and 600 tons of steel in 1943.

A 1948 survey made by a French commission for the modernization of Indochina indicated the existence of a raw material base, with the exception of coking coal, sufficient to support an iron and steel industry capable of producing 100,000 tons of pig iron and 60,000 tons of steel per year. 23/ The development of mining and transportation facilities would be necessary, 24/ and unless the problem of using anthracite coal instead of coke in the blast furnaces is solved, any future steel industry of Communist-held Indochina would have to import 125,000 to 400,000 tons of coke annually. The future development of a steel industry of any size by the Communists would require considerable investment and provision of equipment by the USSR and its Satellites.

c. Ferroalloys.

Among its mineral resources, Indochina possesses several ferroalloy metals, notably manganese, tungsten, and chrome, the important deposits of which are all located north of the 17th Parallel. Production of all these minerals has virtually ceased since World War II. Until such time as a steel industry is developed in North Vietnam the importance of these metals will be limited to export purposes.

\* See also VII, below.

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(1) Manganese.

Reserves of manganese ore in Indochina have been estimated at 25,000 tons, but exploitation would require extensive field investigation to prove the deposits for further development. 25/ The most important occurrences of the deposits are to be found in Vinh (Nghe An)-Ha Tinh (18°40' N - 106°00' E). Production of manganese began in 1935 and reached its peak in 1944 when 7,700 tons were produced. 26/ Under stable conditions at least 10,000 tons of marketable ore could probably be extracted. Inclusion of Indochinese manganese reserves into the Bloc total is relatively unimportant because of the large reserves already controlled by the Bloc.\*

(2) Chrome.

Measured and inferred chromite reserves of the Co Dinh deposit near the village of Nong Cong (20°00' N - 105°30' E), in Thanh Hoa Province, are estimated at 1.7 million to 2 million tons of recoverable metal. 27/ In 1939, this mine produced 2,000 tons. During the Japanese occupation, production rose to 12,400 tons of 45-percent concentrates for 1943-44 inclusive. 28/ In general, North Vietnam may have the potential to produce 50,000 tons of chromite concentration annually. 29/ Chromium ore reserves may be of future importance to Communist China when its requirements exceed exploitation of its own minor deposits.\* 30/

(3) Tungsten.

Known tungsten ore reserves in Indochina are quite small, the only deposits of commercial quality being located in the immediate area surrounding Tinh Tuc (22°39' N - 105°51' E). Production of tungsten concentrates is shown in Table 6.\*\*

There are several reports indicating that the Viet Minh with Chinese Communist aid have been operating these mines. 31/ In view of Communist China's large reserves of tungsten, inclusion of the limited Indochinese tungsten reserves within the Soviet Bloc appears to be of negligible significance to Communist China or the Bloc.\*

\* See also VII, below.

\*\* Table 6 follows on p. 16.

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Table 6

Production of Tungsten Concentrates  
in Indochina a/ 32/  
1937-42

Metric Tons			
<u>Year</u>	<u>Amount</u>	<u>Year</u>	<u>Amount</u>
1937	580	1940	361
1938	553	1941	310
1939	486	1942	200

a. 66-percent tungsten.

2. Nonferrous Minerals.

The greatest period of production for nonferrous metals in Indochina occurred just before and during the period of Japanese occupation. Most of the deposits of these metals are located in or near Viet Minh-controlled territory, and consequently there has been no known production since 1946.

a. Zinc.

Zinc, the deposits of which are located in North Vietnam, is the only major nonferrous metal produced in Indochina which has occupied a position of importance in the economy of the country. A smelter built in Quang Yen near Haiphong, in 1924, with a capacity of 6,000 metric tons of metallic zinc, was reported to have been destroyed or severely damaged by bombing in 1943. 33/ Table 7\* gives the production of zinc in Indochina in terms of metal content and smelter output.

The acquisition of Indochina's zinc industry by the Viet Minh would be of possible benefit to Communist China, particularly if the smelter at Quang Yen were restored. Because facilities in China are inadequate for the conversion of zinc ore to metal, China imports zinc metal from Poland. Aside from this, the

\* Table 7 follows on p. 17.

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rehabilitation of the Indochina zinc industry would have little significance in respect to the Soviet Bloc zinc supply position.\*

Table 7

Production of Zinc in Indochina  
in Terms of Metal Content a/ 34/ and Smelter Output 35/  
1937-43

<u>Year</u>	<u>Amount</u>	
	<u>Metal Content</u>	<u>Smelter Output</u>
1937	5,000	4,200
1938	5,100	4,500
1939	6,978	5,750
1940	6,753	6,090
1941	7,343	6,240
1942	6,119	5,270
1943	4,625	4,140

a. 100-percent zinc metal.

b. Bauxite. 36/

Indochina's reserves of bauxite are estimated at about 300,000 tons; 200,000 tons are located near Dong Dang (21°57' N - 106°42' E) and 100,000 tons near Hai Duong (20°56' N - 106°19' E). Production has been irregular, as shown in Table 8.\*\*

c. Tin.

Indochina has long produced small quantities of tin (see Table 9\*\*). The producing centers are Tinh Tuc, in North Vietnam, and Nam Pathene, in Laos. 37/

\* See also VII, below.

\*\* Tables 8 and 9 follow on p. 18.

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Table 8

Production of Bauxite in Indochina  
1936-43

Metric Tons			
<u>Year</u>	<u>Amount</u>	<u>Year</u>	<u>Amount</u>
1936	30	1940	118
1937	7,000	1941	10,200
1938	160	1942	12,800
1939	330	1943	360

a. 50- to 60-percent alumina,  
2- to 14-percent silica, and up to  
26-percent iron oxide.

Table 9

Production of Tin in Indochina a/ 38/  
1937-43

Metric Tons			
<u>Year</u>	<u>Amount</u>	<u>Year</u>	<u>Amount</u>
1937	1,602	1940	1,495
1938	1,625	1941	1,316
1939	1,490	1942	1,045
		1943	663

a. Tin concentrates (tin content).

For the period from 1933 to 1940, the average annual output of tin was 1,384 tons. Based upon scattered reports of individual mines, it is estimated that 40 to 50 percent of the total production was achieved in North Vietnam and 50 to 60 percent in Laos. Using 45 percent as an average figure, the output of Tonkin for the 1933-40 period would be 620 tons of contained tin per year. On the basis of limited reserves and past production records, a

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maximum output of 1,000 to 1,500 tons of contained tin in concentrates is anticipated for North Vietnam. In view of the large Chinese tin reserves and rapidly growing Chinese output, together with the expected reconstruction of the railroad from Haiphong to Kunming, the significance of the Vietnam tin potential is comparatively unimportant.\*

d. Phosphates.

Most of Indochina's major phosphate deposits are located above the 17th Parallel. The most important of these is at Lao Kay, near the Chinese border. Estimates of reserves range from 10 million tons of 40-percent phosphate and 40 million tons of varying grades to 100 to 200 million tons of all grades. The Japanese raised production at Lao Kay to 120,000 tons in 1942. Other less important deposits are found in Lang Son and Thanh Hoa Provinces. <sup>39/</sup> Table 10 gives the production of phosphate in Indochina.

Table 10

Production of Phosphate in Indochina <sup>40/</sup>  
1937-43

Metric Tons			
<u>Year</u>	<u>Amount</u>	<u>Year</u>	<u>Amount</u>
1937	20,252	1941	100,000
1938	37,341	1942	150,000
1939	35,694	1943	40,000
1940	22,266		

Phosphates represent an important source of fertilizer, which will be of considerable use to the Viet Minh in increasing food production. As early as May 1952 the Chinese Communists reportedly had 10,000 miners extracting the phosphate ores at the Cam Duong mine near Lao Kay. <sup>41/</sup> The expected reconstruction of the railroad from Haiphong to Lao Kay will greatly stimulate production, particularly in view of the fact that there is a phosphate fertilizer factory in Haiphong.\*

\* See also VII, below.

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e. Salt.

Large and small salt works are scattered all along the Indochina coast, but North Vietnam in the past has produced on the average only an estimated one-third of the total salt production of Indochina. For example, of 193,600 tons 42/ of salt produced in 1937 in the whole of Indochina an estimated 66,000 tons were produced in what is now North Vietnam. In 1941, because of increased Japanese requirements for salt, production rose to 260,000 tons. This serves to illustrate to some degree the existing potential for increased sea salt.\* The large population of North Vietnam will probably require imports of salt, pending expansion of the existing salt fields.

3. Coal.

All the developed coal mines of Indochina are located north of the 17th Parallel, in the vicinity of the coastal areas of Haiphong, Hon Gay, and Cam Pha. The bulk of production has been anthracite coal, most of which is of superior quality. The principal area of production has been the Quang Yen Basin (21°07' N - 107°27' E), in which the above-named coastal ports are located. Before World War II, 44 mines were producing coal in this basin. At present, 1 large French company, La Societe Francaise des Charbonnages de Tonkin, and 4 or 5 smaller companies of diversified ownership are the only active operators. The major portion of production is from open-cut mines of the French company. Plans had recently been developed for an extensive renovation of this company's properties over a 5-year period, involving substantial investment and the introduction of modern mining methods and up-to-date mechanized equipment whereby the use of manpower and the cost of production could be reduced. About US \$1.7 million worth of coal mining equipment has been delivered to the Charbonnages du Tonkin company by the US under MSA and FOA auspices. 43/ It was planned to restore production to approximately 1 million tons annually, 44/ depending upon the development of markets for the increased production. The local Indochinese market for coal has been comparatively limited, and coal has been an important export, especially to Japan. 45/

Coal reserves in Indochina, mostly located in North Vietnam, are estimated at 20 billion tons, about equal in volume to the estimated original reserves of anthracite coal in Pennsylvania. Approximately

\* See also VII, below.

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12 billion tons of these reserves are believed to exist in the Quang Yen Basin, of which 300 million tons are in the currently most productive fields within the basin. Based on an estimated recovery of 65 percent, coal from this mine alone would last 200 years at the 1952 rate of production. 46/

The accretion of the Indochinese coal mines and reserves to the Soviet Bloc adds to its resources a significant volume of high-grade anthracite coal (with lesser amounts of bituminous and lignite), which is particularly well located for transportation by water to China and other Asiatic countries and well adapted to supplement and complement the coals presently being mined in China. The possibilities of wider trade, both intra-Bloc and with non-Bloc countries, are materially enhanced by the Bloc's acquisition of these mines and deposits.\*

Table 11\*\* gives the production, imports, exports, and consumption of coal (anthracite, bituminous, and lignite combined) in Indochina, 1937-41 and 1946-53.

4. Electric Power.

Hanoi and Haiphong are the centers of the electric power industry in North Vietnam. Three coal-fired steam plants -- a 22,500-kilowatt (kw) plant in Hanoi, a 6,300-kw plant in Haiphong, and a 12,200-kw plant in the Haiphong Cement Works -- total 41,000 kw, or three-fourths of the total area capacity of 55,000 kw. The Hon Gay Coal Mine Plant with a 4,000-kw installed capacity and the Ben Thuy wood products plant with a 3,450-kw installed capacity are the other two significant plants. 47/ These 5 plants thus account for nearly 90 percent of the total, with the remainder divided among 13 diesel, gasoline, and hydro plants. As a matter of comparison, it is interesting to note that the total capacity of all these plants is only about two-thirds that of the single smallest unit installed in the Potomac Electric Power Company's new Alexandria Station. In the past the Hanoi-Haiphong area was served by over 700 kilometers of 30-kilovolt transmission lines. 48/ Unsettled conditions over the past several years, however, resulted in destruction of a major portion of the system and the installation of small gas and diesel generators to serve the many small centers. 49/

\* See also VII, below.

\*\* Table 11 follows on p. 22.

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Table 11  
 Production and Distribution of Coal in Indochina  
 1937-41 and 1946-53

Year	Production <sup>51/</sup>	Imports	Available Supply <sup>a/</sup>	Used Locally <sup>b/</sup>	Exported <sup>50/</sup>					Total Exports
					To Japan	To China	To Hong Kong	To France	To Other	
1937	2,308	13	2,321	804	N.A.	N.A.	N.A.	N.A.	N.A.	1,517
1938	2,340	13	2,353	749	546	178	122	150	150	1,604
1939	2,628	13	2,641	1,011	546	178	122	150	150	1,604
1940	2,500	13	2,513	883	546	178	122	150	150	1,604
1941	2,329	5 <sup>54/</sup>	2,334	1,001	440	202	0	185	185	1,333
1946	262	8	270	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1947	260	8 <sup>55/</sup>	268	229	20	16	3	Negligible	39	39
1948	359	8 <sup>56/</sup>	367	298	27	10	4	3	69	69
1949	379	8	387	298	0	6	3	0	73	73
1950	503	11 <sup>57/</sup>	514	455	0	8	9	1	59	59
1951	625	11 <sup>58/</sup>	536	399	0	12	45	41	237	237
1952	964	13	977	738	0	N.A.	N.A.	75 <sup>c/</sup>	213	213
1953	933	14 <sup>59/</sup>	947	597	N.A.	N.A.	50	20	350	350

<sup>a.</sup> Production plus imports.

<sup>b.</sup> Available supply minus exports.

<sup>c.</sup> Including unavailable amounts of exports to Hong Kong and France.

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Indications are that the electric power facilities have not recently been utilized at nearly their optimum capacity and that a significant portion of the supply has been for lighting and electric fans. Although some rather elaborate plans for the development of the hydroelectric potential of the area have been advanced, a total capacity of less than 1,000 kw is currently installed at 1 zinc and 2 tin mines.

It may be presumed that the Viet Minh will assign some priority to the restoration of the transmission system so that a maximum portion of the demand may be met from coal-fired plants, rather than from diesel-driven plants which require imported fuel. Such restoration will require the importing of equipment and probably will also require some technical assistance from the Soviet Bloc. The supply of power to local industry may be considerably increased by scheduling techniques and by limitation of domestic use. Any expansion of electric facilities would be a reflection of major expansion of industries. Although a considerable hydroelectric potential exists, the installation of other than the smallest units in the immediate future is unlikely because of the costs and time involved. Table 12\* shows capacity and output of electric power in North Vietnam.

5. Cement.

The partition of Indochina has placed the only cement plant in the area in the control of the Viet Minh. The output of this plant, located at Haiphong (20°52' N - 106°41' E), constitutes the largest volume of production of any single industry other than coal mining in Indochina. 60/ The Haiphong plant is the largest cement producer in Southeast Asia, with an installed annual capacity of 400,000 tons. Allowing for unavoidable plant maintenance, an effective annual production of about 300,000 tons could be realized. 61/ As shown in Table 13,\*\* there has been a marked difference between actual production and theoretical installed capacity, the best production having been achieved during the period 1937-41. The relatively high output of these years was brought about by modernization of the plant and a resultant improvement in quality which opened more foreign markets. The location of the plant on a waterfront serving deep-draft vessels makes its

\* Table 12 follows on p. 24.

\*\* Table 13 follows on p. 25.

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Table 12

Capacity and Production of Electric Power in North Vietnam 62/  
1929, 1935-42, and 1949-53

<u>Year</u>	<u>Capacity</u> <u>(Thousand Kilowatts)</u>	<u>Production</u> <u>(Million Kilowatt-Hours)</u>
1929		17.5
1935		18.3
1936		20.4
1937		21.6
1938		24.2
1939		29.9
1940	28.1	33.8
1941		36.3
1942		35.3
1949	48.4	58.3
1950	49.4	73.6
1951		100.0 <u>E/</u>
1952		120.0 <u>E/</u>
1953	55.0	140.0 <u>E/</u>

a. Estimate, including allowance for unreported plants.

product easily available for inexpensive transportation. Cement exports reached a peak of 159,000 tons in 1939.

Some difficulties may be encountered by the Communists in their operation of the Haiphong Cement Plant. The gypsum required for production has heretofore been imported from Europe and the San Marcos Islands off the California coast and hereafter will probably have to be obtained from the Chinese mainland. The plant is vulnerable to breakdowns if intensively operated, and its maintenance and repair could become a critical problem since much of the equipment was installed in the period 1928-33 and was manufactured in Western Europe, the US, and Japan. If the plant is required to maintain high production, however, makeshift repairs and substitution of spare parts from the Bloc could prevent any major drop in output.

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Table 13

Production and Export of Cement at Haiphong, Tonkin  
1929 and 1933-53

Thousand Metric Tons					
Year	Production	Export	Year	Production	Export
1929	183 <u>63/</u>	40.3 <u>64/</u>	1944	0 <u>78/</u>	
1933	133 <u>65/</u>		1945	5 <u>79/</u>	
1934	115 <u>66/</u>		1946	36 <u>80/</u>	
1935	107 <u>67/</u>		1947	43 <u>81/</u>	
1936	149 <u>68/</u>		1948	98 <u>82/</u>	
1937	235 <u>69/</u>	124.6 <u>70/</u>	1949	154 <u>83/</u>	38.7 <u>84/</u>
1938	266 <u>71/</u>		1950	143 <u>85/</u>	17.6 <u>86/</u>
1939	312 <u>72/</u>	159.0 <u>73/</u>	1951	213 <u>87/</u>	12.3 <u>88/</u>
1940	282 <u>74/</u>		1952	235 <u>89/</u>	8.9 <u>a/ 90/</u>
1941	263 <u>75/</u>		1953	291 <u>91/</u>	
1942	177 <u>76/</u>				
1943	149 <u>77/</u>				

a. Half year only.

The acquisition of this cement plant by the Viet Minh regime will be relatively significant as a source of supply to Communist China, whose requirements for cement are substantial for immediate construction purposes. Thus, Communist China may become the principal external consumer of the plant's output, possibly leading to maximum exploitation of the plant's capability.\* The 1953 output of the plant approximated 10 percent of estimated total Chinese Communist cement production of that year. The expected reconstruction of the Haiphong-Kunming Railroad will make cement conveniently available to the heretofore relatively isolated region of Southwest China. South Vietnam, which in the past used a large portion of the annual cement production of Haiphong, may for the time being be forced to seek its requirements elsewhere.

\* See also VII, below.

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6. Consumer Goods and Handicrafts.

a. Textiles.

Two cotton mills, both of which are located in North Vietnam, account for the major portion of production of machine-made cotton textiles in Indochina. The Societe Cotonniere du Tonkin, at Nam Dinh, the sole industrial producer of cotton fabrics in Indochina, also produces yarn and cotton blankets. <sup>92/</sup> The Societe des Filteries de l'Indochine, at Haiphong, engages only in the spinning of cotton yarn and thread. <sup>93/</sup> Industrial production of cotton fabrics has in the past amounted to 35 to 40 percent of the total output. <sup>94/</sup> The remainder may be attributed to artisan weavers, approximately 60 percent of whom are located in North Vietnam. <sup>95/</sup> It should be noted that the textile industry is completely dependent upon imported raw cotton. During the past several years the US has supplied this demand. Altogether, about 75 percent of the cotton fabric production facilities and all of the yarn production capacity are north of the demarcation line. Table 14\* gives textile production in North Vietnam.

b. Miscellaneous.

Almost the entire Indochinese production of matches and glassware is carried out in North Vietnam. One of the match enterprises has factories at Ben Thuy and at Hanoi, and the other operates a factory at Thanh Hoa. These companies are said to have employed a total of 60,000 workers. <sup>96/</sup> Maximum production of matches was achieved in 1941 when 352 million boxes of matches were manufactured. <sup>97/</sup> Maximum postwar output reached 45.7 million boxes in 1953. <sup>98/</sup>

Glassware is produced by the Societe des Vereries d'Extreme Orient in Haiphong which is equipped to produce window glass, bottles, and drinking glasses. <sup>99/</sup> The production of window glass was suspended by the company in 1939 in order to expand the production of bottles, for which there is a large local demand. Postwar production of glassware reached a record peak in 1953 with 6,768 tons. <sup>100/</sup>

Indochina's present sole industrial producer of leather goods is located in North Vietnam.

\* Table 14 follows on p. 27.



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Table 14  
Production of Textiles in North Vietnam a/  
1937-41 and 1946-53

	1937	1938	1939	1940	1941	1946	1947	1948	1949	1950	1951	1952	1953
Cotton Fabric (Tons)													
Societe Cotonniere du Tonkin			3,284 102/ 5,400 110/	3,030 103/ 4,090 111/					730 104/ 985 112/	1,187 105/ 1,602 113/	1,274 106/ 1,720 114/	1,224 107/ 1,653 115/	1,368 108/ 1,847 116/
Artisan Weavers			8,684	7,120					1,715	2,789	2,994	2,877	3,215
Total		10,019	12,000 118/	13,500 119/			75.2 120/	270 121/	1,206 122/	2,001 123/	3,210 124/	3,792 125/	3,712 126/
Cotton Yarn (Tons)		7,350 117/	12,000 118/	13,500 119/									
Blankets (Thousands of Units)	702 127/		1,000 128/	920 129/					225 130/	298 131/	353 132/	409 133/	525 134/

a. Methodology: All figures are as reported in the sources with the following exception: Artisan production of cotton fabric for all years except 1939 was calculated on the basis of prewar ratios of yarn utilization by the corporation and by Tonkin artisans. Corporation (Societe Cotonniere du Tonkin) production figures were used as bases in applying this relationship.

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Most of the basic needs of the population of North Vietnam, as regards consumer goods, are met through the efforts of local artisans. In most instances, the peasants supplement their income from agricultural endeavors by artisan activity such as basket weaving, grass rope making, and pottery making. There are, however, some villages in which the whole population contributes to the fabrication of one type of item, such as baskets or mats. 135/ Examples of small consumer goods enterprises located in North Vietnam are a candle making plant at Haiphong, 136/ porcelain factories at Hanoi and Mon Cay, 137/ soap factories at Hanoi and Haiphong, 138/ button factories at Hanoi and Haiphong, 139/ and bicycle parts shops at Hanoi and Haiphong. 140/

7. Engineering, Munitions, and Shipbuilding Industries.

a. General.

North Vietnam contains no industrial production facilities which can be considered important or significant to the machine-building industry of the Soviet Bloc as a whole. Although the area is well endowed with both material and human resources for greater industrialization, the machine-building industries are still in planning or rudimentary stages. Colonial policies in the past have generally retarded the development of autonomous industrial facilities; and the facilities which do exist are primarily repair and service shops set up by machine-importing companies for the benefit of their local clients. It is estimated that the benefit to the Bloc resulting from acquisition of these facilities will be negligible.

b. Munitions.

Production of weapons and ammunition in North Vietnam is very limited, and without foreign imports in the form of semi-finished military end items and raw materials, Viet Minh production of weapons and ammunition has been carried on in a number of small plants employing usually no more than 50 to 100 workers each. Such plants have been established in out-of-the-way forested and mountainous areas, have been operated mostly at night, and frequently have been moved to avoid bombing. 141/ Production techniques have been largely improvised, and it is believed that total production has met only a fraction of past Viet Minh needs. With increased supplies of higher quality Chinese weapons, many such plants in Viet Minh have concentrated on repair work and the production of ammunition.

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c. Shipbuilding.

North Vietnam has a very limited capability for ship construction and repair. Construction would probably be limited to small wooden fishing and river vessels without power propulsion. Haiphong is the only point within the area which reportedly possesses any kind of facilities. These yards in the past have built large numbers of wooden vessels and have done repair of small ocean and coastal vessels. 142/

C. Transportation and Communications.

1. Transportation.

a. General.

The DRV, with the areas gained in the truce agreement, possesses the base of a well-developed transportation system involving railroads, highways, and water\* which should be adequate for any immediate exploitation of the resources now under its control. The transport network as developed by the French made available several transport media parallel to each other. The focal point of all transport is the Hanoi-Haiphong road, rail, and water route axis. Transport, however, from the Tonkin Delta area south to the truce demarcation line is not well developed.

The transport system can be made to serve the needs of the area and to develop relations with Communist China and the USSR. The chief requirements for these purposes will be railroad construction equipment and rolling stock, and the relatively small amounts needed are within the capability of Communist China and the USSR to supply.

b. Highways.

The highway complex of North Vietnam focuses on the two major cities of Hanoi and Haiphong. Originally the road system was established to satisfy military needs and to extend French influence inland from the mouth of the Red River toward China. Hence, from a very dense highway network within the delta region, highways have been constructed toward the northern limits of the country,

\* In addition, the Viet Minh now control several airfields to which civil air transport could be established.

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linking the delta with the Chinese border at Ban Leng, Lao Kay, Thanh Thuy, Thuy Cao, Nam Quan, and Mon Cay. In the past these roads, because of their military and political use, never received the extensive improvements which could only have been justified in terms of more intensive economic development. Since 1950 the Viet Minh and the French have placed a major emphasis on improving tactical communications by reconstructing existing roads and trails, and by constructing new roads in order to bypass vulnerable road stretches subject to interdiction. Conspicuous among these is the road built by the Viet Minh connecting Dong Dang, on the Chinese border opposite P'ing-hsiang, the Chinese railhead, to Thai Nguyen, where the improvements have permitted two-way truck traffic.

Under peacetime conditions, and with the reconstruction of bridges, it is probable that each of the roads leading into North Vietnam from China will soon have a capacity of 600 to 1,000 tons each way per day (EWPD). With the return to peacetime conditions and the probable reconstruction of railroad facilities, however, the greater part of the China-Tonkin traffic will move via railroad or water as was the case prior to the outbreak of hostilities. Thus, because of the short supply of gasoline and the heavy consumption thereof on the long-haul supply route from China, the truck park built up by tactical expediency will probably be used more for ancillary or feeder purposes when through railroad service is restored.

c. Railroads.

The French originally constructed a simple but adequate meter-gage railroad system in North Vietnam consisting of two lines crossing at right angles at Hanoi. The line running north-south was built within the concept of a trans-Indochinese railroad uniting the northern and southern parts of the country. The line running generally east-west, extending up the Red River valley from Haiphong to Lao Kay and then into China to Kunming, was built to enhance French influence in Southwest China and to exploit the mineral resources of Yunnan.

Just prior to the truce agreement, only a few separate sectors of this railroad system were in operation -- the vital Hanoi-Haiphong line under French control <sup>143/</sup> and some segments of the system within the Viet Minh areas. <sup>144/</sup> Although the rails have been removed from all nonoperating sectors of the

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railroad net, the roadbed remains. In order to facilitate economic development and to serve military purposes, it is considered probable that the reconstruction of the lines connecting with the Chinese rail systems in Kwangsi and Yunnan Provinces will receive the highest priority in the allocation of labor and materials on the part of both the Chinese Communists and the Viet Minh. It is estimated that these connecting lines could be returned to operating condition within the 300 days allowed the French for withdrawal from the delta.

The Lao Kay-Haiphong line will probably be re-established to its prewar condition to facilitate the exploitation of the Chinese K'ochiu tin mines and the copper resources in southern Yunnan as well as to hasten the development of the mineral resources of North Vietnam. Construction on this line has already been reported begun. This route will probably continue to represent the most expeditious transport link between Yunnan and the industrial areas of China until Kunming is joined by rail to Chungking and the Yangtze River. In 1940 the Haiphong-Yunnan line had a maximum daily capacity of 3 trains EWP, with train capacity computed at 250 tons. 145/

If the Haiphong-Lao Kay line is reconstructed over its entire length with 30-kilogram-per-meter (kg/m) rail (the weight used on the Chinese section of the line), it will require about 34,000 tons of rails. In addition, use of this line into China will require the further construction of about 80 kilometers of rail from the Chinese border to the present railhead at Pi-tze-chai and strengthening of the Lao Kay - Ho-K'ou bridge at the Chinese border and other bridges.

Moreover, the Hanoi-Lang Son-Nam Quan line will probably be rebuilt as soon as possible. This line is not only economically but also strategically important, in that a short rail connection across the Chinese border would connect the Viet Minh railroad system with those of China and the USSR. In 1940 this line had a maximum daily operating capacity of 3 trains EWP, with train capacity computed at 140 tons. 146/ It is probable that the gage of this railroad will be widened to permit use of standard-gage equipment from China. Such a program may delay full utilization of the line, but, in view of the advantage of through transit without transloading and of the relatively low capacity of meter gage lines, it is doubtful if the Chinese would have doubled the capacity of the Nanning-P'ing -hsiang line 147/ without anticipating the need for a like increase in the capacity of the Viet Minh line.

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If the Hanoi-Nam Quan line is rebuilt at standard gage it will require about 15,000 tons of 42-kg/m rails and a considerable amount of bridging equipment. Construction could proceed into North Vietnam from the railhead in China.

Reconstruction of railroads will require Chinese Communist or Soviet aid in the form of rolling stock, rails, and bridging equipment, which are all available in China but in limited quantities. Chinese rail production, estimated to be about 150,000 to 170,000 tons annually, could supply Viet Minh requirements, and the economic development of Southwest China (including eastward and northward railroad construction from Yunnan) would be expedited by the convenient transportation link between Southwest China and coastal transport over the Haiphong-Lao Kay line. Communist China can also alleviate the shortage of railroad repair facilities in North Vietnam through the accessibility of the repair shops at Hengyang and Ch'uchang (Kukong).

d. Water.

(1) Inland Waterways.

The inland waterways system in North Vietnam was organized by the French to develop the movement of traffic between the larger cities and at the same time to extend the irrigation of cultivable land. Over 700 kilometers of waterways are open to navigation, 148 although some of this total may be presently of limited use due to silting of channels. The main waterway system is that of the Red River and its basin in the Tonkin delta. Normally these waterways are heavily trafficked by sampans and junks, and screw and paddle wheel launches regularly serve Hanoi, Haiphong, Nam Dinh, and the chief provincial towns. Because of the vast amount of small junk traffic on the inland waterways, no accurate estimate of activity can be made. There has been, however, no shortage of available bottoms to handle local cargo requirements.

(2) Maritime Shipping.

The expansion of maritime traffic and port facilities in North Vietnam received considerable stimulation from the French, but during the recent hostilities much structural maintenance was allowed to lapse with the result that many of the facilities have been impaired. Nevertheless, the basic factors contributing

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to the continuing movement of ocean-going traffic were preserved as necessary parts of the logistical supply program of the French forces in the area.

The principal port of North Vietnam, Haiphong, is supplemented by secondary ports of either specialized or regional character, such as Cam Pha Port, Hon Gay, Port Wallut, Quang Yen, Dong Hai, and Ben Thuy. Although other minor ports are susceptible to expansion, the rehabilitation and exploitation of the above-named ports should satisfy the major economic needs of the Viet Minh during the next 2 years (barring any unexpected military events). Except for small junks the Viet Minh have no coastal fleet, and probably will be dependent on Communist China for coastal shipping bottoms.

Haiphong, as the major deep-water port of North Vietnam, serves as the gateway for Tonkin. Because of the agreement to allow the French 300 days (that is, until mid-May 1955) to evacuate the port, development by the Viet Minh of the Haiphong industrial complex and port will necessarily be delayed. Although the port has been allowed to silt up during the past 10 years, the existing port facilities would permit a substantial increase in the tonnage now handled. In 1952 the port handled slightly over 1 million metric tons of cargo, and it has been estimated that it could handle approximately 8,000 tons per 20-hour working day, or about 2.8 million tons per year. <sup>149/</sup> The port can berth vessels up to 7,700-ton Liberty-type vessels, but has limited repair facilities. With Haiphong opened for trade of the Viet Minh, commerce will probably be directed chiefly toward Communist China. Since the route between Haiphong and Canton is less than 1,200 kilometers and for the most part sheltered, Chinese Communist coastal-type vessels will be capable of handling a considerable traffic flow between the two areas. Soviet Bloc and chartered vessels will be able to serve the European-Viet Minh trade to Haiphong as it develops.

Hon Gay was developed solely to export coal from nearby mines. Over 2 million tons of coal were exported annually from this port before World War II, <sup>150/</sup> and the port has been in continuous operation. Although most of the vessels calling at Hon Gay port are of the 4,000- to 5,000-ton variety, it is possible to bring in Liberty-type vessels, contingent on high tide and calm waters. <sup>151/</sup> Facilities at the port permit turn-around of 5,000-ton colliers in 24 hours. Cargo other than coal is handled with considerable difficulty.

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Cam Pha Port operates in conjunction with Hon Gay in the export of coal, but it has been relatively inactive in recent years. Maximum loading capacity for coal is estimated at 1,000 tons per day.

2. Communications.

The rapid communications services of North Vietnam have deteriorated markedly since the period before World War II. At that time, depending almost exclusively on foreign equipment and technical knowledge, they probably adequately met the needs of the country. Combat destruction and widespread sabotage have accounted for much of the decline. In consequence, intercity wire-line facilities are almost nonexistent today, with only an estimated 129 kilometers of wire lines and possibly 7 telephone exchanges in operation. As a result, radio communication is being utilized as a minimal alternative. 152/ At present there are 20 to 24 radio stations in the area, concentrated primarily at Hanoi and Haiphong. So depleted are the permanent civil communications resources that the contending military forces reportedly meet their own needs for rapid communications without any dependence on civil facilities. It seems likely that this situation will persist for some time.

In communications resources, North Vietnam is a liability to the Soviet Bloc. In order to restore the existing facilities to a condition to meet adequately the immediate requirements of the Viet Minh regime, the regime will have to obtain from the Bloc trained manpower, communications and electric power equipment, some heavy machinery items, and raw and finished materials. Expansion of the radio broadcasting base as a chief medium of mass communication for control and indoctrination of the "Viet Minhese" and the propagandization of the peoples of the other Indochina states and perhaps Thailand will be included as one of the first orders of business.

III. Human Resources.

In 1954 the total population of Vietnam north of the 17th Parallel line is estimated to be about 14 million. 153/\* \*\* This is about 56 percent of the population of all Vietnam (25 million) and 46 percent

\* All sources on population state that the estimates are subject to at least a 10-percent error.

\*\* Of this total, approximately 7,000 persons are European, primarily French; 100,000 are Chinese; and a negligible number are other Asiatics.



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of all Indochina (30.5 million). The 1954 population represents an increase within the Viet Minh area since 1943 of about 8 percent, compared with an 11-percent increase within all Vietnam, and a 14-percent increase within all Indochina.

Nearly 70 percent of the population of North Vietnam reside in the Red River delta or coastal areas. These areas, however, make up only about a quarter of the land area of North Vietnam. This results in many sections within the area having population densities of over 1,700 persons per square mile, or as high as any nonurban area in the world, as well as having underemployment of the populace.

An estimate of the total labor force available within the country is difficult to calculate. In the rural population, however, everyone works from early youth to old age, and this generalization applies only to a slightly lesser extent to the urban population as well. Probably about 8 million persons fall in the 15 to 59 year age group, of which over 3.5 million would be males. <sup>154/</sup> About 90 percent of the population is dependent on agriculture for a livelihood, and probably no more than 1 percent of the total have no direct connection with agriculture. <sup>155/</sup> Many of those persons working in the mines or industrial installations are also a part of the agricultural population, as they appear to work in the plants only to supplement their agricultural income.

Skilled labor represents only a small fraction of the labor force, and the greater part of the skilled labor force is employed in the production of local specialty items such as food products, textiles, baskets, or other handicraft products. <sup>156/</sup>

Of the modern industrial installations in North Vietnam, coal and other mines, textile plants, and the cement plant employ the greatest amount of labor. Except in the textile industry, most of this labor is unskilled or semiskilled.

There are only meager facilities for the training of skilled workers in North Vietnam, and, if French technicians and administrators withdraw, the factories of North Vietnam will be faced with a severe shortage of skilled and managerial personnel.

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IV. Economic Organization.

The economic organization of the Viet Minh regime is typical of that of a Communist state. The Party directorate is the seat of power, and Party members hold the principal ministries and direct the mass organizations which propagandize and implement decisions of the central body. Some ardent nationalists have been utilized by the Party in ministerial positions but only in close association with Party members as deputy ministers. Six ministries, all of whose ministers or deputy ministers are Party members, deal particularly with matters of economic policy and control: the Ministries of Finance, Commerce and Industry, Agriculture, Labor, Public Works, and Information. In general, the policy of the regime appears to follow closely the lines of Mao Tse-tung's procedure in China in applying the principles of Marxism-Leninism to conditions in Vietnam.

The Land Reform Law, which was promulgated by the National Assembly of the DRV on 4 December 1953, has been heavily propagandized in order to gain popular support. It provides generally for confiscation and expropriation of the lands of large landowners, absentee landlords, and members of the opposition ("reactionaries"), and for redistribution of the land to landless peasants or small landholders. <sup>157/</sup> The law is similar in many respects to the law adopted by the Chinese Communists in June 1950, and, as in Communist China, it appears to have the twofold immediate purpose of popularizing the regime on a broad base and of eliminating the opposition of the gentry as an effective force.

During the last 3 years, the influence of Chinese Communist advisors has been pronounced in the inauguration of fiscal, tax, and currency reforms. In early 1951 a small bond issue (in fact, smaller than planned) was floated with value, in terms of rice paddy, guaranteed for 5 years. In 1951 the budget was formulated in terms of rice paddy, and contracts by the government for services were to be paid in Ho Chi Minh piasters at the market price of paddy on the day of payment. In 1952, collection of taxes and control of expenditures were centralized in the hands of the Ho Chi Minh government. No local government expenditures were allowed unless previously authorized by the central government. Local taxes were abolished, and the people were so informed by widespread propaganda. A National Granary Service, supervised by officials appointed by the central government, assumed control of the paddy supplies collected through taxation, thus removing this function from local authority. In 1952

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a Viet Minh state bank was established with a monopoly on currency issue, which had previously been partly in the hands of semi-independent regional administrations. In 1952, five principal forms of taxation were instituted to replace the previously irregular taxes-in-kind, real estate and business taxes, agricultural tax, taxes on industry and commerce, commodity taxes, export-import duties, and slaughterhouse taxes. The new agricultural tax was based on production instead of on land area, and the yield estimate for tax purposes was said to be stabilized. Exemptions were allowed for family units instead of individual farmers, but the harvest tax was to be collected on a graduated scale based on size of land holdings. 158/

Taxes on industry and commerce under the reform are of three types: turnover taxes, taxes on gross profits, and taxes on particular transactions in the case of petty merchants. Taxes on opium and salt amount to one-third of production. Tea, sugar, tobacco, and cigarettes are similarly taxed, but at lower rates. Slaughterhouse taxes amount to 10 percent of the value of the processed meat.

The implementation of the land reform law and of the tax collection system appears to have been erratic, varying, with the degree of control, from mere propaganda to severe enforcement. The centralization of administration, however, has generally been as absolute as the condition of available communications would appear to allow. The results are reported to have been generally in the direction of a reduced rate of currency and price inflation in the Viet Minh areas and strengthening of control of resources in the hands of the regime. 159/

At the DRV government conference held in Tuyen Quang in July 1953, Vice President Pham Van Dong of the DRV summarized the policies of his government as follows: (1) more thorough and equitable tax collections under the centralized tax collection system; (2) the increase of trade with other countries as well as with "enemy-controlled areas"; and (3) the improvement of land and water transportation systems to facilitate trade. He stated that the fact that prices had become more stable would aid in the development of economic production and that the implementation of the land reform program would increase agricultural production. Since agriculture is the basic element of the Vietnamese economy, he said that the working slogan would again be: "Increase agriculture production first, then encourage the development of family handicrafts." Finally he stated that "production

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and economy are the most important objectives of the government, the party and the entire population." 160/

No economic programs, or even production goals of the DRV, have been announced since the conclusion of the Geneva agreements. The policies of the regime, however, as so far expressed, are clearly reminiscent of those which have been so ruthlessly applied in Communist China over the last 4 years. In view of the close similarity of fiscal and tax reforms to those in Communist China and the continual presence of Chinese Communist advisors in North Vietnam, the pattern of centralization of authority and controlled economic development may be expected to follow that of the Peiping government, with but slight modifications to fit local conditions and resources.

V. Economic Relations of North Vietnam.

A. Prewar Foreign Trade.

The value of the external trade of Tonkin and Annam in the late 1930's lagged considerably behind the trade of Cochinchina. Conducting about half its foreign trade with France,\* the present Viet Minh area (North Vietnam)\*\* ran a consistent commodity trade deficit in the pre-World War II period, and depended on a few basic exports to support a wider range of imports. North Vietnam did not constitute a significant source of supply for France and the Western world, and all of its commodity exports to the West can be replaced from other areas.

Indochinese foreign trade has been weighted more heavily in favor of the southern area than of the northern. For the prewar period, 1936 through 1938, the present Viet Minh area controlled only about 20 percent of the exports and 40 percent of the imports of the three Vietnamese provinces of Tonkin, Annam, and Cochinchina. These relationships change only slightly when the present North Vietnam is compared with the whole of Indochina. For the postwar period, 1949 through 1951, the declining importance of North Vietnam is indicated by its control of only 6 percent of exports and 22 percent of imports.

\* France includes French Union countries.

\*\* The area acquired by the Viet Minh under terms of the cease-fire agreement constitutes 95 percent of the value of external trade of Tonkin and Annam. Trade magnitudes attributed to North Vietnam in this section are those of Tonkin and Annam and are overstated by roughly 5 percent.

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French trade with North Vietnam, protected by preferential customs, was relatively greater than was that area's trade with the rest of the world. Tonkinese and Annamese exports to France, confined mostly to corn, coal, and metals, represented 52 percent of all exports from those provinces during the late 1930's. Imports from France, concentrated in textiles, metal and miscellaneous manufactures, and paper products and chemicals, amounted to 53 percent of total imports in the same period.

An annual commodity trade deficit marked the prewar period of North Vietnam, averaging about US \$4 million from 1936 through 1941. Cochinchina had an inverse experience during this time, with the magnitude of its trade surplus dependent on the quantity and price relationships of grains and rubber.

The pattern of external trade of Tonkin and Annam before World War II was typical of an underdeveloped area dependent on a few basic commodities. Grains, coal, and cement accounted for more than three-fourths of the value of exports from North Vietnam during 1936 through 1938, while textiles and metal manufactures represented more than three-fifths of all imports. Grain, representing 47 percent of exports, consisted primarily of corn exports (to France), with rice exports (to China) averaging about a third of the value of corn exports. Fuel and cement accounted for 32 percent of exports. Coal from mines near Hon Gay produced the major fuel export (to Japan, China, and France), while the cement plant at Haiphong exported half its production to neighboring Asian nations. More than two-fifths of the value of imports arrived as metal and metal manufactures, while textiles accounted for one-fifth of imports.

Tables 15-18\* illustrate the trade relations of North Vietnam during the immediate prewar period and in 1949-51.

B. Trade with Communist China and the Soviet Bloc.

1. Exports.

It is unlikely that the Chinese Communists have given aid to the Viet Minh without demanding some return. We know that\*\*

\* Tables 15, 16, 17, and 18 follow on pp. 40, 41, and 42, respectively.

\*\* Continued on p. 42.

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Table 15

External Trade of North Vietnam and of Total Vietnam  
1936-38 and 1949-51

	Prewar Average <u>161/</u> 1936-38	Postwar Average <u>162/</u> 1949-51
Exports		
North Vietnam a/ (Thousand US \$)	18,615	5,200
Total Vietnam b/ (Thousand US \$)	88,670	87,512
North Vietnam as Percent of Vietnam	20.99	5.94
Imports		
North Vietnam (Thousand US \$)	20,803	53,655
Total Vietnam (Thousand US \$)	52,854	242,528
North Vietnam as Percent of Vietnam	39.36	22.12

a. Tonkin and Annam.

b. Tonkin, Annam, and Cochinchina.

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Table 16

Prewar Commodity Trade Balance of North Vietnam 163/  
1936-41 and Average

Thousand US \$			
<u>Year</u>	<u>Exports</u>	<u>Imports</u>	<u>Balance</u>
1936	22,424	23,035	-611
1937	17,475	19,274	-1,799
1938	16,127	20,100	-3,973
1939	15,130	22,939	-7,809
1940	16,652	19,818	-3,166
1941	11,595	19,226	-7,631
Average	16,567	20,732	-4,165

Table 17

Trade of North Vietnam with France. a/ 164/  
1936-38 and Average

	<u>1936</u>	<u>1937</u>	<u>1938</u>	<u>Average</u>
Exports to France (Thousand US \$)	12,690	9,749	7,566	10,002
Percent of Total of North Vietnam Exports	56.6	55.8	47.0	53.1
Imports from France (Thousand US \$)	12,293	10,577	10,468	11,113
Percent of Total of North Vietnam Imports	53.4	54.9	52.1	53.4
Balance with France (Thousand US \$)	+397	-828	-2,902	-1,111

a. France includes French Union countries.

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Table 18

Composition of Trade of North Vietnam 165/  
1936-38 Average

	<u>Total a/</u>		<u>With France b/</u>	
	<u>Imports</u>	<u>Exports</u>	<u>Imports</u>	<u>Exports</u>
Food Grains	2.7	47.3		68.8 <u>c/</u>
Fuel and Aggregates	7.6	31.6		12.8 <u>d/</u>
Metals and Metal Manufactures	41.6	12.1	37.6	11.0
Textiles	21.0		30.8	
Paper Products	6.3		8.8	
Chemicals	5.7		5.2	
Animal Products	2.6	4.3	2.1	3.4
Miscellaneous Manufactures	10.5	3.0	15.5	4.0
Other	2.0	1.7		
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

- a. Percent of value of total imports and exports.  
 b. Percent of value of imports and exports with France.  
 c. Primarily corn.  
 d. Primarily coal.

from the beginning of 1951 they have exacted 250,000 railroad ties for the construction of the Nanning-P'ing Hsiang railroad. In addition, the Viet Minh have been required to supply such products as vegetable oils, tea, wood, and minerals.

2. Imports.

Reports from a variety of unevaluated sources indicate that Communist China has sent the following supplies to the Viet Minh:

Arms and ammunition: mountain guns, antiaircraft guns, machine guns, field guns, howitzers, mortars, rifles, rocket launchers, ammunition, explosives, grenades and grenade throwers, and land mines.



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Food: rice, maize, dried sweet potatoes, cereals, soybeans, and flour.

Clothing.

Transportation and communications equipment: trucks, tires, spare parts, gasoline, oil, kerosene, radio sets, and field transmitters.

Other: medical and clinical supplies, X-ray metal-testing equipment, balances, electric meters, electric drills, files, abrasives, saw blades, iron and steel for making cables, electrical distributing machinery, agricultural machinery, oxygen containers, oxygen-generating machines, gas masks, binoculars, and industrial machinery.

Little information is available concerning direct trade between North Vietnam and the USSR or other Soviet Bloc countries. Many of the above items imported from Communist China are of Soviet or Soviet Bloc manufacture. A Viet Minh trade mission has been reported in Europe in the first quarter of 1954 placing large orders for military equipment, vehicles (jeeps, trucks, and buses) pharmaceuticals, and hospital equipment in East Germany, Poland, and Czechoslovakia. 166/

3. Extent of Material and Technical Assistance Given to the Viet Minh.

The Viet Minh have received material aid from Communist China since at least December 1949 and perhaps since 1948. Until early 1951 only essential supplies of arms and rice had been sent to the Viet Minh, but by summer Communist China began supplying material designed to develop the Viet Minh's internal systems of supply. Military equipment and supplies, however, apparently continued to be the Bloc's main contribution to the Viet Minh.

The scale of supply is difficult to estimate. In June 1951, Communist China and the USSR were each said to have promised 1,000 tons a month (totaling 2,000 tons per month). The plans for later in the year indicated aid on a lower level of possibly 1,300 tons a month, although implementation of the plan revealed movements of only 500 to 600 tons a month.

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By mid-1953, Soviet Bloc aid may have totaled as much as 2,000 tons a month, according to French sources. By 1954 there were indications of increased military aid, possibly as much as 3,000 to 4,000 tons a month. 167 With the end of the war in sight, however, the 1954 trade agreement called for the exchange of industrial goods.

It has been fairly well established that Chinese Communist personnel -- instructors, technicians, political and military advisors, and perhaps transport labor along major supply routes -- have been operating with the Viet Minh. Estimates on the extent of this personnel assistance, however, have varied widely. While the average of the several estimates in the past has been in the neighborhood of 10,000 to 15,000, there was a gradual decrease during 1952 to roughly 5,000. This decrease was apparently attributable to the progress made by the Viet Minh in their organization, to the development of training camps in South China, and to the difficulties encountered by the presence of Chinese in Viet Minh zones. With respect to this latter point, it is felt that the Viet Minh, while not denying the necessity of Chinese Communist assistance, have been attempting to reduce the numbers of advisors and technicians in Viet Minh zones because of the possibility of a resurgence of traditional antipathy among the Indochinese for the Chinese.

The Viet Minh may, in fact, pursue a deliberate policy of restricting contacts between Chinese personnel and the Vietnamese population in order to avoid arousing historic animosities held by most Vietnamese toward the Chinese. There are no confirmed reports of Chinese combat casualties, except for minor operations along the northern border. It appears, therefore, that Chinese Communist personnel operate primarily in conjunction with central administrative units and at higher command levels, and such a policy would definitely limit the capacity of the Viet Minh organization to absorb foreign specialists and advisors.

C. Relations with South Vietnam and Other Asiatic Countries.

There is probably a limited amount of trade between the Viet Minh and the French-held areas in Vietnam despite government efforts to maintain a land and sea blockade. Individuals who have fled from Viet Minh territory have stated, without confirmation, that trusted Workers' (Communist) Party members are designated in each sector to conduct trade with non-Communist regions.

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Although the total volume of such trade is relatively small, it has been of considerable importance to the Viet Minh because of specific shortages. Special efforts have been made to secure medical supplies, fuel, and transportation equipment and parts, and the Viet Minh have admittedly been dependent upon food supplies seized from French-controlled areas.

There have been reports of arms smuggling between Thailand and Viet Minh areas, carried on by coastwise shipping to Communist-held areas in Cochinchina and overland through Cambodia. No estimates of the volume of this traffic can be made from available information.

D. Effects on World Trade Patterns of the Inclusion of North Vietnam in the Soviet Bloc.

The Viet Minh certainly will attempt to eliminate the area's trade deficit by pushing exports. It is interesting, however, to note that in 1952, coal exports -- one of Tonkin's major foreign exchange earners -- would have paid for only 25,000 tons of rice, about 5 percent of the possible rice deficit the Viet Minh may face, at least in the short run. The Soviet Bloc is not in a favorable position to give aid, although this deficit is relatively small.

Although the Viet Minh Communist policy is not known, the Communists may consider this area important enough to encourage some industrialization. Industrialization, in requiring the importation of capital goods from the Soviet Bloc, would increase, although not significantly, the stresses and strains already existing within the Soviet Bloc. As the Viet Minh area is already a deficit area, industrialization would add to the drain upon Bloc resources.\*

The reopening of the old trade routes from South China through Indochina would facilitate the exploitation of South China's minerals and the general development of this area. In 1937, transit trade from Yunnan through Tonkin to China and Hong Kong totaled more than 50,000 tons valued at US \$13.6 million, almost the value of Tonkin's exports.

The primary commodities entering foreign trade from North Vietnam before the war are generally supplementary to the Chinese

\* See also VII, below.

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economy. Japan, the largest buyer of Tonkinese coal in the 1930's, may be interested in renewing this source of supply in exchange for Japanese textiles and manufactured goods. Should a trade relationship develop between Japan and North Vietnam, China may have an opportunity to use Japanese trading desires as a lever to obtain trading concessions for herself. In the absence of Japanese trade with North Vietnam, it is probable that the USSR and China can furnish North Vietnam with the relatively small amounts of textiles and manufactured goods required.

French imports from North Vietnam before World War II consisted more than 65 percent of corn and of about 10 percent each of metals and coal. French exports to North Vietnam were concentrated in metal manufactures (38 percent), textiles (31 percent), and miscellaneous manufactures (15 percent). Should all trade with North Vietnam be cut off in the future, France should have little difficulty obtaining these imports elsewhere in the Free World. Some adjustments may be necessary in the transition of French trade to other areas, due to the preferential position France enjoyed from Indochinese customs arrangements.

Of greater immediate significance to France than the loss of this trading area is the possibility that US war aid for Indochina may be diverted to other uses. During the calendar year 1954, US \$785 million were to be funneled through France for the war effort in Indochina, thus greatly relieving the French gold and dollar shortage. At the time of the cease-fire, only US \$100 million of this amount had been received by France and US \$100 million additional was in the pipeline. If the US should decide that all or part of the remaining US \$585 million and the US \$800 million now scheduled for calendar year 1955 should be diverted to Southeast Asian or other defense, these funds would not flow through France and would make it increasingly difficult for the French to maintain a foreign currency balance.

VI. Comparison of the Level of Economic Activities and Visibility of North and South Vietnam.

The truce demarcation line divides Vietnam into two areas which under normal conditions would form complementary parts of a national economic entity. Of these, the area now under Viet Minh control possesses by far the greater long-term potential for a visible industrial economy. However, this area does not produce enough rice to

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support its population of 14 million and will probably be dependent upon some grain imports to make up its general food production deficit. North Vietnam contains the only major coal deposits of Vietnam, and practically all of the known metallic mineral resources, including zinc, tin, iron, tungsten, manganese, chrome, lead, and gold. In addition, the only cement plant in the country -- the largest in Southeast Asia -- is located at Haiphong. The country's two major textile plants are also located in the Viet Minh area, although these depend upon imports of raw cotton and do not produce enough textiles for North Vietnamese requirements.

It is believed that these resources should enable the Viet Minh in time to procure in foreign trade the manufactures which are needed for a modest industrial development. However, the apparent unwillingness of the Viet Minh to offer sufficiently attractive terms to the French administrators and managers to continue operating the coal mines and industrial installations and to carry on interregional and foreign trade poses an immediate problem for the Viet Minh if they are to realize any benefit from these economic activities, pending the time when Communist technicians and advisors become available. Moreover, the extensive capital construction necessary to rebuild transport and communications facilities linking North Vietnam to the Soviet Bloc, and the improvement of mining and industrial facilities -- even to the levels that had been planned in US Foreign Operations Administration programs -- is believed to be beyond the capabilities of the Viet Minh and will probably require technical assistance from the Bloc in planning, supervision, and additional equipment. The immediate needs for imported food supplies, raw cotton, gypsum, and technical equipment will require aid from the Bloc if the past level of economic activity in the area is to be restored soon.

For the long term, North Vietnam, as discussed in Section II above, possesses a well-balanced resource base for a self-sustaining industrial economy but needs technical aid and investment funds to develop it. The USSR has provided substantial technical assistance to Communist China in its economic development during the past 5 years. It still remains to be determined whether the USSR or Communist China is in a position to pass on the lessons which have been learned in the initial stages of development of the Chinese economy to another Asian country with an even less developed resource base. North Vietnam, however, already seems to be benefiting from the experiences of Communist China, as can be observed in the measures for taxation,

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land reform, and centralized control which have been promulgated in Viet Minh areas in the past 3 years. The expected reconstruction of the two railroads linking North Vietnam to China will stimulate economic exchanges between the two countries. China is apparently in a position to benefit more at first from the Haiphong-Yunnan railroad connection. It would provide the means of easy export of minerals from Southwest China and of hastening the construction and industrialization programs in that region, while North Vietnam would benefit incidentally from the restoration of the railroad line through its area of prospective resource development. Thus, in view of the early evidences of Chinese Communist aid to the Viet Minh, it is believed that necessary technical aid will be forthcoming, at least to the extent that is considered mutually beneficial.

South Vietnam, on the other hand, has practically no resources available other than agriculture and will be hard pressed to create a self-sustaining economy, even in the long run. The area does possess an agricultural base for rice production sufficient to sustain its population and permit exports, which prior to World War II amounted to over 50 percent of all exports from Indochina. Although in the past China has been the principal purchaser of Indochinese rice, there has been no trade between South Vietnam and China in the last several years. India and other Pacific countries have purchased rice from the Cochinchina area, but rice production and consumption are quite elastic in these regions and the market quite variable. Since rice from the Cochinchina area is inferior to that of the other two main sources, Thailand and Burma, the demand for Indochinese rice is always dependent upon the amount available in those countries. Whether rice trading with the Viet Minh areas will be effected is not yet clear.

In addition to rice production, the only other major resource available to South Vietnam for foreign trade is natural rubber, production of which amounted to about 73,000 tons in 1953, or about 5 percent of the world output. France has been the main market. Depending on markets (and on allocation of the foreign exchange proceeds of exports), these two resources could provide investment funds for a modest development of consumer goods industries which would improve the self-sufficiency of the area.

A major problem immediately facing the South Vietnam government is the relocation of an indeterminate number of persons refugeeing from the northern area. Traditionally unwilling to leave their homes even

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to take up free land in the upland regions, the northern Vietnamese who accept resettlement in the South will probably be limited for the most part to the families of military and functionary personnel dependent on the government for support. These number as many as 330,000 to 350,000 people. Temporary provisions for their accommodation are currently being made. There are several sparsely populated inland plateau areas where these people could be settled, where they could grow such crops as maize, potatoes, beans, manioc, and taro, or where they could develop plantation-type crops such as rubber, coffee, tea, pepper, or fruits. However, even at best, these pursuits would be long-term in their effect and no prospect is in sight to provide the means of livelihood even for the present numbers of civilian personnel seeking resettlement in the South. There seems slight chance that -- in the absence of a vigorous and efficient organization of migration, agricultural, public works and handicraft projects, to utilize the emigrants -- the need for self-supporting economic activity for these people can be fulfilled. Even with some American aid, the capabilities of the South Vietnamese government are being taxed to provide for their welfare.

On the other hand, a large number of stay-behind cadres and guerrilla forces of the Viet Minh can be expected to remain in the South to carry on the Viet Minh regime's program of political subversion and disruption of economic activity. In these circumstances, the institutional structure of the South Vietnam economy as an agricultural colonial appendage of metropolitan France will be subjected to further severe strains. The continued maintenance and protection of French colonial interests in agricultural production and trade are at the same time both necessary for the support of the present level of economic activity in the area and paralyzing in their effect upon native aspirations to develop a viable national economy. The long-enforced dependence of Indochina on the metropolitan country for manufactured goods has discouraged the development of indigenous industry. At a time when increased economic opportunities are needed to support the population and to replace employment in occupations connected with interregional and colonial trade, normal private sources of investment are lacking to provide the needed maintenance and expansion of the small industrial and trade sectors. In the face of the expected further disruption by Communist forces in the area, additional foreign economic aid to South Vietnam appears to be more than ever required to maintain and develop the economy and to provide stimulation, guidance, and support for projects in public works, agriculture, consumer goods and agricultural tools industries, and handicrafts. 168/

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VII. Estimate of Probable Economic Developments in North Vietnam through 1957.

A. Future Soviet Bloc Aid.

Up until the time of the cease-fire, the bulk of aid given to the Viet Minh by the Soviet Bloc was of a military nature and consisted mostly of military equipment and rations, as well as material to develop the Viet Minh's internal lines of supply. Mid-1954 protocols for the exchange of goods between the DRV and Communist China indicate that North Vietnam was scheduled to receive very little in the way of capital goods for improving industrial production from Communist China. Furthermore, there is no known grant of aid to the Viet Minh such as the grant extended to North Korea by the USSR, Communist China, and the European Satellites, which will reportedly amount to US \$300 million and restore the 1946-50 level of economic activity. On the other hand, because of the lack of any information on the Viet Minh regime's plans for economic development or on future Soviet Bloc aid to North Vietnam, future production can only be estimated there, predicated upon North Vietnam's known resources and facilities, the immediate needs of Communist China and the USSR, and the desire of the Peiping regime to make an impressive showing in Indochina for the benefit of the other Southeast Asian countries.

Under these conditions, it is assumed (1) that North Vietnam will receive technical and material aid from the Soviet Bloc, particularly from Communist China because the latter has the most to gain both economically and politically from the integration of North Vietnam into the Asian Communist Bloc; and (2) that such aid, although important enough in itself, will be limited by considerations of economic worth and will not be extended to North Vietnam projects at an unrealistic cost.

B. Probable Economic Developments through 1957.

It is believed that the bulk of Soviet Bloc aid will be granted to (1) connect North Vietnam with Communist China by rail, and to improve other transport facilities; (2) exploit the area's coal, tin, zinc, chrome, and phosphate resources; (3) provide the cotton textile industry with raw cotton; (4) increase cement production; and (5) provide food supplies to overcome present shortages.

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Rehabilitation of the area's railroad system will be expedient both strategically and economically to Communist China particularly and also to the Soviet Bloc. By connecting the Chinese Communist railroad system to that of North Vietnam north of Lang Son, the Bloc will accomplish through railroad service from the USSR through Communist China to the Southeast Asian Communist frontier. Reconstruction of the Lao Kay-Haiphong line, on which construction reportedly has already begun, will again allow Communist China use of the most expeditious route in exploitation of its Ko-chiu tin and other mineral resources found in the Southwest as well as aid Communist China's construction program for that region. Reconstruction of rail facilities will be accomplished almost entirely with Chinese Communist or Bloc materials and technical personnel, and strategically will actually benefit the Chinese Communists more than it will the Viet Minh.

In addition to reconstruction of rail facilities, the Soviet Bloc will probably aid the Viet Minh in rehabilitating Haiphong harbor. Dredging equipment and reconstruction of some wharf and repair facilities will be required, and the equipment and technical assistance for this will also have to come from Communist China and/or the Bloc.

Emphasis on the area's resources will probably proceed as follows (see Table 19\*):

1. Iron and Steel.

Although it is estimated that no iron and steel industry of any significance will be established by 1957, the export of iron ore will undoubtedly be resumed after the restoration of necessary transportation and mining facilities and will probably equal or surpass the prewar production peak of 135,000 tons. Ferroalloy ore production consequently will also be limited to export demands, and probably will also surpass past peak production. Chromite production may receive the greatest attention since Communist China has only very minor chrome ore deposits of its own, and although present requirements are meager they will undoubtedly increase.

\* Table 19 follows on p. 52.

Table 19

Peak Production and Estimated Production of Selected Commodities in North Vietnam in 1957 and Consequent Percentages of Chinese Communist and Total Soviet Bloc Production

Commodity	North Vietnam					
	Past Peak Production (Year) (Thousand Metric Tons)	Estimated 1957 Production (Tentative Estimates) (Thousand Metric Tons)	Communist China 1957 Production (Tentative Estimates) (Thousand Metric Tons)	Soviet Bloc 1957 Total Production (Tentative Estimates) (Thousand Metric Tons)	Communist China Percentage of Production	Total Soviet Bloc Percentage of Production
Iron Ore	134.7 (1939) a/	140.0	8,500.0 b/	112,000.0	1.6	0.1
Manganese	7.7 (1944)	10.0	140.0	7,000.0	7.1	0.1
Chromite	8.2 (1944) c/	10.0	0	1,000.0		1.0
Tungsten	0.58 (1937) d/	0.7	20.0	28.0	3.5	2.5
Zinc	7.34 (1941) e/	8.0	8.0	534.35	100.0	1.5
Tin	0.73 (1938) f/	1.25 f/	17.0	32.6	7.4	3.8
Phosphates	150.0 (1942)	160.0	18.0	6,100.0	888.9	2.6
Salt	87.0 (1941)	120.0	6,400.0	N.A.	1.9	N.A.
Coal	2,628.0 (1939)	1,000.0	101,900.0 b/	520,880.0	1.0	0.1
Cement	312.0 (1939)	300.0	11,870.0 b/	55,292.0	2.5	0.5

a. Fifty to seventy percent iron content.

b. New tentative revised estimates based on Chou En-lai's speech of 23 September 1954.

c. Forty-five percent concentrates.

d. Sixty-six percent tungsten.

e. One-hundred percent zinc metal content.

f. Tin concentrates (tin content).

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2. Nonferrous Minerals.

Zinc production will be of importance to Communist China, particularly when and if the zinc smelter at Quang Yen is retorted. It is assumed that the Chinese Communists will probably give this project high priority inasmuch as their own zinc smelting facilities are inadequate, and China is importing zinc metal from Poland. It is therefore believed that zinc production will reach at least 8,000 tons per year.

Tin production, the only significant addition to the Soviet Bloc as a whole, could possibly reach 1,500 tons by 1957 and would be very considerably increased, probably doubled, with the acquisition and operation of the Nam Pathene mines in Laos.

Production of phosphates which reportedly has already begun under the Chinese Communists in Lao Kay will continue and become more important with the acquisition of the Haiphong phosphate fertilizer factory. It is estimated that production of phosphates will attain at least 160,000 tons by 1957.

3. Coal.

Although coal production in North Vietnam reached an historical peak of 2.6 million tons in 1939, it does not appear likely that this figure will be approached by 1957. The potentiality for a production greater than the estimated 1957 production figure of 1.0 million tons probably exists, but because most production is dependent upon export demands and because present conditions do not portend as favorable a coal export situation as existed in the late 1930's, it does not seem likely that the coal-producing potential in North Vietnam will be fully utilized. New trade agreements made by the Viet Minh regime, however, could significantly change the situation within a short time period. For example, the resumption of coal exports to Japan alone on the 1939 level would mean an increased production of about 350,000 tons per year.

4. Textiles.

Prior to the partitioning of Vietnam, the cotton textile industry, especially the plant at Nam Dinh, was almost entirely dependent upon the US for its supply of short staple cotton. Some

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imports of Indian and Egyptian cotton supplemented the US supply but were not suitable for most of the production. In 1953 the US, through the Foreign Operations Administration, supplied about 8,000 metric tons of raw cotton, and prior to the hostilities the cotton textile industry annually used 12,000 to 14,000 tons of raw cotton. Practically all cloth and yarn produced by the industry is consumed domestically but still does not meet local demand. The Bloc will be required to supply the industry with raw cotton, as well as finished cloth and yarn. This import requirement should not greatly tax the Bloc. The Nam Dinh mill has been idle since French withdrawal, but reportedly is in excellent condition. 169/.

5. Cement.

The only other industry of North Vietnam to which the Bloc probably will grant considerable aid is the Haiphong Cement Plant, North Vietnam's most important manufacturing industry. It is estimated that because of its importance as a new source of supply to the Chinese Communists the latter will exert every effort to raise the plant production to 300,000 tons per year and probably will achieve this well before 1957.

6. Food.

For the present, considerable Bloc aid will be required to meet the daily living requirements of 14 million Northern Vietnamese. Since the area will be a showcase for the rest of Southeast Asia to view Communist "progress," it is believed that the Bloc will exert considerable efforts to raise the living standard. The estimated per capita production of rice (milled) of 126.2 kilograms is considerably below the yearly rice requirements of an Annamite which are estimated to be between 200 and 250 kilograms. It is anticipated that rice production may be increased somewhat in North Vietnam within the next two years. General food production probably will also be increased over the same time period with programs for growing other food crops and increasing fish catch production. The immediate acute needs of North Vietnam for food because of a poor crop year will necessitate, however, comparatively high imports of foodstuffs. These will have to come either from Communist China, which is experiencing a bad crop year in 1954 because of the present floods, from South Vietnam, or from other Southeast Asian rice producers. In addition, the area will still require importation of many daily necessities such as footwear and clothing, which in the past have been supplied by France.

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APPENDIX

SOURCES

Evaluations, following the classification entry and designated "Eval.," have the following significance:

<u>Source of Information</u>	<u>Information</u>
Doc. - Documentary	1 - Confirmed by other sources
A - Completely reliable	2 - Probably true
B - Usually reliable	3 - Possibly true
C - Fairly reliable	4 - Doubtful
D - Not usually reliable	5 - Probably false
E - Not reliable	6 - Cannot be judged
F - Cannot be judged	

"Documentary" refers to original documents of foreign governments and organizations; copies or translations of such documents by a staff officer; or information extracted from such documents by a staff officer, all of which may carry the field evaluation "Documentary."

Evaluations not otherwise designated are those appearing on the cited document; those designated "RR" are by the author of this report. No "RR" evaluation is given when the author agrees with the evaluation on the cited document.

25X1X7

1. State, OIR, Selected Background Data, Indochina, 1 Apr 1954. S.
2. J. Gauthier, L'Indochine en Travail, Paris, 1949. U.
3. State, Hanoi Despatch No. 77, 1 Apr 1954. S. Eval. RR 2.
4. State, Saigon Despatch No. 2701, 9 Jun 1954. C. Eval. RR 2.
5. [REDACTED]
6. CIA NIS 43, draft on agriculture. C.  
JANIS 70, Chap. IX, Oct 1945. C.  
Agriculture, Food Balances, for Burma, Thailand, Indochina, Philippines and Taiwan, 1952. C.

- 55 -

S-E-C-R-E-T

S-E-C-R-E-T

- State, OIR, Selected Background Data, Indochina, op. cit.  
 FOA, Yearbook of Food and Agricultural Statistics, 1952. U.
7. Agriculture, Food Balances, op. cit.
  8. Ibid.
  9. Ibid.
  10. JANIS 70, Chap. I, Oct 1945. C.
  11. State, Saigon Despatch No. 28, 13 Mar 1947. U.  
International Yearbook of Agricultural Statistics,  
 1941-1946, Rome, 1947. U.  
 FOA, Yearbook of Food and Agricultural Statistics, op. cit.
  12. Ibid.
  13. International Tea Committee, Bulletin of Statistics,  
 Jun 1952 and Supplement, Dec 1951. U.
  14. Ibid.
  15. Annuaire des États Associés, 1953, Paris, 1953. U.
  16. Ibid.
  17. JANIS 70, Chap. I, Oct 1945. C.
  18. Agriculture, Food Balances, op. cit.
  19. JANIS 70, Chap. IX, Oct 1945. C.  
 State, Saigon Despatch No. 306, 25 Jan 1954. C.
  20. Estimate by US Department of Agriculture.
  21. Interior, US Bureau of Mines, Mineral Trade Notes,  
 May 1952. U. Eval. RR 2.
  22. CIA NIS 43, Section 63, Oct 1953. C. Eval. RR 2.
  23. "Premier Report de la Sous-Commission de Modernisation  
 de l'Indo-Chine," 1948. U. Eval. RR 3.  
 UN Economic and Social Council, E/CN 11/I 8 S/19, Annex B,  
 15 Dec 1950. U. Eval. RR 2.

25X1X7yyyyyy [REDACTED]

yyyyyyyyyyyyyyyy CIA NIS 43, Section 63, Oct 1953. C. Eval. RR 2.

yyyyyyyyyyyyyyyy [REDACTED]

yyyyy 27. Ibid.

28. UN, The Manufacture of Iron and Steel in Indo-China,  
 Third Session, Lahore, Pakistan, 14 Feb 1953. U.

29. CIA NIS 43, Section 63, Oct 1953. C. Eval. RR 2.

30. CIA NIS 39, Section 63, Dec 1952. C.

31. CIA NIS 43, Section 63, Oct 1953. C. Eval. RR 2.

32. [REDACTED]

33. The Metal Bulletin No. 2539, 3 Nov 1950. U. Eval. RR 3.

34. Minéraux et Métaux-Société Anonyme Statistique, Paris, 1946.  
 U. Eval. Doc.

35. Ibid., Paris, 1948. U. Eval. Doc.

25X1A2g

S-E-C-R-E-T

S-E-C-R-E-T

36. Minerals Survey-Bauxite, USBM for NSRB, Aug 1953, Section III, p. 41, Section IV, Table 1, pp. 12, 14, 16. U. Eval. RR 3.  
Sources of Bauxite in Asia, MPM, USBM, Special Supplement No. 27, to Vol. 26, No. 6, Jun 1948, p. 14. U. Eval. RR 2.
37. JANIS 70, Chap. IX, Oct 1945. C. Eval. RR 2.
38. Army, Strategic Intelligence Digest, "French Indochina," 1 Oct 1948. C. Eval. RR 2.
39. JANIS 70, Chap. IX, Oct 1945. C. Eval. RR 2.
40. Ibid.
41. [REDACTED]
42. JANIS 70, Chap. IX, Oct 1945. C. Eval. RR 2.
43. FOA, Indo-China, 9.95-FR-631, 20 Apr 1953. U.
44. CIA NIS 43, Section 62-B, Jul 1953. C, US OFFICIALS ONLY.
45. State, Saigon Despatch No. 353, 2 Mar 1953. C.
46. CIA NIS 43, Section 62-B, Jul 1953. C, US OFFICIALS ONLY.
47. Ibid.
48. Ibid.
49. Ibid.
50. Board of Economic Warfare, No. 4979, 22 May 1948. C.
51. Ibid.
52. CIA NIS 43, Section 62-B, Jul 1953. C, US OFFICIALS ONLY.
53. Ibid.
54. Ibid.
55. Ibid.
56. Ibid.
57. [REDACTED]
58. Annuaire des Etats Associés, Cambodge, Laos, Vietnam, Paris, 1953. U.
59. Ibid.
60. J. Gauthier, L'Indochine en Travail, Paris, 1949. U.  
Navy, c-31820, Area Study 12-53. S.
61. Navy, NA, Saigon Report No. 234-52, 12 Dec 1952. U. Eval. A-2.
62. Annuaire Statistique du Vietnam, 1949-50, Saigon, 1951. U.  
Statistiques Economiques et Financières, No. 20, Feb 1954, Saigon. U.
63. C. Robequain, The Economic Development of French Indochina, Oxford, 1944. U.
64. Ibid.
65. UN, Statistical Yearbook, 1952. U.
66. Ibid.
67. Ibid.

25X1A2g

FOIAb3c

S-E-C-R-E-T

S-E-C-R-E-T

68. Ibid.  
69. Ibid.  
70. Robequair, op. cit.  
71. UN, Statistical Yearbook, 1952. U.  
72. Ibid.  
73. Navy, Saigon Report No. 234-52, 12 Dec 1952. Eval. A-2.  
74. UN, Statistical Yearbook, 1952. U.  
75. Ibid.  
76. Ibid.  
77. Ibid.  
78. Navy, Saigon Report No. 234-52, 12 Dec 1952. U. Eval. A-2.  
79. UN, Statistical Yearbook, 1952. U.  
80. Ibid.  
81. Ibid.  
82. Ibid.  
83. Ibid.  
25X1A2g 84. [REDACTED]  
85. UN, Statistical Yearbook, 1952. U.  
25X1A2g 86. [REDACTED]  
87. UN, Statistical Yearbook, 1952. U.  
88. Navy, NA, Saigon Report No. 234-52, 12 Dec 1952. U. Eval. A-2.  
89. Bulletin Economique Hebdomadaire de la Chambre de Commerce,  
Saigon, 23 Jan 1954. U.  
90. Navy, NA, Saigon Report No. 234-52, 12 Dec 1952. U. Eval. A-2.  
91. Bulletin Economique Hebdomadaire de la Chambre de Commerce,  
op. cit.  
92. Annuaire des États Associés, Paris, 1953. U.  
93. CIA NIS 43, Section 64, Mar 1953. S.  
94. JANIS 70, Chap. IX, Oct 1945. C.  
95. Ibid.  
96. Premier Report de la Sous-Commission de Modernisation  
de l'Indochine, Commission de Modernisation des Territoires  
d'Outre Mer, Nov 1948. U.  
97. Annuaire des États Associés, op. cit.  
98. Statistiques Économiques et Financières, No. 8, Feb 1953,  
Saigon. U.  
99. Bulletin Hebdomadaire de la Chambre de Commerce  
de Haiphong, Haiphong, 26 Sep 1953. U.  
100. Statistiques Économiques et Financières, No. 8, Feb 1953,  
Saigon. U.  
101. Premier Report de la Sous-Commission de Modernisation  
de l'Indochine, op. cit.  
102. JANIS 70, Chap. IX, Oct 1945. C.

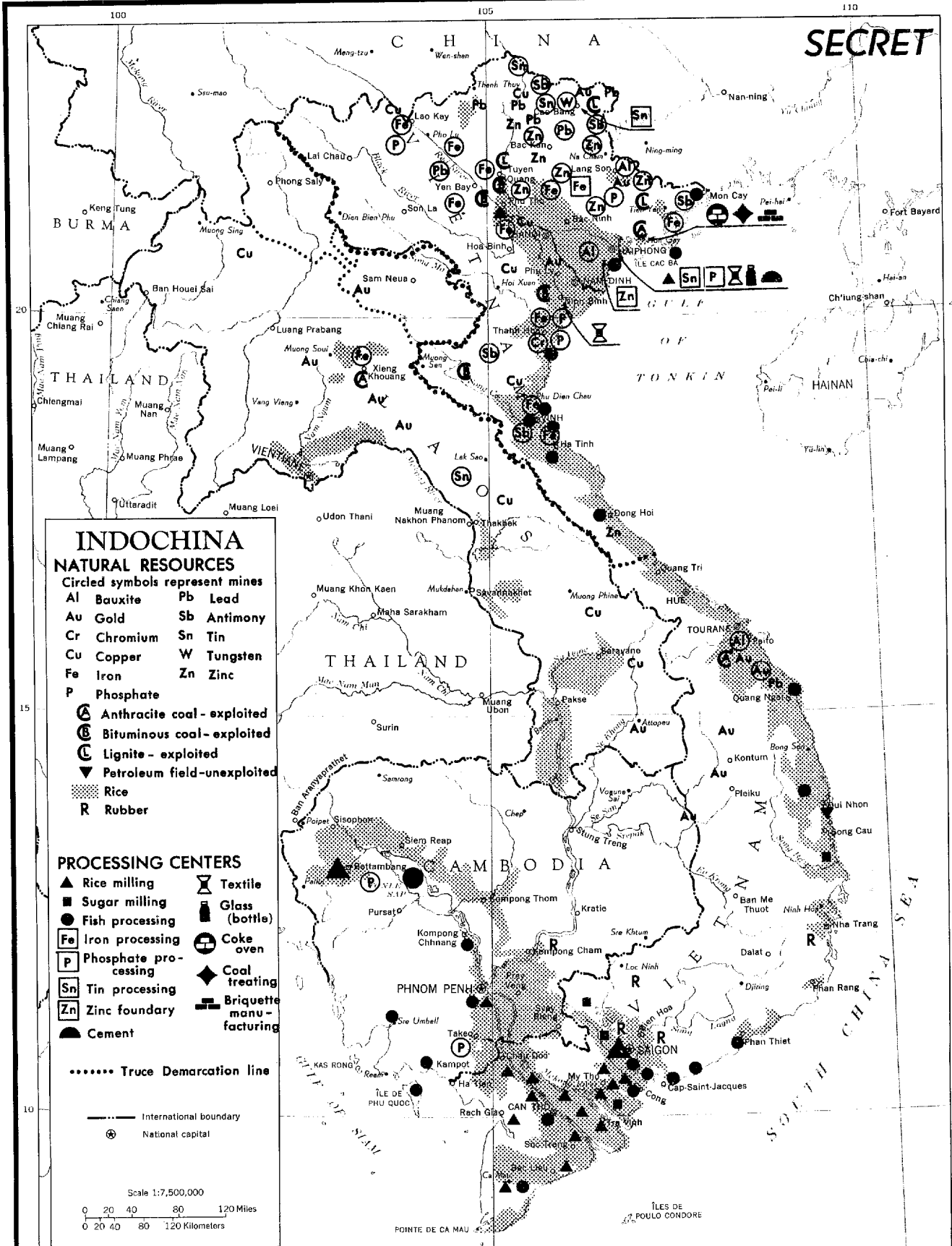


S-E-C-R-E-T

103. Ibid.
104. Annuaire Statistique du Vietnam, op. cit.
105. Ibid.
106. Ibid.
107. Annuaire des États Associés, op. cit.
108. Statistiques Économiques et Financières, No. 20, Feb 1954, Saigon. U.
109. JANIS 70, Chap. IX, Oct 1945. C.
110. Ibid.
111. Ibid.
112. Ibid.
113. Ibid.
114. Ibid.
115. Ibid.
116. Ibid.
117. Premier Report de la Sous-Commission de Modernisation de l'Indochine, op. cit.
- 25X1A2g0090001-2 118. JANIS 70, Chap. IX, op. cit.
- 25X1A2g 119. [REDACTED]
120. Annuaire des États Associés, op. cit.
121. [REDACTED]
122. Annuaire Statistique du Vietnam, op. cit.
123. Ibid.
124. Ibid.
125. Annuaire des États Associés, op. cit.
126. Statistiques Économiques et Financières, No. 20, Feb 1954, Saigon. U.
127. Robequain, op. cit.
128. JANIS 70, Chap. IX, Oct 1945. C.
129. Ibid.
130. State, Saigon Despatch No. 237, 6 Oct 1950. U.
131. Annuaire Statistique du Vietnam, op. cit.
132. Ibid.
133. Annuaire des États Associés, op. cit.
134. Statistiques Économiques et Financières, No. 20, Feb 1954, Saigon. U.
135. Robequain, op. cit.
136. Ibid.
137. Annuaire des États Associés, op. cit.
138. CIA NIS 43, Section 64, Mar 1953. S.
- 25X1A2g 139. Robequain, op. cit.
140. CIA NIS 43, Section 64, Mar 1953. S.
141. [REDACTED]

S-E-C-R-E-T

- 25X1A2g 142. CIA MIS 43, Section 64, Mar 1953. S.  
[REDACTED]
- 25X1X7 143. [REDACTED]  
144. [REDACTED]  
145. CIA FDD No. 158687, Military Topography of Northern French Indo-China, Southern Army Headquarters, Vol. I and II, 1944. C.  
146. Ibid.  
147. Air, FEAF, Intelligence Roundup, No. 151, Jun 1954. S.  
148. Robequain, op. cit.  
25X1A2gDP79T00935A000300090001-2 149. [REDACTED]  
150. Navy, NA, Saigon Report No. 61-52, 16 Apr 1952. C.  
151. Navy, NA, Saigon Report No. 54-52, 7 Apr 1952. C.  
25X1A2g 152. [REDACTED]
- 25X1A2g 153. CIA/RR IM-389, Population and Manpower in Indochina, 1 Sep 1954. S.  
154. [REDACTED]  
155. [REDACTED]  
156. State, Saigon Despatch No. 3991, 18 Mar 1954. S.  
Robequain, op. cit.  
157. State, Saigon Despatch No. 302, 9 Feb 1954. C.  
158. State, Hanoi Despatch No. 206, 1 Jun 1953. C.  
159. Ibid.  
25X1A2gDP79T00935A000300090001-2 160. [REDACTED]
161. Indochina, Commerce Extérieure, 1936, 1937, 1938. U.  
162. Annuaire Statistique du Vietnam, 1951, 1952, Saigon. U.  
163. Indochina, Commerce Extérieure, op. cit.  
164. Ibid.  
165. Ibid.  
166. [REDACTED] FOIAb3b1  
CIA FDD, Selected Briefs from the International Press, No. 12, 13 Aug 1954. C.
167. [REDACTED] FOIAb3b1  
State, Hong Kong, Review of the Hong Kong Chinese Press, Nos. 52, 53, 54, 19 Nov 1953. U.  
168. State, OIR Report No. 6701, 4 Oct 1954. S. Eval. RR 2.  
169. State, Saigon Despatch No. 892, 4 Sep 1954.  
(For official use only.)



**INDOCHINA**  
**NATURAL RESOURCES**

Circled symbols represent mines

Al Bauxite	Pb Lead
Au Gold	Sb Antimony
Cr Chromium	Sn Tin
Cu Copper	W Tungsten
Fe Iron	Zn Zinc
P Phosphate	

(A) Anthracite coal - exploited  
 (B) Bituminous coal - exploited  
 (C) Lignite - exploited  
 ▼ Petroleum field - unexploited  
 Rice  
 R Rubber

**PROCESSING CENTERS**

▲ Rice milling	⌚ Textile
■ Sugar milling	🍷 Glass (bottle)
● Fish processing	🔥 Coke oven
⌚ Iron processing	⬠ Coal treating
⌚ Phosphate processing	🏭 Briquette manufacturing
⌚ Tin processing	
⌚ Zinc foundry	
🏠 Cement	

..... Truce Demarcation line  
 ——— International boundary  
 ⊕ National capital

Scale 1:7,500,000

0 20 40 80 120 Miles  
0 20 40 80 120 Kilometers

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