most important mineral product. It is mined principally at Quang Yen, about 20 miles north of Haiphong, and in smaller fields near Phan Me and Tuyen Quang, about 70 miles northwest of Hanoi. In 1962, 1963, and 1964 the coalfields produced over 3 million metric tons each year, half the annual output under the French. Production was sufficient to meet the needs of industry and the railroads and to permit export of a million tons.

The Quang Yen field, the largest in Southeast Asia and with reserves estimated at some 200 million metric tons, produces a high quality anthracite. The seams vary greatly in thickness from less than 3 feet to over 250 feet. At one time the mines were of the open-pit type, but deep-shaft mining developed rapidly in the 1980's. Operations have been largely mechanized since World War II. The coalfields have the advantage of proximity to Haiphong and adjacent ports. Information is lacking as to current processing and shipping facilities at these ports, but those removed by the French in 1955 were among the most modern in the Far East.

The Phan Me coalfield has been exploited since 1910 and the Tuyen Quang field since 1915. The soft coal from these fields is moved by railroad or inland waterway to the larger centers for use or transshipment. Another band of coal is known to extend almost 100 miles northwest from Ninh Binh to Van Yen in the mountains southwest of the Delta.

Promising iron deposits have been found near Thai Nguyen in the Viet Bac Autonomous Region and on the island of Cai Bau northeast of Haiphong; both contain good quality ore. The Tri Cau open-pit iron mine has been developed to supply 300,000 tons of ore annually to Thai Nguyen, 15 miles to the northwest, from reserves estimated at more than 10 million metric tons. The Communist Chinese are giving technical assistance to this project. Another bed near Lao Cai on the northwest Chinese border is said to contain another 10 million metric tons. Small iron-mining centers are found near Thanh Hoa, Vinh, and Ha Tinh. In these areas the ore is associated with manganese. Overall iron ore production in 1964 exceeded 100,000 tons.

The known tin deposits all lie about 35 miles southwest of Cao Bang near the Chinese border north of Hanoi. The mines of Tinh Tuc, in this general area, were reopened in 1957 with Soviet equipment, and production is reported to average 8,000 metric tons annually. In certain veins uranium occurs in association with tin.

Chromite, a high-grade alluvial product extracted at a rate of about 30,000 tons a year, comes from a single mine, Co Dinh, in the mountainous area about 20 miles northwest of Thanh Hoa.
Gold is obtained from streambeds and alluvium in many parts of the country, and lodes also have been discovered. Zinc is found in the limestone massif north of Tuyen Quang and Thai Nguyen. Lead and silver veins are associated with the zinc, and small quantities were exploited by the Chinese before the French occupation. The chief mining area lies near Cho Dien, 90 miles north of Hanoi, and there is a smelting plant at Quang Yen. Antimony deposits are found at Mong Cai near the Chinese border on the coast and near Thanh Hoa, where chromite is also found. Graphite occurs in the rocks near Lao Cai on the left bank of the Red River at the Chinese border. Other metals found include nickel, cobalt, aluminum, and platinum.

Under the stimulus of a rapidly increasing demand for chemical fertilizer, widespread raw phosphate deposits, estimated to contain hundreds of millions of metric tons, have been identified and are being developed. The mineral is obtained from fissures and cavities in the limestone plateaus. The main mining operation is located in the northwest at Lao Cai, where deposits are estimated at 100 million tons, and there is another at Thanh Hoa. The Romanians have been responsible for greatly expanding the production of phosphates. In addition to developing the Lao Cai mine, a beneficiation plant near the mine site and a railroad at Haiphong also were constructed. Lao Cai was equipped with electric and diesel power shovels working rich zones of open pits; it was also equipped with more than 50 trucks to move the phosphate to the railroad.

Clay is plentiful; limestone deposits are few and scattered. Glass sand is abundant along the coast.

MANUFACTURING

Raw materials permit the development of some heavy industry, especially iron and steel, metalworking, and chemicals. Part of the industrial accomplishment of the 1950's was based on French undertakings which could be rebuilt without too much difficulty, particularly the installations at Hanoi and Haiphong, but most of the modern equipment in these plants was dismantled by the French forces when they left the North. The damage to the economy was relieved in 1955 when essential machinery and technicians from Communist China and the Soviet Union began to arrive. By 1965, North Vietnam claimed to have more than 1,000 industrial enterprises, of which 200 were mainly modern.

The largest industrial establishment is the Thai Nguyen Iron and Steel Works, which in 1966 was still under construction.
It consists of blast furnaces, an iron-smelting works, a steel rolling mill and piping and cable workshops. Initial output was planned at 100,000 metric tons of iron ingots annually, with this amount to be doubled by enlarging the plant when necessary. Communist China was supplying equipment and technical assistance. After completion, which was behind schedule, it was expected to supply the greater part of domestic requirements in cast iron and steel. In 1964 pig iron output probably exceeded 50,000 tons, and production of cast iron and steel was between 20,000 and 30,000 tons.

The metalworking industry covers a wide range of products, from machine tools to assorted farm implements, hardware and kitchen utensils. In 1966 two large, modern plants were said to be turning out machine tools; the Duyen Hai Machine Works in Haiphong, formerly owned by the French and retooled by the Soviet Union; and the Hanoi Engineering Plant, completed in 1958 with Soviet assistance. The Hanoi Engineering Plant has 3 presses of 15, 50, and 160 tons, power hammers of 180, 880, and 1,650 pounds, and large automatic lathes. In 1961, 1,029 cutting machines alone allegedly were produced. The Duyen Hai Machine Works blast furnace reportedly had an output of 20 metric tons of pig iron a day; that of the small blast furnace at the Hanoi plant was 2 metric tons a day. The Gia Lam Railway Shop, 5 miles northeast of Hanoi, retooled and enlarged under the Five-Year Plan, produced its third locomotive in June 1965. A medium-sized seagoing vessel, the July 20, said to be the first ship to be built in North Vietnam, was launched at Bac Dang shipyard, Haiphong, about mid-1965.

Small local machine shops have been increasing in number, and 80 “backyard” blast furnaces were reported to be in operation in 1962. According to official statements made in January 1962, there were 210 engineering shops in towns, provinces and districts, as well as 5,000 farm-tool-making teams in agricultural cooperatives. The local engineering shops not only made repairs and some farm implements but also were turning out simple machine tools.

A rudimentary chemical industry was in the process of expansion in late 1966. There was a chemical plant capable of producing annually 1,700 metric tons of caustic soda, chlorine and insecticides and 15,000 metric tons of sulfuric acid. An insecticide factory with a capacity of 10,000 tons of insecticide annually was commissioned at Viet Tri about 50 miles west of Hanoi in April 1964.

Special attention has been paid to increasing the production
of chemical fertilizers. In 1964 there were about six phosphate plants of various types which together produced more than 200,000 tons of phosphate fertilizers. The most important of these was the Lam Thac superphosphate plant in Haiphong, Soviet equipped and rated at 100,000 tons of product annually. It also had a 40,000-ton per year sulfuric acid unit. The Van Diem magnesium phosphate factory, built near Hanoi with Chinese aid, was inaugurated in September 1968. It was stated to have an annual capacity of 20,000 tons of phosphate fertilizer. The nitrate fertilizer plants at Bac Giang and nearby Ha Bac were still under construction in mid-1966. Output of fertilizers rose from 11,000 metric tons in 1961 to 295,900 metric tons in 1968.

Cement, bricks, and tile were being produced by an increasing number of plants. Much the largest producer in 1966 was the Haiphong cement works. Its reconstruction was completed in 1956, and it produced 600,000 metric tons of cement in 1964 in comparison with 300,000 metric tons before World War II. A new brick kiln at Thanh Hoa and a prefabricated ferroconcrete factory at Hanoi, completed in 1961, resulted in further expansion of building materials production.

Sawmills at Vinh and at Viet Tri provide timber for the building industry, producing nearly 184,000 cubic yards of lumber in 1961. The wood products industry at Viet Tri also includes a new plywood factory, completed with Czechoslovakian help, and a papermill. The capacity of the plywood factory is not known, but it is claimed that the papermill produced 4,000 metric tons of stationery and packing paper in 1961.

In the field of consumer goods the textile industry is the largest and most important. In mid-1966 it consisted of the cotton combine at Nam Dinh; the “March 8” textile mill at Hanoi, inaugurated in 1965 and built with Chinese assistance; a knitwear factory in Hanoi, built with Chinese, Czechoslovakian and East German aid; a wool-spinning factory with a yarn-dyeing department in Haiphong; and a cloth-printing factory north of Hanoi at Ha Dong.

The “March 8” textile mill was stated to have 50,000 spindles and to be completely automated. It consisted of cotton textile, weaving, printing, dyeing, and gunny sack workshops. There were also a large number of small weaving and dyeing shops organized into cooperatives. In 1961 the industry produced 60 million yards of cotton cloth. The knitwear factory produced underwear, winter clothing, mosquito netting, and other articles; information on output is lacking.
Other light industrial establishments include a bicycle-tire plant installed by Chinese Communist engineers, two match factories provided through Czechoslovakian aid, three cigarette factories, a soap factory, a plasticware plant with an annual capacity of 200 tons, an enamelware factory with a capacity of several hundred thousand bowls and pots a year, and a plant with production capacity of 744,000 pens and pencils annually. Information is lacking regarding their location under the 1966 economic dispersal program.

The main food-processing industries are rice milling and sugar refining. In 1963 processed rice was reported to be 339,000 metric tons and refined sugar 24,900 metric tons, more than double the tonnage in 1960. Most rice mills are small, having been family concerns serving local communities. Nine new rice mills were completed in 1958 and 1959 with Communist Chinese aid. Four sugar refineries were also built under the Three-Year Plan with Chinese assistance at Ha Dong and Viet Tri and in Nghe An Province; another was constructed at Van Diem, near Ha Dong, with Polish technical assistance. Other food-processing plants include two provided by the Soviet Union for processing tea; a fish cannery at Vinh and one at Haiphong also completed with Soviet aid; and a distillery at Hanoi. Great efforts are being made to produce cheap foodstuffs by processing sweet potatoes, cassava, soybeans, and vegetables in numerous small establishments.

CONSTRUCTION

Construction has played a prime role in the development of the economy since independence. By early 1966 the public utilities, factories, irrigation works, railroads, and roads inherited from the French colonial period and damaged in the Indochina War had been rehabilitated; new factories had been built with aid from Communist countries; and new power stations, irrigation works, roads, and railroads had been constructed. It was also claimed that thousands of housing units, schools, and hospitals had been completed.

Major achievements in construction are said to have been recorded in 1964. Official statistics state that 23 construction projects had been completed during the year, with road and railroad construction, irrigation and flood control projects being of particular importance. It was further noted that the efficiency of construction work had shown improvement and that such work as pile driving and bridge building, formerly done by hand, gradually was being mechanized.
As a result of the United States aerial attacks, construction of large facilities has admittedly dropped, but the building in rural areas of houses, clubs, maternity centers, storehouses, covered threshing floors, livestock sheds, pigsties, and irrigation canals is said to have accelerated. Construction materials are reported to be in short supply. The necessity for continual repair of roads, railroads, bridges, and embankments no doubt has resulted in the diversion of most construction brigades to these duties. The brigades are reported to be assisted by 30,000 to 50,000 Chinese laborers.

HANDICRAFTS

Handicrafts make an indispensable contribution to the consumer goods available. Output includes not only traditional products, such as pottery, pots and pans, textiles and baskets, but also agricultural tools, boats, carts, and simple machines. Emphasis is on reducing dependence on imported goods. Luxury articles, such as ivory carvings, silver inlay, lacquer, embroidered items, and bamboo objects, are usually produced only for export. A number of craft-training centers have been established to improve quality and productivity.

Artisans pursue their callings in their own villages throughout the year, or, in certain seasonal crafts, work away from home at certain times of the year. Most basketmakers, for example, work at home, but those who fashion the huge storage baskets (bo) seasonally move to various provinces where their services are needed.

In 1961 there were reported to be 66,000 craftsmen, and, although the government has encouraged the formation of cooperatives, most craft industry continued to be conducted by individuals or families on a seasonal or part-time basis as a supplement to farm income in catering to local needs.
CHAPTER 18

FOREIGN ECONOMIC RELATIONS

Foreign trade has expanded considerably since 1954. The major portion has been with the Communist countries, but there also have been commercial relations with more than 58 other nations. All foreign trade transactions were handled by the Ministry of Foreign Trade, which assumed the primary objective of supplying the country with capital goods necessary to develop the national economy. Imports of consumer goods were kept at a minimum and were confined to basic necessities.

Communist countries have given large-scale assistance. By 1966 more than twice as much aid had been received from Communist China than from the Soviet Union, but the proportion of Soviet assistance was increasing.

The pattern of foreign trade is determined primarily by trade and payments agreements and foreign aid and loans. Before 1959 these trade and payments agreements were negotiated on a 1-year basis; later, 2-year and some 5-year agreements were concluded. The government also has negotiated individual contracts with certain private firms or government agencies which were not provided for in trade agreements.

The regime has added a number of new items to commodities sold abroad. Before World War II the main exports from North Vietnam were coal and ores. Since 1955 processed agricultural and forestry products and handicrafts have played an increasingly important role in total shipments. As the industrial sector was reconstructed and expanded, manufactures provided a steadily increasing percentage of total exports.

The bombing of North Vietnam by the United States resulted in a notable decrease in exports and a vast increase in aid from the Communist countries.

TRADE AGREEMENTS

The Communist regime has concluded a number of trade and payments agreements, most of them with Communist countries.
Each agreement enumerates the deliveries to be made between the signatory countries within a given time period, but information on actual deliveries habitually is not published. Communist China in 1952 was the first country with which North Vietnam entered into trade relations. An agreement on the further development of trade was concluded in Peiping in 1955 and was renewed each year until 1961 when a longer term agreement for 1960-62 was signed.

This was followed by a 5-year agreement, concluded in 1961, which provided that China would supply North Vietnam with steel products, cotton and cotton yarn, chemicals, mechanical equipment, and medicines in exchange for coal, timber, cement, livestock, poultry, fruits, and other foodstuffs. In 1964 a civil aviation agreement was signed in Hanoi providing for closer cooperation between civil aviation administrations of the two countries.

An agreement with the Soviet Union was signed in Moscow in 1955 by Ho Chi Minh and has been renewed from year to year. In 1958 a protocol increased the terms of trade by 70 percent. The Soviet Union would sell goods, including metalworking machines, power and electrotechnical equipment, spare parts, bearings, oil products, sheet metal, cable, chemicals and cloth, in return for jute, hardwood products, tobacco, tea, coffee, spices, bananas, knit goods, footwear, and other goods. A new 5-year trade agreement, concluded in 1960, envisaged an increase of 250 percent in commercial exchanges during the period. The terms of trade were further increased in 1962.

Trade relations with Czechoslovakia are regulated by an agreement concluded in Hanoi in 1955 and renewed yearly with revisions in the list of goods scheduled for delivery. In 1960 the renewal was extended until 1965. In addition to this general agreement, supplementary agreements for the delivery of specific commodities have been signed between North Vietnam and Czechoslovakia. In 1957 Czechoslovakia purchased coal for reexport to Belgium and in 1958 made further coal purchases for reexport to other countries of Western Europe in exchange for various raw materials required for the development of industry in North Vietnam.

In 1956 the first general trade agreement was signed with East Germany for the exchange of goods; in 1958 a second was concluded which has been renewed each year since. In 1958 a special agreement was signed between the foreign trade organization of the North Vietnamese Government and the enterprise for the foreign trade in haberdashery in East Germany for the
purchase in North Vietnam of substantial quantities of silver haberdashery articles and handmade art objects. In 1961, under an agreement of the same type, North Vietnam agreed to make shipments over the next 6 years of chrome, tin, tungsten and phosphates; this was followed by a protocol in 1965 which provided for an increase in trade between the two countries.

In 1956 agreements were signed also with Bulgaria, Poland, Romania and Hungary. In 1957 the first trade relations were established with the Mongolian People's Republic and with North Korea. A trade agreement with Albania was signed in 1959 and with Cuba in 1960. All these agreements were subsequently renewed.

In 1962, under protocols to these agreements governing trade, North Vietnam was to receive from Romania trucks, electric pumps for irrigation, diesel and electric motors, and other goods in exchange for raw phosphate, tin, sesame, and tea. Albania would exchange bitumen and cotton for "tropical products and industrial goods." North Korea was to ship structural steel, copper wire, fertilizer, and machinery in exchange for raw phosphate, chrome ores, and tin. Protocols covering trade in subsequent years showed slight changes in the commodities listed. In February 1964 a trade and payments protocol, said to provide for an increase in business, was signed in Hanoi with Cuba.

North Vietnam has also concluded several trade and payments agreements with non-Communist countries—France, India, Indonesia, the United Arab Republic (UAR), Iraq, Yemen, Guinea, Cambodia, and Laos. The agreement with France was signed in 1955 and specified annual exchanges amounting in value to 1 billion francs (for value of the franc, see Glossary). It was renewed in 1965, when France for the first time extended medium-term credits for up to 5 years. Under the agreement with India, signed in 1956, individual contracts covering specific commodities were also concluded between the two countries.

Trade relations with Indonesia and the UAR date from trade agreements signed in 1957; trade with Iraq, from an agreement signed in 1959. In March 1961 a 3-year agreement was signed with Guinea by which that country would send coffee, rubber, iron ore, and other produce in exchange for Vietnamese coal, rice, and tea. All these agreements appear to have been renewed. Information on the trade agreement with Yemen is lacking.

North Vietnam (then Tonkin) conducted trade with Cambodia and Laos when all were members of the Indochinese Union (see ch. 2, Historical Setting). The Communist regime regularized
North Vietnam's trade relations with Cambodia under a trade agreement signed in 1958 at Phnom Penh, Cambodia. Under its terms, Cambodia has shipped ivory, cotton, and dried fish to North Vietnam and received coal, phosphates, silk, and cotton fabrics, cement, small machine tools, and tea. A civil aviation agreement was concluded in 1963.

North Vietnam's agreement with Laos, signed in 1961, is for aid as well as trade. Under its terms, North Vietnam reportedly gave Laos 10 million dong (for value of the dong, see Glossary). This was to be used for financing the surveying and repair of transportation and telecommunications networks, technical assistance rendered Laos by North Vietnamese specialists and the training of Laotian technical workers in North Vietnam.

FOREIGN AID AND LOANS

North Vietnam's foreign economic relations with the Communist countries have not been confined to trade. Many of these countries have made substantial grants-in-aid to assist the regime to rehabilitate and expand the economy and to support the military activities in South Vietnam. Many have also made long-term loans having a similar objective. From 1955 to 1960 Communist countries gave grants-in-aid of over 1,500 million old rubles (for value of the ruble, see Glossary) and lent over 500 million old rubles. In support of the first Five-Year Plan, North Vietnam received long-term loans totaling 1,310 million old rubles. In addition, the Soviet Union gave 20 million old rubles to use in eliminating malaria.

With these funds, donor countries helped North Vietnam build 108 engineering projects, including 29 electric power projects, 17 mechanical projects, 13 mining and metallurgy projects, 21 light industries, and 11 transportation projects. By the end of 1962 aid from Communist China represented 64.4 percent of all aid received; Soviet aid, 27.8 percent; and other Communist countries (including Mongolia), the remaining 7.8 percent.

Communist China

During the Indochina War the Chinese Communists gave the North Vietnamese regime supplies, arms, technical assistance, and training facilities in China. In 1954, when Ho Chi Minh visited Peiping, an agreement was signed which provided for the reconstruction of the transportation and communications networks between North Vietnam and Communist China. Ho also thanked
the People's Relief Administration of China for a gift of 10,000 tons of rice and 5.5 million yards of cloth.

In 1955, when Ho made another visit to Peiping, a treaty of friendship and aid was negotiated whereby North Vietnam was to receive a grant of 800 million yuan (25 yuan equals U.S.$1), to be spent in the next 5 years. This sum was intended to finance the reconstruction of transportation facilities and a number of industrial installations. The grant provided for the delivery of equipment, for the services of Chinese technicians and supervisors to be sent to North Vietnam and China. In the same year the Communist Chinese Red Cross gave 200,000 yuan for the relief of Haiphong flood victims. In 1956 two 900-ton freighters were presented to North Vietnam, and Communist sources announced that six motor barges had been given by China after the French defeat at Dien Bien Phu. Protocols on aid and assistance were signed covering industry, agriculture, water conservation, transport, posts, and telecommunications.

In 1957 a further aid grant was made by Communist China in the form of passenger cars, rolled-steel mechanical equipment and various consumer goods, such as cotton, fabrics, pharmaceuticals and chemicals. In 1958 a 200-horsepower tugboat was presented to North Vietnam, and it was announced that the Chinese Government had sent materials, equipment, and technicians to assemble other tugs and help North Vietnam train ship-building technicians and workers. In the same year, another agreement provided for the joint use of the 530-mile railroad linking the port of Haiphong with Kunming in southwest China, and still another provided for aid in the construction and reconstruction of 18 industrial enterprises.

In 1959 a further agreement was concluded whereby North Vietnam was given a grant of 100 million yuan and a long-term loan of almost 300 million yuan to pay for complete sets of plant equipment and technical assistance to be provided by Communist China. Included were 28 industrial and transport enterprises in the fields of metallurgy, power generation, railroads and light industries. The loan was repayable in 10 years at 1 percent interest. In 1960 a protocol provided for Chinese aid in the building and equipment of eight state-owned farms to be established by 1962. By 1962 statements by North Vietnamese officials indicated that deliveries under these agreements had been slow and incomplete.

Aid was stepped up, however, after the United States began bombing North Vietnam. In 1965 Communist Chinese Deputy Premier Li Hsien Nien and North Vietnam's Deputy Premier
Le Thanh Nghi signed an agreement under which Communist China agreed to provide North Vietnam with free aid in the form of "equipment," installations for whole plants and supplies for the national defense. Numerous sources said that Peiping's military aid was most likely to be in the form of light arms and ammunition.

Soviet Union

Soviet aid can be divided into three categories: deliveries of complete industrial installations, deliveries of commodities, and technical assistance. Soviet aid is based on an agreement to assist in the rehabilitation and development of the North Vietnamese economy concluded in 1955 at the time of Ho Chi Minh's visit to Moscow. Immediately on conclusion of the agreement the Soviet Union announced it had made a grant of 400 million rubles to North Vietnam for the purchase of 25 undertakings, geological prospecting, a health campaign, and medical training. Just over a quarter of the sum was spent on consumer goods and the remainder on industrial equipment, machinery, and raw materials. Among the projects for which this grant was made were an engineering plant at Hanoi, a tin mine, two tea-processing plants, waterworks, powerplants, broadcasting stations, a fertilizer factory, a raw phosphate mine, and cotton plantations. As a result, over 1,000 Soviet technicians were sent to North Vietnam by 1957 to work on these and other projects, including agricultural development.

The 1955 grant was followed by gift shipments in 1955 and 1956 of 170,000 tons of Burmese rice, 9.9 million yards of various fabrics, 5,000 tons of cotton, 1,000 tons of yarn, a large quantity of paper, medicines, and thread in order to overcome the lack of such goods on the North Vietnamese market. In 1957 the Soviet Union granted a long-term credit of 47 million rubles for the purchase of spare parts, chemicals, and metals. It was followed in 1959 by the grant of another long-term credit of 100 million rubles to finance various industrial and other enterprises. These included an electric station to generate 24,000 kilowatts, a coal mine to produce 600,000 tons a year and a polytechnic institute at Hanoi. In June 1960 a further agreement was made providing 35 million rubles credit for the increase of perennial tropical plant cultivation and industrial processing of the same. In 1961 the Soviet Union contributed over 101 million rubles to North Vietnam's Five-Year Plan, 48 million rubles as a long-term credit and the remainder to cover the construction of 48 industrial plants, 8 thermal plants and hydroelectric power sta-
tions, development of coal mines, Soviet assistance in geological prospecting and in establishing new research and educational institutions.

A 1962 agreement provided for economic and technical aid which included the building of pumps for irrigation, the construction of chemical plants, and the enlargement of existing powerplants. The Soviet Union also agreed to furnish tractors, agricultural machinery, fertilizers, and motor fuel for cooperative farms.

Soviet aid assisted in the construction of a number of industrial and mining enterprises and power stations. It also helped by aiding in the development of agriculture and lumbering, by gifts of fertilizers and agricultural implements to state farms, and by technical assistance rendered by Soviet specialists in the introduction of industrial crops. The Soviet Union also delivered the equipment and provided specialists for a large hospital in Hanoi and sent three special teams to combat malaria, trachoma and other diseases. It equipped several laboratories, the university, the polytechnical school and a medical institute in Hanoi, and a number of Soviet teachers have been sent to these and to other higher educational institutions. At the same time, training was being given to more than 3,000 North Vietnamese at educational institutions in the Soviet Union.

By early 1964 Soviet aid to North Vietnam seemed to be steadily decreasing as a result of Hanoi's increasingly vocal support of Peiping, which at the same time was in no position to give any substantial assistance (see ch. 12, Foreign Relations). A reversal took place, however, after the United States began bombing North Vietnam.

In February 1965, during Soviet Premier Alexei Kosygin's visit to North Vietnam, an economic agreement was signed unifying all loans specified in the three North Vietnam-Soviet Union economic agreements of 1960 and 1962. Under this new agreement the Soviet Union proposed to use the unified loan to continue giving technical aid in the expansion of power plants and coal mines and in the construction of pumping stations, diesel engine factories, and other industrial and agricultural projects. The Soviet Union also agreed to give North Vietnam six fishing boats and a quantity of hospital and medical equipment.

Other Communist Countries

According to Communist sources, in 1955 Czechoslovakia granted 35 million rubles for technical assistance in factory construction and development of the zinc mining industry and
for the purchase of the necessary equipment and materials. Czechoslovakia also made a gift to North Vietnam of excavators, tractors, machine tools, electric motors, and pumps. In 1961 Czechoslovakia agreed to contribute over 6 million rubles to North Vietnam's Five-Year Plan and in 1962 granted a long-term credit for the construction of a tannery, a shoe factory, and a brick factory.

Communist sources also claim that East Germany, as early as 1952 during the Indochina War, sent gifts of drugs and medical supplies to North Vietnam. This was followed by further gifts of drugs in 1954 and 1955. In 1956 East Germany donated equipment for a hospital; a maternity home; a prosthesis factory; other medical and educational facilities; four radar-equipped fishing trawlers; and a telephone exchange to be constructed by East Germany. In 1957 East Germany made a gift of equipment and accessories valued at 2.7 million dong.

In the same year Romania was said to have granted aid in the amount of 15 million rubles in the form of shipments of machinery, equipment, and consumer goods and assistance in the expansion of the Haiphong cement works. In 1961 Romania agreed to contribute over 33 million rubles to the Five-Year Plan.

Also in 1957, Poland reportedly gave 30 million zlotys (1 zloty equals U.S.$0.25) in the form of goods, such as machinery, tractors, medical appliances and trucks, and granted a long-term loan of 20 million rubles to cover the costs of two boiler houses and a sugar mill. In 1961 Poland contributed 7 million rubles to the Five-Year Plan.

The other Communist countries have granted financial aid and goods since 1955. According to Communist sources, Hungary contributed 6 million rubles to the Five-Year Plan. Bulgaria gave 4.8 million rubles in goods and in 1961 made a contribution of more than 2 million rubles to the Five-Year Plan; Albania supplied goods valued at 62,300 rubles, and Mongolia sent goods valued at 367,000 rubles. Mongolia also donated 100,000 animals to be delivered between 1960 and 1965, sent veterinarians and expert stockbreeders to North Vietnam and, after the United States initiated its air raids, is reported to have further broadened its aid. In 1962 North Korea made a gift of 10 trucks and in 1965 signed an economic and technical aid agreement. In 1965 Cuba donated 10,000 tons of sugar.

**PATTERN OF FOREIGN TRADE**

The total volume of foreign trade is not known, and available
figures are fragmentary. It expanded from an insignificant amount in 1955 to a reported value of 831.2 million rubles in 1960. Thereafter, no foreign trade statistics were issued. It was claimed, however, that export value in 1961 increased by 2 percent over 1960 and in 1963, by 3 percent over 1962; at the same time, imports increased. Soviet trade figures show that the country's exports to North Vietnam had risen steadily to 49 million rubles in 1962 and that imports from North Vietnam also rose, to 27 million rubles. Beginning in 1965, however, Soviet imports from North Vietnam showed a considerable decline.

For 1963 the United States Department of Commerce has estimated exports of non-Communist countries to North Vietnam at $12.8 million (as against $10.1 million in 1960) and imports of non-Communist countries from North Vietnam at $24.8 million (as against $15.7 million in 1960). The United States Department of State estimates that 15 percent to 20 percent of North Vietnam's foreign trade is with non-Communist countries. On this basis the total value of trade in 1963 would have been around $200 million, with the Soviet Union accounting for about 43 percent, China and other Communist countries for 39 percent and the non-Communist world for 18 percent.

Indications are that foreign trade continued to grow in 1964 and 1965. In 1964, according to United States Department of Commerce estimates, imports from non-Communist countries alone totaled a minimum of $15 million, and exports to non-Communist countries reached a value of more than $23 million (see tables 4 and 5). Using the Department of State formula, total trade would appear to have been in the neighborhood of $210 million. Incomplete returns for 1965 indicate a further rise in value of total trade. Japan, France, Hong Kong, Malaysia and Singapore and Cambodia appear to have developed into major non-Communist trading partners.

Exports

The value of exports rose from 163.8 million rubles in 1957 to 319.6 million rubles in 1960. The regime claims that exports have become more and more diversified, increasing from 128 categories in 1958 to 335 in 1963. Exports of products listed as "industrial" by the North Vietnamese Government steadily drew ahead of agricultural and forestry products in importance. Included in the industrial category were coal, handicrafts, ores, cement, floor tiles, clothing, and footwear. Of this group of com-
### Table 4. North Vietnamese Imports from Non-Communist Countries, 1964*

<table>
<thead>
<tr>
<th>Country</th>
<th>Value (in thousands of dollars)</th>
<th>Major commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>3,372</td>
<td>Fibers; chemicals; manufactured goods, mainly fabrics; 2,450 metric tons of tin plates and sheet.</td>
</tr>
<tr>
<td>France</td>
<td>2,551</td>
<td>5,000 tons of wheat flour; chemicals; manufacturing and transport equipment; motor vehicles, textiles, yarn and thread.</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1,686</td>
<td>270 tons of plastic forms, sheets and tubes; 360.09 tons of corn; 7,934 tons of raw cotton.</td>
</tr>
<tr>
<td>Malaya and Singapore</td>
<td>1,288</td>
<td>2,000 tons of raw rubber; 1,524 tons of coconut oil; miscellaneous manufactured products.</td>
</tr>
<tr>
<td>Italy</td>
<td>1,274</td>
<td>9,505 tons of nitrogenous fertilizer; chemicals; motor vehicles; machinery and transport equipment.</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1,188</td>
<td>6,446 tons of rice; 4,430 tons of corn; 20,500 hundredweight of timber; other merchandise.</td>
</tr>
<tr>
<td>West Germany</td>
<td>1,108</td>
<td>329 tons of complete plant installations for smelting works and a rolling mill; 46 tons of electric installations for powerplants and factories; chemicals.</td>
</tr>
<tr>
<td>Argentina</td>
<td>606</td>
<td>11,480 tons of corn.</td>
</tr>
<tr>
<td>Syria</td>
<td>314</td>
<td>486 tons of raw cotton.</td>
</tr>
<tr>
<td>Egypt</td>
<td>200</td>
<td>228 tons of cotton yarn.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>144</td>
<td>Medicines and pharmaceuticals; 53 tons of leather; miscellaneous manufactured goods.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>100</td>
<td>Chemicals and miscellaneous manufactured goods.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>79</td>
<td>Yarns and thread.</td>
</tr>
<tr>
<td>Ceylon</td>
<td>59</td>
<td>4 tons of coconut oil.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>24</td>
<td>Tallow; animal fats and oils.</td>
</tr>
<tr>
<td>Denmark</td>
<td>12</td>
<td>Machinery and transport equipment.</td>
</tr>
<tr>
<td>Morocco</td>
<td>12</td>
<td>Miscellaneous merchandise.</td>
</tr>
<tr>
<td>Finland</td>
<td>6</td>
<td>Iron and steel manufactured goods.</td>
</tr>
<tr>
<td>Belgium and Luxembourg</td>
<td>4</td>
<td>Miscellaneous manufactured goods.</td>
</tr>
</tbody>
</table>

* Estimated. Does not include minor or unreported shipments. Other important items such as crude oil and sugar are supplied from Communist-controlled areas when available.

modities, the major items of export were, however, coal and handicrafts. Since 1957 about a half million tons of anthracite have been shipped to Japan annually and significant tonnages delivered to France, Belgium, Hong Kong, the Netherlands, Italy and Singapore. A considerable amount of coal is exported through bunkering foreign ships at Hon Gay, a trading port about 30 miles northeast of Haiphong, in the center of the coal region. By the 1960's cement had become an important export item, with Hong Kong, Singapore and Cambodia being the major customers.
## Table 5. North Vietnamese Exports to Non-Communist Countries, 1964*

<table>
<thead>
<tr>
<th>Country</th>
<th>Value (in thousands of dollars)</th>
<th>Major commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>9,842</td>
<td>Miscellaneous merchandise; 403,000 metric tons of coal; 28,000 metric tons of pig iron.</td>
</tr>
<tr>
<td>France</td>
<td>3,740</td>
<td>187,000 metric tons of coal, feathers, spices, textiles, basketwork.</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>3,729</td>
<td>216,000 hundredweight or rice; 11,000 metric tons of coal; 28,000 hundredweight of refined sugar; eggs; live animals; 988,000 hundredweight of cement; 128,000 hundredweight of lime.</td>
</tr>
<tr>
<td>Malaya and Singapore</td>
<td>1,434</td>
<td>1,100 tons of refined sugar; oilseeds; 17,219 metric tons of coal; 50,000 hundredweight of cement.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,312</td>
<td>42,000 tons of coal; 120 tons of cotton fabrics; 382 tons of baskets and mats.</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1,266</td>
<td>47,247 tons of cement; 500 tons of sugar; tea; chemicals; rubber tubes and tires; miscellaneous merchandise.</td>
</tr>
<tr>
<td>Belgium and Luxembourg</td>
<td>767</td>
<td>29,082 tons of coal; 74 tons of coffee; textiles; miscellaneous merchandise.</td>
</tr>
<tr>
<td>Egypt</td>
<td>886</td>
<td>2,000 tons of refined sugar.</td>
</tr>
<tr>
<td>Italy</td>
<td>278</td>
<td>9,000 tons of coal.</td>
</tr>
<tr>
<td>West Germany</td>
<td>233</td>
<td>Feathers, down; essential oils.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>165</td>
<td>Cocoa, tea, spices, wood; miscellaneous merchandise.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>69</td>
<td>Feathers; other miscellaneous merchandise.</td>
</tr>
<tr>
<td>Austria</td>
<td>58</td>
<td>Crude animal materials; basketwork.</td>
</tr>
<tr>
<td>Denmark</td>
<td>10</td>
<td>62 tons of feathers.</td>
</tr>
<tr>
<td>Sweden</td>
<td>7</td>
<td>Bamboo mats, baskets, etc.</td>
</tr>
<tr>
<td>Jordan</td>
<td>4</td>
<td>Food.</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1</td>
<td>Jute.</td>
</tr>
</tbody>
</table>

*Estimated. Does not include minor or unreported shipments.

Handicrafts, consisting of articles made of silver, ivory, horn, bamboo, cane; rattan, and rare woods, have become an important export, accounting for a relatively large share of the total. Sales abroad have risen spectacularly from a value of 1 million dong in 1955 to 4 million dong in 1956 and to a still higher value in subsequent years.

Of the wide variety of exports classed as agricultural and forestry products—which included rice, sugar, peanuts, sesame, castor oil, jute, canned or dried vegetables and fruits, fish, and lumber, particularly rare woods—rice, sugar, and lumber were the most important. More than 180,000 tons of rice were shipped...
abroad in 1957 to the Soviet Union and its satellites, to Indonesia and to India. Figures for 1958 and 1959 are not available, but $2 million worth of rice reportedly was sold to non-Communist countries in 1960. Hong Kong's major import from North Vietnam is rice, and shipments rose from 5,800 tons in 1962 to 8,100 tons in 1964, earning for North Vietnam about $1.3 million in the latter year. The French customarily shipped out high-quality Tonkinese rice, for which high prices were obtainable, and shipped in cheaper low-quality rice for domestic consumption. The North Vietnamese may be following this practice in order to obtain much-needed hard currency. Sugar became a popular export item in the 1960's, although no totals are available. There is no information on the quantity of lumber shipped, but it appears to be significant.

Imports

Value of imports rose from 398 million rubles in 1957 to 511.6 million rubles in 1960. The major portion of imports were producer goods. Machinery and equipment ranked first and included large quantities of machine tools; precision, mechanical and optical equipment; electrical and radio apparatus; road-building equipment and agricultural machinery, consisting of threshers, harvesters, grinders, tractors, and other equipment. Motor vehicles, especially trucks and bicycles were also important import items. Industrial raw materials were next in rank. These consisted of rolled steel, plastics, cotton, and cotton thread. Other very important imports were petroleum and petroleum products, supplied mainly by the Soviet Union. Fabrics (mostly cotton), sugar, and pharmaceuticals were the main consumer goods imported.

BALANCE OF PAYMENTS

No balance-of-payments account is published by the regime. The request to the Communist countries for cancellation of debts totaling 430 million rubles is evidence of North Vietnam's unfavorable balance on account with these countries. The government, however, has continued to point out that the trade balance is improving, with exports paying for an increasing percentage of imports. The United States Department of Commerce calculates that North Vietnam's balance of trade with non-Communist countries is favorable.
In 1966 domestic trade, the weakest sector of the socialized economy, was further disrupted by United States air attacks on the transportation system. The bombing of the large bridges at Hai Duong; and on the roads running east and west of Haiphong and north and northwest of Hanoi to Viet Tri and Thai Nguyen, was interfering with the supplying of food to Hanoi. Moreover, the destruction by mid-July of a significant proportion of petroleum storage capacity, estimated at 250,000 metric tons, obviously entailed even greater transport difficulties.

The strains on the system were publicly revealed in early July 1965 when the government announced the formation of a corps of 2 million labor shock troops whose primary task was the repair of damaged communications and transport facilities. Subsequently, communications and transport were organized along military lines. Many types of improvisation were resorted to, and every available means of rudimentary transport was organized. In general, serious disruption appears to have been prevented but at considerable cost and to have been accomplished with increasing difficulty as the population was called on to work harder and longer on smaller rations.

The bulk of internal trade is concerned with the buying and selling of rice and other farm produce, livestock, poultry and poultry products, fish and fish products, charcoal, firewood, sugar, textiles, tools, and household articles. The distribution system, which in the colonial period supplied the cities with local produce, appears to have broken down, and the government has resorted to extreme measures to obtain delivery of minimum stocks of food and other commodities to the cooperative and state stores. Delivery of manufactured goods from the cities to the countryside also has presented much difficulty that the government in 1963 adopted the policy of dispersing industry throughout the countryside in order to develop the "self-sufficiency" of each province and each district.

The internal market has been beset by shortages. Some arise
from the unsolved problems in directing agricultural produce to the cities and manufactured products to the rural areas; others result from the government policy of limiting imports largely to capital goods, thus making the consumer market almost entirely dependent on domestic production. Although domestic production of manufactured goods has increased, it has been unable to meet consumer demand. Manufactured goods and handicraft products remain scanty, low in quality and high in price. Food is perennially in short supply, and the government has aggravated the shortage by exporting rice to pay for capital equipment. Rice has been rationed in the cities for some years, and certain textiles and items of finished clothing are sold only to holders of coupons issued to Lao Dong Party cadres (see Glossary) or winners of awards. Price controls have been established for many commodities.

Domestic trade has been undergoing reorganization along Communist lines since 1949. Government-controlled cooperatives were introduced in areas under Viet Minh control during the Indochina War and since have assumed an increasingly important role. After the partition of the country in 1954 many French and Chinese firms withdrew under the pressure of Communist economic policy, and their functions as importers, exporters, wholesalers, and retailers were taken over by newly created state trading organizations. Since 1955 government marketing agencies have continued to increase in number and to expand their activities. Private traders, though permitted to remain in business, have been, in theory, tightly controlled by government regulations; in practice, they have been able to circumvent the regulations to a large extent.

Trade and transportation employ the largest segment of the population after agriculture. Over 75 percent of wholesale trade is carried out by government organizations, and cooperative and state stores almost entirely have replaced privately owned retail shops. Inventories and accounts of retailers who have survived heavy taxation and denunciation are subject to frequent government inspection for conformity to regulations. A series of drives carried out by the government to disperse handicraftsmen and traders into the countryside away from Hanoi appears to have met with some degree of success. Visiting journalists report that the soup, noodle and rice peddlers and the lemonade and flower vendors have almost all disappeared, leaving only the bicycle tire mend ers, a few hairdressers and dealers in cigarettes, matches and bananas.

Most shopkeepers and artisans are Vietnamese, although some
are Vietnamese-born Chinese. In 1960 the authorities reported that more than 630,000 persons were engaged in trade and services but gave no information on the number of women or the total number of persons working in cooperative and state stores or operating their own businesses. There has been no occupational census since 1960.

BACKGROUND

Before the French came, Vietnam was a country composed almost entirely of nearly self-sufficient villages. With each village devoted to virtually identical pursuits—mainly crop cultivation and subsidiary occupations such as fishing and local crafts—there was little need for commerce between villages. The few cities—Hanoi, Hue, and Saigon—drew upon the surrounding countryside for their needs.

Under French colonial rule, the development of exports—coal, in particular, from Tonkin, rice from Cochin China—and the importation of French manufactured goods greatly stimulated internal commerce. Further commercial activity was generated by the evolution of a pattern of trade within the country whereby rice from Cochin China was exchanged for the coal and manufactured goods of Tonkin.

In the latter part of the nineteenth century the French began constructing rail lines and roads, waterways were improved and extended and many new canals were dug. By 1910 railroads around Hanoi and the railroad connecting Hanoi and Haiphong with Kunming in southwest China were completed. After World War I networks of roads which reached into the highland areas were built around Hanoi. The famous coastal Mandarin Route from Hanoi to Saigon, originally constructed by the Annamite emperors, was made into a modern motor route. Other new roads connected Hanoi with China. In 1936 the rail link between Hanoi and Saigon was completed, greatly facilitating north-south trade.

The transportation system suffered greatly in World War II and even more so in the Indochina War which followed; it suffered, in fact, more damage than any other physical element of the economy. Railroad rolling stock was almost totally destroyed or seriously damaged, and most of the highways were left unusable as a result of military action and lack of maintenance. Boats and other obstacles were sunk in the navigable waterways, and silting closed many of the main river channels and harbors.
to large ships. The great majority of the junks which carried cargo on the rivers and along the seacoast were destroyed.

World War II also began the disruption of the marketing system. The rice of Cochin China and the coal of Tonkin were diverted to Japan, and imports declined drastically. The Indochina War and the destruction of the transport system brought to a standstill the movement of goods other than that within the local community. Commerce revived after the armistice in 1954 but had to be completely reoriented.

WHOLESALE AND RETAIL TRADE

The Ministry of Domestic Trade, which includes the buying-and-selling cooperatives, is responsible for the distribution of most consumer goods. Exceptions are drugs, which are under the jurisdiction of the Ministry of Public Health, and books and newspapers, which are distributed by the General Directorate of Posts and Radio Communications and by the Ministry of Culture.

Wholesale trade is dominated by state organizations—the Foodstuffs Commodities Company, the General Commodities Company, the Lumber and Locally Produced Commodities Company and several others—operating under the Ministry of Domestic Trade. Retail trade is carried on by state stores, buying-and-selling cooperatives, and private dealers. The number of state stores and cooperatives engaged in trade has greatly increased since 1955, while the number of privately operated enterprises has steadily declined.

The state trading organizations supply raw materials to manufacturers and processors, and they purchase and wholesale the finished products. Prices and quality specifications are set by the government. State stores purchase directly from producers and serve as suppliers to buying-and-selling cooperatives. The private merchant either pays cash for wholesale merchandise from state trading organizations or he functions as a sales agent receiving merchandise consigned by the government and being paid on commission. In either case the price which the retailer may charge is fixed by the government.

Frequently the state trading organizations and the buying-and-selling cooperatives extend credits and give advances on the products to be purchased. The terms of such credits and advances are more favorable for agricultural producer cooperatives and other cooperatives than for private farmers, individual craftsmen and private cottage industries.
Buying-and-Selling Cooperatives

In 1963 a resolution was adopted by the eighth conference of the Lao Dong Party's Central Committee proposing the rapid development of the buying-and-selling cooperatives and the establishment of at least one such cooperative in every village. First organized in mid-1955, they originally consisted of 36 cooperative establishments, 133 retail stores and 5 sales cells. By 1960 there were over 4,000 buying-and-selling cooperatives, but most of them were located in the cities, in the district and provincial towns, and along major transportation routes. Following the Committee's resolution, however, buying-and-selling cooperatives greatly increased in number. In 18 months, millions of people joined them, contributing as circulating capital more than 13 million dong (see Glossary), representing 6 million shares.

By 1966 most villages in the Red River Delta and half the villages in the highlands had organized buying-and-selling cooperatives; membership totaled more than 5 million. The cooperatives had become the major arm of the state-operated trade apparatus for the collection and purchase of farm products and food and for the distribution of manufactured goods and farm supplies to the villages. On the average, each buying-and-selling cooperative stocked 250 to 300 items, and many places stocked 400 to 500 items. Many of the village buying-and-selling cooperatives had opened branches in the hamlets, enabling farmers to buy and sell more conveniently. They had displaced nearly 25,000 small businessmen who had gone into "productive" activities.

The buying-and-selling cooperative of a village was subject to the leadership of the Party organization and of the community's administrative committee. With regard to business activities it was guided by the buying-and-selling cooperative of the district. Party committees at all levels and the executive committees of the provinces and municipalities were responsible for guiding the procurement plan in their localities.

Collective Canteens

Because of the food shortages, in 1966 most of the population of Hanoi and other urban centers were taking their meals in collectively operated canteens where prices were reasonable and supplies less erratic than in the markets. Ration cards of the members were turned over to the canteen. Unions, factories, and kitchen staffs had been urged to raise pigs, ducks, chickens, and
fish to augment the food stocks of the canteens. Meanwhile, prac­tically all the thousands of soup, noodle, and rice vendors and little restaurants, once characteristic of urban centers, had disappeared.

The policy regarding the establishment of collective canteens was promulgated by the government early in 1963. By the middle of 1964 there were thousands of such mess halls throughout the country, each factory and worksite having at least one. Hanoi had 551; Quang Ninh, 130; and Nam Dinh, 92. There were scores at Vinh Phuc, 25 miles northwest of Hanoi, and at the coastal town of Ha Tinh, 175 miles southeast of Hanoi. The number of people using them every day was steadily increasing and was estimated to include 50 percent of the country's laborers and factory workers, public servants, and students.

**RATIONING**

The government issues ration coupons for the purchase of most foods. In September 1966 the monthly rice ration of just under 27.5 pounds per person (33 pounds for students) could usually be obtained on schedule in the cities. The ration had been the same since 1962. Frequently, corn or dried tapioca chips was substituted for up to 30 percent of the rice ration. The meat ration was theoretically 10 ounces (reduced in 1963 from 1¼ pounds) of beef or pork per month, but often only half of this could be obtained. The sugar ration was 1.1 pounds per month and was very scarce.

Extra rations are prescribed in special cases. The mother of a newborn baby is entitled to 2.2 pounds of sugar, 1.1 pounds of meat and approximately 1 quart of fish sauce during the first month after giving birth. The newborn baby may receive 1.1 pounds of sugar and from two to four cans of condensed milk, but only if the mother cannot breast feed it. She must submit to a strict examination before she can claim the baby’s ration.

Possession of a ration coupon is no guarantee of being able to buy the amount of food to which one is entitled. The rations are admitted to be insufficient, but while supplies are available stocks are sold in government shops and markets at the official prices. Sometimes, when supplies are obviously inadequate, rations are reduced or canceled altogether, and sometimes the shops sell food while stocks last to those who come first. Consequently, everybody seeks to be first at the shops and the result is lengthy queues and many hours of wasted time.
Even if a person successfully purchases his full food ration, this is insufficient to keep him alive and healthy for a month, so everyone is obliged to buy supplementary supplies of food in the local black market where prices generally are very high. Although the authorities disapprove of black-market dealings and have frequently forced traders out of business and into "productive labor," they have learned that the state cannot function without them. Food producers are reluctant to sell their produce to the authorities and conceal as much as they think they safely can. The only effective method of inducing them to place this hidden food on sale has proved to be the black market, so it is permitted to operate and has grown in size since 1963 when the government first adopted its permissive attitude. Those whose earnings are insufficient to pay the high prices demanded by the black marketeers must go without or acquire money from some other source.

Rations have always been extremely small, and the government has urged various means to add to the diet. In August 1962 an order was promulgated by the Premier's Office which obliged all factories, barracks, nearby government offices, schools, and construction sites to grow food in any conveniently located plot of spare land. Each person was expected to produce at least 22 pounds of food yearly, which was deducted from his ration. Some of these gardens have been developed into successful operations providing sufficient food for the participants.

In September 1966 the annual clothing ration consisted of 12 feet of cheap cotton cloth, including mosquito netting, reduced from 18 feet in 1963. As in the past, only poor-grade, locally produced cloth was available for the ration. Coupons were not the only requirement for buying; the coupon holder was also required to produce a certificate of necessity issued by the local "street committee." The street committees, controlled by the Lao Dong Party, issue certificates only if the Party has indicated that stocks are sufficient. Small quantities of superior cloth, khaki and poplin were available but were reserved for the cadres and were supplied directly to them by the institution or organization for which they worked.

Most commodities could not be purchased without coupons, which were difficult to obtain unless one had good connections. In addition, permits from the street committee were required for the purchase of alcohol and a number of specified consumer goods.
Price Control

The task of stabilizing prices in the face of shortages was initially assigned to the state trading organizations. Their failure to halt buying by retailers at prices higher than those fixed by the government led to the establishment in 1957 of the special Committee on Prices. It includes representatives of the Ministry of Domestic Trade, the Ministry of Finance, the National Bank and other state organizations. The Committee on Prices makes recommendations to the Council of Ministers on the basis of price studies and supply and demand surveys.

In 1961 the Council of Ministers approved increased prices for a number of agricultural products in the hope of stimulating production and inducing the peasants to sell to the government. At the same time, prices were reduced on a number of consumer goods, and state trading organizations were ordered to make every effort to find additional sources of products—especially foodstuffs, textiles and clothing. The state stores were also instructed to improve distribution in the rural areas.

Prices, however, continued to fluctuate widely and differed greatly from place to place. The tenth plenary session of the Lao Dong Party's Central Committee, convened in December 1964, proceeded to investigate the problems of price determination and adopted a resolution which specifically pointed out the need to construct a price system which included the prices of the means of production, bulk-purchasing prices and wholesale prices, as well as the retail prices of consumer goods.

Transportation

In 1966 all traffic moved only at night, and then it was heavily camouflaged. Aircraft took off and landed only after dark. Seventy percent of the highway system and most bridges (which are very numerous in the Delta where the land is intersected by a complex network of streams, canals, and rivers) had been hit many times by rockets and bombs. Roads and waterways were described by Western visitors as being deserted in the daytime but, with the onset of darkness, bursting with activity. A steady stream of boats sail in and out of docks and ferry slips. Soviet-made trucks and jeeps roll along the highways with their lights off or with only a small glow to suggest something is moving along the road. In the stream of traffic are hundreds of heavily loaded bicycles and tricycles and thousands of persons carrying laden baskets suspended from shoulder poles.
At the sound of an American airplane all traffic stops, lights are turned off and people quickly jump into nearby slit trenches or other cover. As soon as the attack is over, hundreds of persons, mostly women from the neighborhood, stream out to fill bomb craters and reconstitute some sort of surface for the road from the piles of stones and gravel permanently kept by the roadside for that purpose. Within hours the route is again passable, if only with difficulty. The North Vietnamese boast that no road has been closed for more than 48 hours.

Particular ingenuity has been shown with regard to bombed bridges. Some are replaced by pontoons of bamboo rafts; others by ferries which may be either pushed by a launch or manhandled over fixed cables. Sometimes a bridge may be rebuilt under water; at other times a spare, floating bridge is kept in reserve nearby. By daylight bridges and ferries may be hidden under cover at the water's edge, to preclude detection by aerial observers.

To keep traffic moving and to minimize the disruptive effects of the air war, the government by 1966 had established a centrally directed communications-transportation branch which included the organization of local repair teams made up of residents along all the main roads and near other principal targets. The "science-technology" cadres of the communications-transportation branch and those of the Army, the engineers, National Scientific Research Commission, and universities had been given the task of improvising from locally available raw materials, such as wood and bamboo, the means to replace damaged bridges, repair roads, fill bomb holes, and deactivate time bombs. These cadres also assist and advise the local teams in the application of such means. At all levels of the communication-transportation branch, the "science-technology management staffs," supplemented by engineer troops and pioneer youths, had been placed in charge of the central task of maintaining transportation.

At the end of the Indochina War the government was faced with the necessity not only of restoring the transportation system as it had existed under the French but of extending it as an essential part of its economic development program. Rehabilitation of roads, railroads and waterways was essentially completed by 1965 when the United States began its bombing attacks. The port of Haiphong had been largely mechanized. In the Delta hundreds of new bridges had been built and ferries modernized and motorized.

In the highlands, in addition to a few highly strategic new roads, footpaths had been widened for use by horse caravans.
Throughout the country many cart tracks had been constructed to connect villages with district centers to do away with shoulder poles and porters and to facilitate delivery of farm products. The shortage of draft animals, however, limited the increased use of carts for hauling. A few of the main roads permitted fairly fast motor traffic, but most were narrow and rutted, subject to washouts in the wet season and landslides in the mountains. The government operated a fleet of trucks and a civil airline, but the shoulder pole, the junk, the sampan, and the bicycle, to which a box on wheels could be attached, remained the major means of freight transport.

Difficulties were still being encountered in the dispatching, loading, and unloading of freight at Hanoi, Haiphong, Thai Nguyen, and Thanh Hoa, points of particular concentration. Storage facilities were few and inadequate. The maintenance and repair of automotive and transport equipment, including bicycles, also continued to present serious problems. Most equipment had been imported and spare parts were chronically in short supply.

Trained mechanics were few, and use of equipment was inefficient and wasteful. Every year the percentage of trucks in need of extensive repairs was high, and owing to lack of servicing facilities proper repair could not be assured. By the end of 1965 the Gia Lam Railway Shop near Hanoi was able to produce steam locomotives, passenger cars, and freight cars as well as to repair those received from Communist China. A bicycle factory was in operation, and engineering shops had begun, as directed, to reproduce needed spare parts. Quality, however, was low, as much from careless workmanship as from lack of experience in metalworking.

Roads

Almost all of the 6,634 miles of highways in existence in 1939 had been destroyed by mining and aerial bombardment during the hostilities which terminated in 1954. Most of this road network had been rendered usable by the end of the Five-Year Plan in 1965, but the major effort had been expended on the development of secondary gravel or dirt roads built by the local population with technical advice from trained cadres detailed for the purpose by the provincial authorities. By the end of 1965 all the provinces had roads connecting the districts; the majority had roads connecting the villages, and some had vehicular roads to the cooperatives, storehouses and fields. The
highway network still needed to be reorganized, unified and extended to support the development of forestry and mining in the mountains.

Trucks performed the long-distance jobs, carrying more freight than the railroads since other means of transport were not utilized as extensively as they should have been. Buses operating in the principal towns and along the major arteries carried more passengers but less freight than the railroads. Both passengers and freight showed a steady rise each year through 1963, the last year for which statistics are available. Horse- or ox-drawn carts were common but still insufficient in number to meet past and current needs. It was bicycles which created the traffic jams in downtown Hanoi at rush hour when people were commuting to and from work.

The role of the state as an operator of highway and road transport has grown since 1956 with the acquisition of large numbers of motor vehicles under aid agreements with the Soviet-bloc countries. Czechoslovakia, for example, provided buses; the Soviet Union, trucks and passenger cars. The government formed transport companies under the supervision of the Ministry of Communications and Transportation. Some companies were assigned to a municipality such as Hanoi or Haiphong, others to the provincial authorities and still others to an enterprise such as the coal mining complex at Hon Gai (30 miles northeast of Haiphong), or the Thai Nguyen metallurgical center (40 miles north of Hanoi).

Waterways and Ports

In the course of a year, changes in weather cause water levels to vary greatly between high- and low-water seasons, seriously affecting shipping activity. Ill-organized port and yard facilities, lack of loading and unloading equipment, and the prevalence of one-way cargo renders shipment by waterway slow, uncertain and more expensive than other types of transport. The volume of freight carried on the rivers and canals and by the sea along the coast in 1968 was almost as great as that transported by truck. Previously, the waterways had carried the bulk of the freight shipped within the country, the shift reflecting the increase in the truck fleet and the improvement in the roads. Yet there was no decrease in the demand for shipping space on the waterways, which lacked sufficient motorized and manually operated craft, an indication of the overall shortage of transport means. Although passenger traffic tripled
from 425,000 in 1960 to over a million fares in 1963, the number was still far lower than the passengers carried by the railroads and by bus.

A great deal of work had been done to rehabilitate the water transport system of the Red River Delta. About 1,000 miles (one-fourth of the total of inland waterways) had been repaired or rebuilt. Most of our river outlets in the Delta are navigable, although silting necessitates regular dredging of channels. River craft can also move up the Red River as far as Yen Bai (about 80 miles northwest of Hanoi), up the Black River as far as Cho Bo (45 miles southwest of Hanoi) and up the Song Lo as far as Tuyen Quang (70 miles northwest of Hanoi). The government has improved the river service, added more craft, and extended the routes.

Haiphong, situated 10 miles inland from the Gulf of Tonkin on waterways connecting with the Red River, is one of the country's few ports and ranks among the largest in Southeast Asia. Its access channel must be dredged regularly to permit the passage of large vessels. The French abandoned dredging operations early in 1955 before they withdrew from the North, and a large part of the port equipment was either evacuated or damaged. When the North Vietnamese took control of Haiphong, large vessels had to transfer their loads to lighters in the outer bay. In 1956 a large harbor dredge was supplied by the Soviet Union to clear the channel, a project completed in 1957, opening Haiphong again to 10,000-ton ships. By the end of 1963 loading and unloading equipment had been mechanized, hastening the turnaround time of vessels calling at Haiphong to off-load cargo.

Northeast of Haiphong are the two coal ports of Hon Gai and Cam Pha which ship anthracite from the neighboring mines. Both are used for direct loading of coal for export or shipment to Haiphong for domestic distribution. The only other port of any significance is Ben Thuy, which serves the southern part of North Vietnam. It can admit coastal vessels up to 400 tons.

Railroads

Less freight is carried by rail than by water or truck. The railroad is inadequate for moving coal from the mines in the northeast to the industrial centers and for the transport of forestry products and processed ores from the mountains to the factories and ports in the lowlands. Railroads have been, however, the major long-distance passenger carrier. In 1963 they
served about 24 million persons, in comparison with 17 million using buses and 1 million using watercraft. Between 1960 and 1968 the number of rail passengers increased by 10 million and the amount of freight carried, by 1 million tons. Most freight shipped on the northern rail lines consists of exports to and imports from China.

Of the 714 miles of railroads existing in 1939 in that part of French Indochina which is now North Vietnam, 658 miles had been damaged or destroyed by the time the Indochina War was ended. In 1954 only the line between Hanoi and Haiphong and a 5-mile spur from Hanoi south to Van Dien were operable. Immediately after the cease-fire the railroads became the property of the government, and reconstruction began. By 1965 the entire rail network had been rebuilt and a new branch added, extending from the metallurgical center of Thai Nguyen to Dong Anh, about 10 miles north of Hanoi, where it joins the Lang Son line going northeast to Nanning in Kwangsi Province of Communist China (see ch. 2, Physical Environment and Population).

Communist China played a leading role in the reconstruction of the rail network. Under the terms of an aid agreement signed in December 1954 the Chinese supplied locomotives, passenger cars, and other railroad equipment and sent technicians and skilled workers to help in the reconstruction. Beginning in early 1965 China also assumed major responsibility for continuing repair and restoration of damages to the rail network resulting from United States aerial bombing. Indications in 1966 were that some 50,000 Chinese technicians and laborers were employed in North Vietnam keeping the rail lines in operation. The rail line from Hanoi south to Vinh had been severed in a number of locations, and motor vehicles placed on the tracks were running on the individual sections.

By Air

An air service is maintained between Hanoi and the national capitals of Peiping, Vientiane (Laos), and Phnom Penh (Cambodia). All major towns throughout the country have air fields, but there is no indication that there is a regularly scheduled civilian air service in operation. No information is available on either the number of passengers or the amount of freight carried (see ch. 2, Physical Environment and Population).
Farmers accounted for more than three-fourths of the total labor force, estimated at 9.3 million in 1965. Many peasants were engaged part of the time in making and selling handicraft articles and in marketing garden produce. There were approximately 130,000 craftsmen, merchants and vendors in 1964. The number of industrial workers had risen from 21,000 in 1955 to 150,000 in 1963, but the majority of them remained unskilled.

Manpower policies initiated in 1954 by the government and the Party were designed to change the basic structure and character of the labor force so as to conform with Communist economic and political tenets. One of these policies was the assimilation of independent craftsmen and small merchants into collective agriculture, state-owned industrial production, and handicraft cooperatives. Craftsmen and vendors were denounced, and peasants who sold part of their produce and handmade household goods on the open markets were called profiteers. Since 1965 handicraft skills have been found to be useful in supplementing the lagging factory production. In fact, officials have declared that contracting some types of factory work to individual craftsmen is preferable to hiring additional workers.

The government also has tried to improve skills among workers and farmers and to train cadres (see Glossary) and managerial personnel. Since 1954 many schools and courses imparting technical skill have been created, but the number of graduates has filled only a small percentage of the total need. Official statements regarding the relationship between the objectives of training programs and the needs of the national economy stressed the importance of replacing manual with technical production processes in agriculture and industry. In 1965 several Party leaders declared that the schooling of most peasants and workers was insufficient to serve as a basis for even simple technical training. The training of cadres and intermediate-level managerial personnel was also handicapped by their inadequate education (see ch. 8, Education).
To regulate the uneven geographical distribution of manpower, a large-scale migration program was launched in 1961. By 1966 more than 1 million persons had been moved from the thickly populated Red River Delta to the sparsely settled highlands. The purpose was to boost agricultural production by bringing a larger portion of the highlands under cultivation. Party leaders have stated that they intend to move "additional thousands" of persons in order to redistribute the labor force.

Military conscription has created serious manpower shortages, mainly in agriculture. To replace male workers called into military service, the government in 1965 launched a major propaganda campaign aimed especially at women, stressing the "three responsibilities": to free men for military service; to care for families and dependents of servicemen; and to join the militia and serve in battle if necessary. Many women, however, were unable to perform long-term physical work; others proved to have an even poorer educational background than their male counterparts. Special labor brigades, composed of men and women, have been recruited since 1965 to increase the number of persons available for urgent construction projects and for special assignments to repair war damages.

Government and Party leaders have voiced concern over the disruption of the working day and the loss of many work-hours because of aerial attacks. Official pressure to make up the loss by working overtime and the general strain resulting from shortages have had adverse effects on the health and morale of workers in industry and agriculture (see ch. 7, Living Conditions).

Military obligations and the disruption of working hours because of aerial bombardment have further lowered the production rate, already inadequate by official standards. Government demands to boost production despite wartime hardships have taken the form of drives to increase the number of participants in so-called emulation movements (see Glossary). Workers are called upon to exert themselves in the cause of "national salvation against the United States aggressors."

Traditionally, the relationship between the Vietnamese employer and employee was paternalistic. The government, while explicitly repudiating paternalism, has encouraged the people to think of President Ho Chi Minh as "Uncle Ho," and he regularly addresses himself to his "nieces and nephews."

With its expansion in the ownership and operation of enterprises, the government has become the chief employer. The
number of persons working on state farms and in government-owned factories and offices increased fivefold between 1955 and 1965. The proportion of government-employed workers in the total labor force rose from 2.5 to 10 percent during the same period.

The Vietnam General Federation of Trade Unions is an instrument of the Party, and its primary task is the political indoctrination and mobilization of the workers to carry out government policies. The Federation and its member unions are the only legal labor organizations. Most of its national leaders are influential members of the Party. Member unions are expected to bolster emulation drives, assist in the implementation of labor laws and promote industrial safety campaigns.

The third conference of labor union representatives in August 1966 reiterated the importance of increased production, coupled with ideological and technical training. At the conference Hoang Quoc Viet, chairman of the General Federation, appealing to the "revolutionary heroism of workers," set forth three "paramount tasks" for labor union officials and cadres. These were to ensure high productivity, efficiency and favorable living standards for workers; protect production and fight heroically; and train workers in political and ideological subjects, as well as in technology, science, and culture.

COMPOSITION

The most recent data reflecting the composition of the labor force are contained in the census of 1960. In that year the labor force totaled over 8 million, about 51 percent of the population. Some 6.3 million persons (78.4 percent of the labor force) were employed in agriculture; 537,700 (6.8 percent) worked in industry; 230,000 (2.8 percent) were engaged in trade; 181,000 (1.6 percent) worked in construction; 101,500 (1.2 percent) worked in transport and communications; and 66,000 (0.9 percent) were in other occupations. Services, administration, education, scientific research, public health, social services and banking accounted for 671,500 (8.3 percent) of the working population.

Information regarding the structure and size of the labor force in 1966 was scanty. Based on the number of persons between 15 and 59 years of age, a United States source estimated the total labor force in 1965 to be approximately 9.3 million, composed of about 4.8 million women and 4.5 million men. More than 6 million persons, about three-fourths of the
According to an article by Tran Nguyen, entitled “Shifting Small Merchants into Production Work,” in the December 1964 issue of Hoc Tap, there were approximately 130,000 small merchants and craftsmen operating as private entrepreneurs. In addition, many peasants spent part of their time making and selling handicraft products on the free market (see ch. 19, Domestic trade). Their entry into collectives, and especially into agricultural cooperatives, has been an important government objective. The article complained that from 1959 to 1963 only 70,000 small merchants were shifted to “production work,” whereas during the same period 75,000 new small trading enterprises were started.

A statistical survey of the labor force employed by state-owned enterprises, in the “1963 Statistical Data, North Vietnam,” published by the Central Statistical Bureau, indicated that 75.8 percent of the workers were engaged in the “material production sector” and 24.2 percent in the “nonmaterial production sector.” In the “material production sector,” industrial workers represented the largest category (27.6 percent). Some 18.7 percent worked in basic construction; 9.8 percent on state-owned farms; 9.2 percent in commerce; 7.5 percent in communications, transport, and postal services; and about 3.0 percent in miscellaneous pursuits.

In the “nonmaterial production sector,” persons employed in state and group management duties represented the largest category (9.9 percent), followed by teachers, artists, and cultural workers (7.8 percent). Employees in science and in science-supporting enterprises represented 2.9 percent of the labor force in the state-owned portion of this sector. About 4.1 percent were in unspecified categories.

The proportion of women in the labor force has been increasing since 1954, particularly in agriculture. According to government spokesmen, women made up more than 60 percent of the agricultural labor force in 1965, as compared to 56 percent in 1962. Officials asserted that in many areas, for example in Binh Xuyen district, between 70 and 80 percent of the farm-workers were women, and in some hamlets the percentage was as high as 90 percent.

According to the Party newspaper Nhan Dan (March 1965), the percentage of women workers and employees had also
gained in the nonagricultural sector, in which they comprised some 28.8 percent of the total industrial labor force. In light industry they represented 44.9 percent and in heavy industry 23.4 percent of the workers. In trade they constituted more than 32 percent of the employees; in the teaching profession, more than 30 percent. A new textile factory in Hanoi employed 7,000 workers in 1966, of whom 70 percent were women.

CHARACTERISTICS

The Labor Supply

The labor supply is unevenly distributed because of the concentration of more than four-fifths of the population in the Red River Delta. The imbalance has contributed to insufficient agricultural production in the sparsely settled uplands because of manpower shortages.

The regulation of manpower distribution between areas has long been a government objective and has been declared "a requirement of socialist construction." To balance the labor supply and to increase the size of cultivated areas in the highlands the government has moved approximately 1 million persons from the Red River Delta to the highlands since 1961. At the same time, some 11,000 highlanders have been permanently resettled in certain areas designated by the government (see ch. 2, Physical Environment and Population).

In 1965 government officials again stated that "distribution of manpower among different areas constitutes a long-range problem of primary importance." They asserted that the scope of the migration to the highlands must be further expanded in order to settle additional thousands of persons and emphasized that the program must proceed with maximum speed.

Since 1965 the military draft has severely depleted available manpower resources, especially in agriculture. Because of the assignment of large numbers of persons to communications and transport tasks in support of military operations, the government no longer has been able to make up for the slow pace of agricultural mechanization by diverting additional personnel to the agricultural sector. Much of the work has been left to women and children who have been unable to fulfill production quotas by themselves.

Minister of Agriculture Hoan Anh stated in 1965 that the average number of annual workdays per worker in the cooperatives had to be increased from 250 to 360. He also called
for “rational work plans for old people and children. . . .”

Le Duan, first secretary of the Party, declared in 1965 that “the labor problem is becoming critical.” He called for “better labor management, tighter labor organization, and for the increase of the number of work days devoted to collective production.” Minister of Heavy Industry Nguyen Van Tran said in an article in the October 1965 issue of Hoc Tap, that because “. . . tens of thousands of youths in the agricultural and industrial sectors have been taken into the army and are doing essential work for national defense . . . the number of people not engaged in production has increased greatly.”

In addition to exhorting everybody to work longer and harder, the government has launched a campaign to recruit special labor brigades (also called labor shock troops) among young people between 17 and 30 years of age. In 1965 the Vietnam Labor Youth Union, an important mass organization, was charged with recruiting labor volunteers. Nguyen Van De, secretary of the Vietnam Labor Youth Union Central Committee, was appointed commander of the labor brigades. The Union works in conjunction with the Ministry of Labor, but the overall control of the recruitment drive rests with the Party’s Central Committee. The term of service in the labor brigades is 3 years. The volunteers are assigned to work on communications and transport projects and on large-scale construction tasks and to repair roads and bridges damaged by United States aerial attacks. In 1966 the Central Committee of the Vietnam Labor Youth Union announced that it had pledged to mobilize 4 million young people and to consolidate the young shock brigades for “resistance against United States aggression.”

Officials exhorted the members of agricultural cooperatives to help families of young people recruited for voluntary labor service to attain the officially stipulated production quotas so that volunteers “may feel at ease when leaving home.” Special inducements to prospective volunteers included medical care, health allowances in the event of illness, and priority selection to be trained as technical cadres or to attend institutions of higher learning. If volunteers were wounded or died in the course of labor brigade duty they would be eligible for the same honors and privileges accorded to war invalids and casualties.

**Women in the Labor Force**

Since the intensification of the war in South Vietnam, the
government has relied heavily on women to counteract the drain on the supply of manpower. Women have been exhorted to follow the Party "onto the glorious road of socialist construction." Female workers have been asked to bring food to collective kitchens and to leave shopping, rice-cooking, and the care of children to elderly neighbors and youngsters. In the cities women have been encouraged to bring their families to collective dining halls for meals and to relinquish care of children to the nurseries. Women have been assigned to heavy physical labor in agriculture, construction, and industry with adverse effects on their health. Official admonitions, therefore, have been issued not to overlook the physical and psychological limitations of women when assigning them work (see ch. 7, Living Conditions).

The program to mobilize women to perform men's work has been centered around the "three responsibilities movement" launched in March 1965, in which women were encouraged to assume responsibilities in all fields of production. The number of women joining the movement was officially estimated in 1965 as between 1 million and 2 million. Local Party officials, notably those of Ha Bac, Nam Ha and Hai Duong Provinces, reported that many women are engaged in harrowing, plowing, roofing, and other tasks formerly reserved for men. In Phu Tho, Hai Duong, Hung Yen, Thai Binh, and Thanh Hoa Provinces women were put to work as managers of cooperatives and production teams and as bookkeepers and statisticians. Many also worked in administrative committees and local Party offices on the district and village levels.

Speaking at a conference of women cadres in May 1965, Premier Pham Van Dong stated that "in the present anti-United States national struggle women must participate in greater numbers than in the past in all branches, such as agriculture, light industry, trade, postal services, education, health, culture, and administrative agencies." He said that the output of women had increased at the price of excessively long working hours and hard work. He called for the use of tools and labor techniques which are better suited for women, particularly "in tasks requiring much labor strength such as digging earth, transporting products, harvesting crops, purchasing products."

Skills and Training

The lack of skills in agriculture and industry and the inadequate training of administrative, managerial and technical per-
sonnel have seriously handicapped the government's efforts to increase production and improve quality in agriculture and industry. Technicians from the Soviet Union and Communist China assisted in the management of major factories, construction projects and powerplants, but their numbers were not sufficient and the period of their assignments was too brief to provide adequate training for their Vietnamese counterparts.

Although the scope of education has been expanded, the educational level of the large majority of workers and peasants is insufficient to serve as a basis for the understanding of modern production processes. The education of most peasants stops below the fourth grade. In industry few workers have more than 1 year of intermediate-level schooling (grades 5 to 7) (see ch. 8, Education).

Skills are also inadequate among basic- and intermediate-level technical and administrative personnel commonly known as cadres. Party officials reported in 1965 that the educational level of almost half of the basic-level (elementary) cadres was below the seventh grade and that even among intermediate- and high-level cadres 40 percent had not completed the seventh grade. In the highlands most cadres have only a third- or fourth-grade education. Because of deficient schooling the managers of agricultural cooperatives are often unable to draft and to implement production schedules, and their training in arithmetic is insufficient to enable them to perform simple bookkeeping tasks.

The lack of technical skills and managerial qualifications has been especially apparent in agricultural cooperatives where women have taken over administrative and managerial duties. Officials have complained that not nearly enough of such women have completed the intermediate-level schooling. In industry the poor training of foremen and managers has been responsible for the lack of production planning and coordination, as well as for much waste, product rejection, and low-quality products in general.

The government has relied mainly on cultural and training courses for adults to raise the educational level of workers, peasants, and cadres. Special 8-year programs were launched in 1968 to improve the qualifications of cadres assigned to managerial positions in agriculture. Adult education courses are provided in factories and agricultural cooperatives to give workers general and technical training while putting in a full day's work. In 1966, according to Hanoi radio commentators, adult education courses operated in 60 percent of the factories and enterprises,
with almost 2,000 workers and cadres attending. It was reported that “thousands of other workers and students” had graduated from adult education courses offered by the University of Hanoi, but Vice President Ton Duc Thang said in 1965 that adult education had “developed unevenly” and that workers had been negligent in attending courses.

Although higher level professional personnel have increased appreciably since the Indochina War (1946–54), their numbers are inadequate to satisfy the demand for experts, teachers, executives and managers. The latest information on the number of intermediate-level and higher level professional personnel is given in a statistical survey of the Ministry of Education, published in 1963. According to the survey there was a total of 12,637 university-level and 56,893 intermediate-level cadres. More than 17,000 of the intermediate-level cadres worked for government-controlled cooperatives.

Among the 12,637 university-level cadres there were 5,602 teachers for grades 8 to 10 of secondary schools. Other pursuits represented were as follows: 1,840, industry; 1,334, public health; 1,142, agricultural cadres; 960, architecture, and 1,759, miscellaneous.

Productivity

Productivity in industry and agriculture is a major concern. The government has made extensive use of radio, press, exhibits, special rallies and propaganda campaigns to increase productivity. In a 1965 May Day speech Hoang Quoc Viet, president of the Vietnam General Federation of Trade Unions, asked:

... all cadres and Party members and people [to] try their utmost to step up various revolutionary campaigns and emulation movements at factories, agricultural and handicraft cooperatives, construction sites, state farms, public services and in culture, education, and science. ...

The executive committee of the Vietnam General Federation of Trade Unions exhorted workers to “overfulfill the state plan in all circumstances.” Banners and bulletins have been posted at worksites bearing such slogans as “hammer in one hand, rifle in the other” and “each shall do the work of two” (see ch. 13, Public Information and Propaganda).

Since 1954 emulation movements have been a permanent feature in the drive to boost production. The organization, operation and rituals of such movements are modeled on the Soviet Stakhanovite Movement, named after a Soviet worker, Stakhanov, who consistently exceeded his assigned norms.
Workers participating in the emulation movement are organized in production teams. Those exceeding their work quotas are called progressive labor teams, and those with consistently high production records may compete for the title of “socialist labor teams”—the highest distinction in the emulation movement—conferred on the winners by government officials during an elaborate ceremony. Besides exceeding production quotas, the winning groups and their respective members must give evidence of efficiency, thrift, self-reliance and enthusiasm for the collective production process. They must also comply strictly with government economic policies and be active in organizing political, technical, and cultural training courses. A government pennant, accompanied by a 1,000 dong (see Glossary) prize, is awarded annually to the winning team from the previous winner. At the end of a given economic planning period, the team having kept the pennant longest is entitled to keep it permanently.

Individual workers may also aspire for the title of “progressive laborer” or “emulation fighter” by exceeding work quotas, by economizing in raw materials, or by developing new working methods which facilitate and expedite production. The highest distinction an individual worker may attain is the title of “labor hero.”

In 1964 the government introduced the practice of rewarding successful emulation workers and labor teams with monetary prizes. An enterprise may award “a progressive worker” a maximum of 8 dong twice a year. An “emulation fighter” may receive a maximum of 25 dong once a year. Labor heroes and socialist labor teams may receive higher sums, although the exact amount is not stipulated. Additional regulations were announced in 1965 dealing with monetary rewards for workers who economize with raw material or develop more efficient working methods.

The regulation stipulated that the amount of the reward would be in proportion to the merits of the innovation in the light of the needs of technology, science, and the economy in general. The reward would amount to not less than 5 and not more than 2,000 dong. The regulation provided, further, that assistants and collaborators of the recipient would be simultaneously granted smaller monetary prizes. At the time of the publication of the new regulation, the newspaper Lao Dong (Labor) warned that workers, when striving to make contributions to the national economy, must be guided by ideological and political considerations rather than by the prospect of financial rewards.

According to Lao Dong about 40 percent of all workers were
engaged in emulation movements in 1965. More than 150,000 workers received awards for various innovations in work techniques. In 1966 the government awarded the title of “socialist labor team” to 3,626 working units in industry and to 25 units in the agricultural sector. According to the managers of various enterprises in the Haiphong area, labor output tends to be low during the first quarter of the production plan and then suddenly rises during the last quarter because of pressures to complete the plan. Officials asserted that because of inadequate ideological training many workers fail to realize the importance of emulation movements.

WORKING CONDITIONS

In the industrial sector, working conditions vary greatly. Most workers are still employed in old installations, renovated and improved but generally rudimentary. There are, however, a few completely modern plants—all of them state owned. Some of the new plants near Hanoi are well ventilated and include dining rooms and showers for employees. Additional modern factories have been planned, but construction has been interrupted by special training and other military requirements and, since early 1965, by aerial bombardment. Many persons work in family-run shops which are badly lighted, poorly aired, crowded and lacking in any type of sanitary facilities.

Most labor laws are issued by the Ministry of Labor, although policies governing their content originate with the Lao Dong Party. The Ministry of Labor, under Nguyen Van Tao, in 1966 was in charge of regulating and organizing manpower, a task in which it was assisted by the Ministries of Heavy Industry, Light Industry, and Agriculture. The implementation and enforcement of labor laws are left largely to the labor unions and to the various mass organizations.

Labor Legislation

As early as 1947, while the Indochina War was in progress, the Viet Minh published a labor code which limited the hours of work, prohibited child labor and established a minimum wage. The code had little practical effect. Decrees issued in 1957 regulated salaries and provided for certain benefits to employees in case of injury or death. They also provided life insurance and medical, health, and welfare benefits. Employers must pay the
salary and medical expenses of an employee injured at work. State-owned industries must compensate the families of deceased employees with 12 months' pay; private employers must pay an amount equal to 5 months' pay.

The Constitution of 1960 provides for the protection of female labor, maternity assistance, and safe working conditions. The social insurance law of 1962 arranged for sickness insurance, maternity benefits, workmen's compensation, and old age pensions. During the same year a law regulating female labor gave temporary exemptions from labor duties to pregnant women, women caring for children less than 12 months old, and women with more than two children under 7 years of age.

The office of the Premier promulgated a law in the summer of 1964 pertaining to the retirement of disabled workers. It granted free medical care to persons suffering 40 to 59 percent disability. Those who must be retired because of disability are eligible for a monthly pension or for a lump-sum retirement payment. Positions becoming vacant because of temporary disability may be filled only with the approval of the Ministry of Labor. Enterprises must establish health-determination boards to pass upon the eligibility of disability claims. The boards, each consisting of three members (a medical-aid cadre, a labor union representative, a wage-labor cadre), are headed by the director of the enterprise, who acts as board chairman. The newspaper Nhan Dan (The People) asserted that enterprises are responsible for providing their disabled retired workers with a certain amount of work so that they may earn "some additional income."

Also during 1964 a law regulating hiring and dismissal practices was passed. It limited the number of workers an enterprise may hire and forbade the employment of additional personnel for work which "can be hired out to family-type enterprises." All permanent workers in state-owned enterprises had to undergo a political checkup and to submit a detailed personal history in writing. The June 16, 1964, issue of Lao Dong, the press organ of the Vietnam Federation of Trade Unions, reported that there were many instances of terminating workers without severance pay and many irregularities in connection with hiring procedures.

A new law regulating industrial safety was passed in 1964, following complaints by Ministry of Labor representatives and by local Party and labor union officials regarding poor safety standards and high accident rates throughout the economy. Most of
the accidents occurred at rock blasting and deforestation sites and in mines. Other workers were injured by electrical shock and as a result of falls from high places.

Minister of Labor Nguyen Van Tao stated in 1964 that poor industrial safety standards and high rates of industrial accidents are caused by obsolete machinery and by the workers' apathy toward safety rules. He also pointed out, however, that long working hours in the interest of higher production rates have made workers "tired, ill and accident-prone." Under these conditions they are negligent about wearing protective clothing and proceed on their jobs in haste without checking machinery and equipment.

According to the 1964 regulations, all machines must be checked for safety before being put into operation; workers must attend courses and pass examinations on rules of industrial safety and health. Protective clothing and safety devices must be worn near hazardous machinery; rescue equipment must be kept at hand in mines and in chemical and metallurgical enterprises.

The 1964 law also provided for medical examination of workers at the time of their hiring and for regular checkups for those engaged in hazardous duties. These workers are also eligible for special high-energy food rations. All provisions are enforced by the Committee for the Inspection of Safety techniques and Labor Protection under the Ministry of Labor. Party officials have called on labor unions to lend their support by organizing safety campaigns in individual enterprises and by establishing courses to train special cadres on labor safety.

According to an article in the periodical Nghien Cuu 'Kinh-Te (Economic Research), the number of average actual work hours in 1965 was nearly 7 a day, as compared to 6 hours and 20 minutes in 1963. In mining and construction enterprises, however, the actual working day was 6 hours. The article said that such working schedules were inadequate in view of production needs and that workers must be urged to put in 8 actual working hours each day by refraining from arriving late at work, leaving early and taking naps and walks during working hours.

Party and government officials have vigorously exhorted all workers to extend the working day in order to "fight America for national salvation." According to North Vietnamese press accounts, 1 extra hour of work per day is required of workers in state-owned enterprises. Workers are urged, furthermore, to put in extra hours of work, at night if necessary, to make up for time lost because of air raids. One of several resolutions issued
by the Lao Dong Party on May Day 1965 exhorted workers and public servants "to eagerly practice the extra work hour against the United States and for national salvation...."

Permanent workers are entitled to 10 working days of paid vacation after 1 year of continuous employment. If Sundays or holidays fall on any of the vacation days, these may be added to the total number of days. One or two additional days may be granted to workers who must travel long distances for home visits during their vacation. In April 1966 the Ministry of Labor issued a decree asking workers and employees to desist from taking long trips, in view of wartime conditions, and to spend their vacations at or near the locality of their employment.

Wages

The officially preferred method of compensation throughout the economy is payment by piece or by volume of work. The quantity each worker must produce is governed by an elaborate system of norms set up by economic and labor experts of the Party. Party officials have stated that payment by volume is the method most likely to increase production since it incorporates the principle of material encouragement. That principle was officially approved by the Seventh Conference of the Lao Dong Party Central Committee in 1962.

Payment by the hour is applied only in the case of machine operators, repairmen, clerical workers and workers in the public services. In the case of work teams, notably in mining or in assembly work, the wage is paid to the team and then distributed among the members. The sum paid to each is based on his respective rank and on the number of hours worked. Contract labor wages, particularly in the construction industry or in loading and deforestation operations, are based upon the total volume of work performed. If the project is completed ahead of schedule, an award is added to the originally contracted sum. Since 1959 compensation paid to all employees represents a basic wage, without fringe benefits, such as family, health and other welfare allowances, previously combined with the basic wage.

Agricultural cooperatives are required to set labor norms for each kind of work and norms for calculating payment. The labor norm is the work done by an average worker in 1 day with consideration given to conditions of land, draft power, farm tools and weather. Norms may be readjusted if they are found to be inadequate or if production conditions change.
In evaluating the number of workdays to be allotted to any given piece of work, the cooperative is required to "base itself on the fulfillment of the labor norm set for this type of work, the technical skill required, the effort spent and the importance of the work." Under average conditions, for the fulfillment of a labor norm, a workday, that is, 10 work points, is allotted. Production-team leaders receive a 4 percent responsibility bonus.

The congress of the cooperative's members, every year, may fix a minimum of workdays for managers and accountants and give each an allowance calculated in workdays equal to that of the average cooperative member. It assigns bonuses to cooperative members and at the end of each year may grant rewards to leading cadres in proportion to the overfulfillment of the annual plan.

Families of "war martyrs," families of sick and wounded servicemen or families with few working members may be given help in the form of extra workdays performed by other cooperative and noncooperative members. The total number of workdays performed by these families themselves and those given in help should "be equal to the average number of workdays allotted to households with an equal number of mouths to feed." This principle may also be applicable to village cadres—the secretary of the village Party cell or the president of the village administrative committee—who are engaged in "work of common interest" and whose families lack working members (see ch. 16, Agriculture).

An analysis of the wage system in the industrial sector was published in *Thai Lieu Hoc Tap Kinh Te Cong Nhan* (Industrial and Economic Documents) published in 1963 by the Ministry of Education. Depending on their skill and training, workers are classified into progressively numbered wage levels. Each level has a coefficient index relating to the wage of the first level. In the mechanical, electrical and machine-building industries the wage scale comprises seven levels. According to computations made in 1965 the level seven wage in these industries was 2.5 times higher than the level one wage. In terms of actual wages those in level one, working under average normal conditions, earned 38 dong per month; those on level seven, 95 dong per month. For those working under hazardous conditions the level one wage was 42 dong, and for level seven, 105 dong per month.

The rates for respective levels and the coefficient indices vary by industry. In textile enterprises, for example, there are five
wage levels for weavers; those in level five earn 1.8 times more than those in level one.

A worker producing what is regarded as the minimum for his wage level receives the standard minimum pay applicable to that level. Wage increases are related to the quantity of products regarded as minimal for the respective levels. As the worker surpasses the minimum production rate for his respective wage level, his wages are raised in proportion to the increased quantity. When the minimum production is exceeded by 1 to 10 percent, the wage increases by 50 percent; if excess production amounts to between 20 and 100 percent of the minimum production rate, the worker is entitled to a 100 percent wage raise. In determining minimum rates of output for the respective levels, enterprise managers were urged to set these rates higher than the current average production rates.

LABOR UNIONS

In 1930 a young miner from Tonkin, Hoang Quoc Viet, organized a dockworkers' union in Saigon. In Tonkin, at about the same time, other unions were formed among the textile workers and miners. These first unions were organized like those in the Communist-dominated General Confederation of Labor (Confédération Générale du Travail—CGT) in France. The Communist Party of Indochina played a leading part in creating the unions and controlled them completely.

The early labor unions operated clandestinely, since their activities in the interests of social reforms and national independence were regarded as a threat to French control by the colonial authorities. The unions attained a status of semilegality only for a brief interval—between 1936 and 1938—at the time of the ascent of the left-wing Popular Front in France. During this time the labor unions, together with the Communist Party of Indochina, sought to win support among wage earners by promoting demands for increased pay and benefits and improved working conditions.

By the beginning of World War II the labor movement had a well-established underground organization. At this time Hoang Quoc Viet, an associate of Ho Chi Minh, was put at the head of all labor unions affiliated with the Viet Minh (see Glossary). In July 1945, when the Japanese-dominated government of Vietnam legalized the formation of unions, Hoang Quoc Viet and other Communist labor leaders were ready to expand the labor organi-
zations. The first labor union congress was held at Hanoi in March 1946, and the General Confederation of Labor of Vietnam (Viet Nam Tong Lien Doan Lao Dong—TLD) was founded on April 20, 1946. Its name was changed to the Vietnam General Federation of Trade Unions in February 1961.

On November 9, 1957, the government promulgated a labor law which was the basic statute defining the rights of labor and clearly designated the primary role of labor unions as a political one. It provided that unions shall "defend the interests of the laborers, work for the improvement of their living conditions, and undertake all steps capable of raising steadily their material and cultural life . . .," qualifying the injunction with the phrase, "on the basis of increased production." The remainder of the law is devoted to explaining the role and duties of unions to increase production in all spheres. The rights to strike and to bargain collectively were not mentioned.

Organization and Membership

The General Federation of Trade Unions, the only legal labor union federation, is one of the mass organizations within the Fatherland Front which the Party has fostered to broaden the government's base support (see ch. 11, Political Dynamics).

The top echelon of the General Federation, the central committee, incorporates all labor union representatives. It was headed in 1966 by Chairman Hoang Quoc Viet, who dominated the organization since it was founded. He was also a member of the Party Central Committee. The deputy chairman was Nguyen Cong Hoa. Vice President and secretary general was Tran Dinh Tuyen. An administrative and a political committee operated within the General Federation central committee; regional central committees were similarly organized.

In the General Federation, labor unions are grouped into federations for particular trades and into regional labor union councils. Both federations and councils function according to rules established by the General Federation on the basis of Party directives and are autonomous only within narrow limits. Local labor unions contribute to the General Federation treasury and are dependent upon it for their operating funds.

The Union of Working Youth of Vietnam, affiliated with the General Federation, was founded in 1956. It had approximately 800,000 members in 1962.

General Federation membership claims (407,000 in 1961) us-
ually refer to "vountary members," although membership is probably compulsory. In 1965 the estimated number of labor union members was 500,000. Some of the larger individual labor unions included those at the Haiphong Cement Plant, with almost 4,500 members, and at the Hanoi Mechanical Plant, with 1,000 members.

Information regarding the occupational composition of labor union membership is lacking, but the core consists of industrial workers. Little mention generally is made of agricultural workers, although during the early 1950's they constituted a sizable percentage of the total membership.

Objectives and Activities

The General Federation's objectives are specified in a book by Chairman Hoang Quoc Viet, published in 1962. He asserts that the main concern of labor unions must be:

... to unite the mass of industrial, office and professional workers in a monolithic block around the Party, to organize the masses and mobilize them for the fulfillment of tasks assumed by the Party in each determined revolutionary period. ... At the present historical stage the North Vietnam trade union organizations direct their activities toward becoming the basic school of direction, management, socialism and Communism.

An article on the character of labor unions in the August 13, 1964, issue of Lao Dong emphasized that as "mass organizations of the working class," labor unions must "assume the Party's political missions" and develop "creativity in production."

Since 1964 Party and labor union leaders have placed the main emphasis of their appeals and resolutions addressed to workers on the need "to engage in positive struggle to increase labor productivity," and to constitute an "advanced guard in the anti-United States struggle." A General Federation resolution issued in July 1964 appealed to workers to "agitate for emulation drives," fulfill the state plan, organize conferences for shock workers, improve production and rationally utilize labor.

The resolution of July 1964 called for further efforts to strengthen and consolidate local labor union units on the basis of the "four good movement," by which cells in factories and enterprises must be "good in leading production, good in executing Party policy, good in organizing and carrying out mass activities and good in consolidating and developing the Party." The resolution stated that response to the movement by local labor unions has been inadequate, largely because of poor organization, lack of political guidance and shortage of cadres. An article in Lao
Dong said that the problems of local labor unions in general and the disappointing results of the “four good movement” are due to the “refusal of the masses” to participate in labor union work. It stressed the need for “cadres, organizers, coordinators and leaders who help the broad masses of the people fulfill their revolutionary mission.” Another article in Lao Dong complained that “the masses lag” and that an insufficient number of labor union cadres must do all organizational work on an overtime basis, without any compensation.

Inadequate ideological and political education has been blamed as a factor contributing to the apparently widespread apathy to labor union activities. The need to strengthen ideological training of workers, especially of cadres, was stressed in the July 1964 resolution; the resolution also called for additional political publications by labor unions.

An article in Nhan Dan in November 1962 emphasized the responsibility of labor unions in raising the workers’ living standards and in organizing local food production units, collective kitchens and nurseries. The article admonished cadres to improve the lax standards in workers’ health care. The General Federation top leadership has reminded cadres to pay closer attention to worker welfare. The resolution of July 1964 singled out the improvement of workers’ living conditions as a prominent task for all labor union cadres. It stressed the importance of securing adequate food rations for workers, establishing messhalls at places of employment and giving special attention to the health and welfare of workers engaged in emulation movements. The General Federation presidium in December 1964 commended some labor unions for organizing nurseries, dining rooms and housing projects. At the time, however, it deplored the lack of coordination in labor union operations, low production rates and unsatisfactory level of ideological education among workers.