

Population and Work Force

Growing at least 2 percent annually during the 1980s, Albania's population reached 3.2 million by 1990. Males accounted for about 51.5 percent of the Albanian populace. About 60 percent of the country's men and 55 percent of its women were of working age. Natural growth added about 45,000 persons to the working-age population annually in the 1980s, about a 3.5 percent average yearly increase. The work force officially numbered about 1 million people in 1980 and about 1.5 million when the economy collapsed in 1990. Albania's principal industries were labor-intensive, but there were ample labor reserves in the agricultural population. Workers officially put in a six-day, forty-eight-hour week with at least two weeks of annual vacation. People who fled Albania during the communist era, however, reported that ten-hour workdays were the minimum at many farms and factories (see Social Structure under Communist Rule; Social Insurance, ch. 2).

The government also assigned almost everyone to special "work actions," which entailed gathering harvests and building irrigation systems and railroad embankments; "volunteer" work details scavenged scrap metal and beautified public parks on "Enver Days" to honor the "father of the nation." Labor productivity declined about 1.7 percent per year from 1980 to 1988, an indication that the economy was failing to create enough jobs to absorb the increasing numbers of working-age people. Apart from diplomatic staff and émigrés, no Albanian nationals were working abroad before the communist system's decline.

Albania's employment profile was clearly that of a developing country. In 1987, Albania's agriculture sector employed 52 percent of the country's workers; industry, 22.9 percent; construction, 7.1 percent; trade, 4.6 percent; education and culture, 4.4 percent; and transportation and communications, 2.9 percent (see table 6, Appendix). The failure of the communist economy, however, rocked the structure of Albania's work force. Except for workers in the government bureaucracy, schools and hospitals, the military and police, basic services, and private firms, the turmoil left only a handful of Albanians with productive jobs. The doors slammed shut, for example, at almost all the enterprises in the mountainous Kukës District, including a profitable chromite mine, a copper-smelting plant that closed for lack of coal, and a textile factory that ran out of wool and thread. Albania's government reported unemployment at about 30 percent, but unofficial 1991 estimates indicated that about 50 percent of the work force was



*Woman at work in a clothing
store in the port city of Durrës
Courtesy Charles Sudetic*



*Women at a loom
in the port city of Durrës
Courtesy Charles Sudetic*

jobless. Idled factory workers tilled private plots, sought jobs in new private retail outlets and handicraft workshops, or attempted to leave the country to search for work abroad. Officials appealed to the international community to provide material inputs necessary to jump-start Albanian factories and hoped that a US\$10 average monthly wage, one of the world's lowest for a literate labor force, would entice foreign investors.

Women in the Work Force

The female proportion of the country's wage-earning work force increased markedly after World War II, although women continued to bear most of the responsibility for maintaining Albanian's households. Women had played a subservient role in traditional Albanian society and were for hundreds of years considered little more than beasts of burden. During Albania's Cultural and Ideological Revolution, which began in 1966, the regime encouraged women to take jobs outside the home in an effort to overcome their conservatism and compensate for labor shortages. An enormous increase in the number of preschools facilitated the entry of women into paying jobs. By late in the decade, the regime was struggling to overcome male resistance to the appointment of women to government and party posts once held exclusively by men. Women accounted for about 41 percent of the overall rural labor force in 1961 and 51.3 percent in 1983. Despite Albania's high annual birth rate in the late 1980s, women made up about 47 percent of the country's overall work force, including 53 percent of the labor force in agriculture; 43.5 percent in industry; 55 percent in trade; 80 percent in health care; and 54 percent in education and culture. In mountain areas, women made up a significantly higher proportion of farm labor. In 1981 women accounted for 70.7 percent of the collective-farm work force in Pukë District and constituted a similarly disproportionate segment in Kukës, Tropojë, Mat, and Librazhd.

Trade Unions

Albanian workers and enterprise managers had little significant influence until the old order began breaking down in 1990. Workers for decades had no recourse but to rely on government-controlled trade unions to protect their interests, but the ruling party used these unions only as mouthpieces to implore workers to produce more and accept more sacrifices. Independent trade unions arose from the ashes of the official labor organizations in each of the economy's major sectors. In 1991 union representatives pressed government officials for concessions on issues of wages and

working conditions, a general labor contract, and wage indexing to mitigate the effects of inflation. They also demanded social security guarantees, reestablishment of electrical service in many towns, and deliveries of raw materials to idle factories. Management often backed the workers' demands to the government. There were strikes as well as mass protests in central Tiranë and elsewhere. In mid-1991, the Council of Ministers drafted a law on labor relations that eliminated the job security Albanian workers had enjoyed under the communist system, allowing firms to dismiss workers who violated disciplinary standards.

Agriculture

The Albanian economy's traditional mainstay, agriculture, generated a third of the country's net material product and employed more than half the work force in 1990. Domestic farm products accounted for 63 percent of household expenditures and 25 percent of exports in that year. While striving for self-sufficiency in the 1970s and 1980s, the Hoxha regime created the world's most strictly controlled and isolated farm sector. But as the government force-fed investment funds to industry at the farm sector's expense, food output fell short of the needs of the rapidly increasing population. The government triggered acute disruptions in food supplies by reducing the size of personal plots, collectivizing livestock, and forbidding peasants to market their produce privately. By the early 1990s, the country's farms were no longer supplying adequate amounts of food to urban areas; they were also failing to meet the needs of Albanian factories for raw materials. The regime responded by stimulating agricultural production through a program of land privatization and free-market measures, cognizant that the success of its broader economic reform program depended heavily on the agricultural sector's ability to feed the population and provide the input-starved production lines with raw materials.

The Land

In 1991 cultivable land in Albania amounted to about 714,000 hectares, about 25 percent of the country's total area. Arable land and permanent croplands totaled about 590,000 hectares and 124,000 hectares, respectively; permanent pasturelands accounted for another 409,528 hectares. More than 100,000 hectares of the cultivable land had a slope greater than 30 percent and was allocated almost entirely to permanent tree crops such as olives. Forests and woodlands covered more than 1 million hectares, or 38 percent of the total land area. The soils of the coastal plain and

eastern plateau were fertile, but acidic soils were predominant in the 200,000 hectares of cropland in hilly and mountainous areas.

Irrigation and desalination projects, terracing of highlands, and drainage of marshes, often carried out by forced labor, added considerably to the country's cultivable land after 1945. Large population increases, however, reduced the amount of cultivable land per capita by 35 percent between 1950 and 1987 and by 20 percent between 1980 and 1988. About 423,000 hectares were irrigated in 1991, up from about 39,300 hectares in 1950. The economic disruptions of the early 1990s, however, left only about 40 percent of the country's irrigation system functional and 20 percent in complete disrepair. Albania also invested substantially in imported Dutch greenhouses during its drive for food self-sufficiency.

Land Distribution and Agricultural Organization

Following Enver Hoxha's 1967 proclamation that the regime had collectivized all of Albania's private farmland, the country's only legal forms of agricultural production were state farms, collective farms, and personal plots granted to members of collective farms. The first Albanian state farm grew out of a large experimental farm set up by Italian colonists in the 1930s. After World War II, the government amalgamated small collective farms and transformed them into state farms in each district. The 216 state farms, which still controlled 24 percent of the arable land in 1991, functioned like industrial organizations; thus, state farm workers, like factory workers, toiled for set wages. The state farms received the best land and equipment and a disproportionate amount of investment monies. Collective farms were the result of government campaigns to coerce peasants into signing over their private holdings to cooperatives and working the land in common, according to the instructions of the central government's economic planners. The authorities later took gradual steps to transform collective farms into "higher-type" farms more closely resembling state farms in their organization. Faced with dire food shortages, the regime in 1990 attempted to reform the agricultural system by lifting a 200-square-meter limitation on the size of the personal plots of collective farm-members.

In July 1991, the government enacted a law that nullified old property claims and regulated redistribution of the expropriated farmlands given to collective farms after 1946. The law granted landownership rights to members of the former collective farms and their households without requiring compensation; it also granted land-use rights to up to 0.4 hectares to other qualifying residents of villages attached to collective farms. The law provided for

the inheritance of property but banned land sales and leases, thereby blocking voluntary consolidation of tiny landholdings and limiting farmers' access to credit by precluding the use of land as collateral.

The government established the National Land Commission to oversee the land reform. The minister of agriculture chaired the commission and reported on its activities to the Council of Ministers. District and village land commissions demarcated the land, issued ownership titles, and compiled a land registry.

Albania's land redistribution program proceeded rapidly but unevenly. It met especially stiff resistance in the country's mountainous northeastern regions where clans anxious to stake out the boundaries of their traditional family lands tried to stop large numbers of postwar immigrants from gaining title to them. Land disputes threatened to trigger blood feuds. Local officials also impeded the reform process. The central government countered by threatening to prosecute anyone who seized land illegally. Under the land-distribution program, Albania's agricultural sector would gain about 380,000 small family farms averaging about 1.4 hectares in size and often made up of two or three plots. In mountain areas, the parcels were significantly smaller. In Pukë, for example, the average size was just over 0.5 hectares, and in Kukës, almost 0.9 hectares. Western economists estimated that 35 percent of the new farms would not be economically viable and expressed concern that, unless restrictions on land sales were lifted, inheritance would lead to land fragmentation and hamper development. Fearing that smallholdings would not provide sustenance, the government amended the land law to provide for income support of farmers in mountainous areas. As privatization progressed, some families and owners of contiguous fields began to form private cooperatives to take advantage of economies of scale.

Left in limbo by the land reform were the 216 state farms and their 155,000 employees, who accounted for about 20 percent of the agricultural labor force. State farms contributed about 30 percent of the value of the country's agricultural output and supplied city dwellers with most of their dairy products, fruits, and vegetables. The state farms' yields normally outstripped those of the cooperative farms by a third or more because the state farms benefited from richer soils, more mechanization, and easier access to farm services, government finance, and transportation. The breakdown of the communist structure dealt the state farms serious setbacks. By mid-1991 lines of authority had snapped, equipment and buildings had been plundered, and the amount of cultivated land had decreased by half. Although it planned to dissolve sixty money-losing state farms in the mountainous northeast, the government

generally spared the state farms from redistribution because their breakup would lead to serious land fragmentation problems and reduce urban food supplies. Pasturelands and forests were also exempted. Western economic analysts concluded that some of the state farms could turn a profit and that foreign companies might follow the lead of one Italian firm that had entered into a joint venture with a state farm.

Structure and Marketing of Agricultural Output

Before the 1990s, Albania's main food crops were wheat, corn, fruits, and vegetables (see table 7, Appendix). However, planners were devoting increasing attention to tobacco, olives, and oranges. Between 1989 and 1991, the country's crop structure underwent a radical transformation. The new private farmers took responsibility for transporting and selling their output and began basing their production and marketing decisions on free-market conditions. Low state procurement prices, a shortage of livestock feed, the breakdown of the transportation system, and a lack of demand from idled processing plants led to steep declines in the hectareage sown with wheat and such industrial crops as tobacco, sugar beets, sunflowers, and cotton. Disputes arising out of the government's land-privatization program, shortages of funds for seeds and agricultural machinery, and the hasty privatization of the enterprises that provided farmers with machinery and fertilizers also had an effect. In the first third of 1991, milk production was down 50 percent compared to the corresponding period in 1990; bread-grain production was down 67 percent; and areas sown with cotton and tobacco had decreased by 80 percent and 50 percent, respectively.

The farmers' choice of which crops to plant was motivated primarily by the need to feed their families and only secondarily by the cash market. In mid-1991, 10 to 15 percent of Albania's cultivable land lay fallow mainly because the state enterprises were not giving small farmers seed, fertilizers, and other necessary inputs. Transportation breakdowns and other problems continued to force farmers away from crops requiring processing, leaving wheat, sugar, and vegetable oils in short supply. Production on newly privatized plots grew, however, despite input shortages. Corn production increased, and meat, egg, and vegetable output seemed to be on the rise. Western economists expected agricultural production to begin recovering in 1992 as the private sector began solving transportation problems and reorganizing production in response to demand. Despite these grounds for optimism, domestic production in 1992 was projected to meet only about 88 percent



*Tractor plowing a field just outside Tiranë
Courtesy Charles Sudetic*

of the country's need for meat, 48 percent for wheat, 30 percent for sugar, and 5 percent for vegetable oils. The production shortfalls would force donor countries to commit additional food aid to avert serious hunger.

Livestock and Pasturelands

A botched campaign to collectivize livestock in the late 1970s and early 1980s led to a wholesale slaughter and chronic production shortfalls. When meat and dairy product shortages in the larger towns grew critical, Albania's communists retraced their steps. The regime gave animal husbandry a high priority in the Eighth Five-Year Plan (1986-90). In July 1990, the government decided to allow collective-farm members to raise cattle on their private plots and instructed the administrators of collective farms to transfer a portion of their stock animals to members. The government also recommended that collective farms in mountainous areas grant members 0.2 hectares of land each, in addition to their private plots, in order to increase livestock production. In mid-1991, shortages of feed severely hampered livestock production and forced farmers to allocate much of their land to cultivation of forage and feed corn. The animals raised on this diet were deficient in protein and generally of poor quality. Despite the ban on food exports,

herdsmen were reportedly smuggling about 1,000 head of calves, cows, sheep, and other livestock across the Greek and Yugoslav borders each day because they lacked fodder and sought to take advantage of high prices on foreign markets. An additional challenge to Albanian stockmen was a serious shortage of artificial-insemination and other veterinary services.

Albania's 409,528 hectares of pastureland remained state-owned despite the land reform, and in the chaos of 1991 the government set to work on a new law to reassert state control of pasturelands and give managers new guidelines. The Ministry of Agriculture's eighteen pasture enterprises managed grazing lands at the district level and charged customers, including private herdsmen and farmers, a seasonal fee. Price liberalization did not boost grazing fees even though the enterprises were operating at a loss in 1991. Ministry officials estimated that grazing fees could have to increase fourfold before the pasture enterprises could break even. Western economists projected that pressure on Albania's pasturelands would increase as livestock herds grew and as expanding communities sought land for residential and recreational purposes.

Mechanization

Faithful to Stalin's teachings on agricultural organization, Albania's communist regime allowed state farms to possess tractors but gave collective farms access to machinery only through machine tractor stations (see Glossary). These stations remained a cornerstone of Albania's collective agricultural sector for decades. In 1991 the thirty-three machine tractor stations controlled about 63 percent of Albania's 10,630 tractors and 25 percent of its 1,433 combine harvesters; state farms controlled the rest. Official inventories also listed 1,857 threshers. As the old order collapsed, the tractor stations metamorphosed into state-owned "agricultural machinery enterprises" that offered their services to peasant customers on a contractual basis. These enterprises often ignored state limitations on service charges, demanding exorbitant fees as well as compensation for fuel at prices higher than those charged at the pump. Some tractor drivers bought older Chinese tractors and offered their services at prices up to 40 percent more than those charged by the state enterprises. More than 75 percent of Albania's tractors were over fifteen years old in 1991; most tractors were in disrepair because plant closures had cut off supplies of spare parts.

Fertilizers, Pesticides, and Seeds

During peak years, Albania had used fertilizers less than almost any other nation in Eastern Europe. Nevertheless, in the early 1990s

the agricultural sector experienced a fertilizer shortage; supplies of pesticides and hybrid seed also ran low. In 1989 Albanian farmers had applied about 158 kilograms of active ingredients per hectare, but the country's economic breakdown pushed the total down to 135 kilograms in 1990 and 38 kilograms in 1991. A lack of hard currency caused fertilizer supplies to drop 80 percent and pesticide reserves to fall 63 percent. Ironically, intensive application of lindane and other pesticides as well as disinfectants for treating soil at seeding time, in combination with monocropping of wheat and corn, had destroyed many pests' natural enemies and increased dependency on pesticides. Although Albania's agricultural research institutes produced sufficient foundation seed, obsolete sorting and cleaning equipment lowered seed quality. Varietal improvement was dependent on the crossing of local strains. The breakup of collective farms, which produced most of the wheat and corn seed, forced farmers to seek new seed suppliers.

Forests

Albania has soils and a climate favorable to an extensive lumber industry. Although the postwar government invested heavily in afforestation, it developed an inefficient wood products industry. In the early 1990s, the thickest woodlands were in the central and northern mountain ranges. The country's southern half was mostly deforested, a consequence of the clear-cutting of oak trees to build the merchant ships of old Venice and Dubrovnik, the destruction of woodlands to create pastures, the burning of wood for fuel, and the expansion of villages onto hillsides. Albania's nine state forestry industry complexes produced an estimated 2.3 million cubic meters of roundwood annually between 1976 and 1988; its twenty-eight sawmills cut about 200,000 cubic meters of wood annually between 1977 and 1988. Outdated sawmills, however, wasted raw materials and were situated too far from sources of raw materials. The pulp, paper, and fiberboard industries enjoyed little competitive advantage and did considerable environmental damage. The country's high dependency on wood for heating—amounting to 100 percent of household energy needs in mountainous areas and over 90 percent in the cities in 1991—contributed to the overexploitation of forests. Unchecked cutting by people so desperate for fuel that they hacked tree stumps to below ground level caused serious damage to woodlands.

Fisheries

Albania's fishing industry, which was underdeveloped and poorly managed, consisted of four state-owned fishing enterprises, sixteen

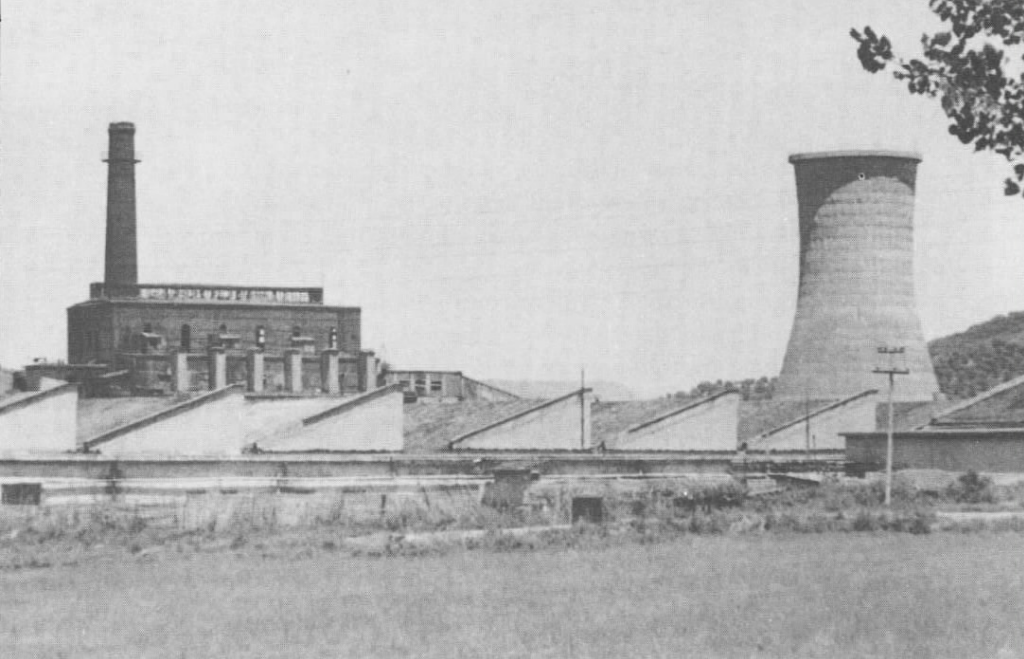
aquaculture enterprises, and two shellfish enterprises. The government foresaw little trouble in privatizing all of the country's fishing vessels but anticipated difficulty in selling off the three fish canneries and the only shipyard servicing the fishing and coastal transportation fleet. World Bank and European Community economists reported that Albania's fishing industry had good potential to generate export earnings because prices in the nearby Greek and Italian markets were many times higher than those in the Albanian market. Albania's coastal waters were overfished, and foreign economists advised the Albanian government to protect its piscine resources from illegal exploitation by vessels from other European countries.

Industry

Albania's rigid Stalinists considered heavy industry the force driving all developed economies. For years, the government fed the lion's share of investment money and technology imports to industrial behemoths, which had domestic monopolies and too often lacked distinct objectives. Especially from the 1960s onward, the government spent most investment funds on the production of minerals for export and the manufacture of import-substitution products. The effort succeeded in expanding and diversifying Albania's industrial sector, but without the discipline imposed by a free market; the resulting creation was inefficient and structurally distorted (see table 8; table 9, Appendix). In the early 1990s, industry accounted for about 40 percent of Albania's GDP and employed about 25 percent of the nation's work force. The industrial sector's most important branches were food products, energy and petroleum production, mining, light industry, and engineering. All of Albania's industrial branches suffered from obsolete equipment, inadequate infrastructure, and low levels of worker skill and motivation. Shortages of energy, spare parts, and raw materials stopped industrial production almost entirely in the early 1990s.

Energy and Natural Resources

Since classical times, people have exploited the fossil-fuel and mineral deposits present in the lands that now constitute Albania. Petroleum, natural gas, coal, and asphalt lie in the sedimentary rock formations of the country's southwestern regions. The predominantly igneous formations of the northern mountains yield chromite, ferronickel, copper, and cobalt. Albania also has deposits of phosphorite, bauxite, gold, silver, kaolin, clay, asbestos, magnesite, dolomite, and gypsum. Salt is abundant. About 70 percent of Albania's territory is about 300 meters above sea level, twice



*A power plant for a textile mill complex on the
outskirts of Tiranë
Courtesy Charles Sudetic
Elbasan Steel Combine
Courtesy Fred Conrad*

the average elevation of Europe. Jagged limestone peaks rise to over 2,700 meters. These great heights, combined with normally abundant highland rainfall, facilitate the production of hydroelectric power along rivers.

With its significant petroleum and natural-gas reserves, coal deposits, and hydroelectric-power capacity, Albania has the potential to produce enough energy for domestic consumption and export fuels and electric power. Mismanagement led to production shortfalls in the early 1990s, however, and forced the government to import both petroleum and electric power. For years after production dropped in the late 1970s, Albania's government considered statistics on the performance of its petroleum industry a state secret; as a consequence, data on the oil industry vary radically (see table 10). Known petroleum reserves at existing Albanian drill sites totaled about 200 million tons, but in 1991 recoverable stocks amounted to only 25 million tons. Albania's petroleum reserves generally were located in the tertiary layers in southwestern Albania, mainly in the triangle-shaped region delimited by Vlorë, Berat, and Durrës. The principal petroleum reserves were in the valley of the lower Devoll; in the valley of the Gjanicë near Patos in the southwest, where they lay in sandy Middle or Upper Miocene layers; and in Marinëz, between Kuçovë and Fier. Petroleum was refined in Ballsh, near Berat; Cërrik near Elbasan; and Kuçovë.

In the 1980s, the petroleum and bitumen enterprises employed 10 percent of Albania's industrial work force, controlled 25 percent of the country's industrial capital, and received almost 33 percent of its industrial investment funds. Nevertheless, the industry's share of the country's gross industrial production fell from 8.1 percent in 1980 to 6.6 percent in 1982 and perhaps as little as 5 percent in 1985. Albania produced only between 1.5 million tons and 2.1 million tons of petroleum annually in the 1970s, according to reliable estimates. Output sagged further during the 1980s when extraction became increasingly difficult. Albania's wells pumped only 1.2 million tons of petroleum in 1990. At some sites, obsolete drilling equipment was extracting only 12 percent of the available petroleum in situations where modern drilling and pumping equipment would permit the extraction of as much as 40 percent.

Petroleum was the first industry to attract direct foreign investment after the communist economic system broke down. In 1990 and 1991, the Albanian Petroleum and Gas Directorate entered into negotiations with foreign drilling and exploration firms for onshore and offshore prospecting. In March 1991, the Albanian government and a German company, Denimex, signed a US\$500

million contract for seismological studies, well drilling, and production preparation. Albania also negotiated exploration contracts with Agip of Italy and Occidental Petroleum, Chevron, and Hamilton Oil of the United States.

Albania's known natural-gas reserves have been estimated at 22,400 million cubic meters and lie mainly in the Kuçovë and Patos areas. The country's wells pumped about 600,000 cubic meters of natural gas annually during the late 1980s. Fertilizer plants consumed about 40 percent of Albania's annual natural-gas production; power stations consumed about another 15 percent. Planners projected an increase in natural-gas production to about 1.1 million cubic meters per year by 1995, but output tumbled during the first quarter of 1991.

Albania's unprofitable coal mines produced about 2.1 million tons in 1987. The coal, mainly lignite with a low calorific value, was being mined mainly in central Albania near Valias, Manëz, and Krrabë; near Korçë at Mborje and Drenovë; in northern Tepelehtë at Memaliaj; and in Alarup to the south of Lake Ohrid. Coal washeries were located at Valias and Memaliaj. Albania imported about 200,000 tons of coke per year from Poland for its metalworks. Conditions inside Albania's coal mines were deplorable, with much of the work done by manual labor. Albania used most of its coal to generate electric power.

About 80 percent of Albania's electric power came from a system of hydroelectric dams built after 1947 and driven by several rivers that normally carried abundant rainfall. Electric power output was estimated by Albanian officials at 3,984,000 megawatt hours in 1988. Outfitted with French-built turbines, Albania's largest power station, the Koman hydroelectric plant on the Drin River, had a capacity of about 600 megawatts. The hydroelectric stations at Fierzë and Dejas, also on the Drin River, had capacities of 500 megawatts and 250 megawatts, respectively, and used Chinese-built turbines. Albania had no capacity to generate nuclear power, but in the early 1990s a research nuclear reactor was reportedly under construction with United Nations funds. In 1972 high-tension transmission lines linked Albania's power grid with Yugoslavia's distribution system. Albania's first 400-kilovolt high-tension line carried power from Elbasan over the mountains to Korçë, where a 220-kilovolt line carried it to Greece.

Droughts in the late 1980s and in 1990 brought an energy crisis and a sharp drop in earnings from electric-power exports. In 1991 heavy rainfall allowed Albania to resume electric-power exports to Yugoslavia and Greece. In the early 1990s, labor strikes and transformer burnouts—caused by the overloading of circuits when

many Albanians turned to electricity to heat apartments after other fuel supplies ran out—regularly resulted in blackouts in towns across the country, and even sections of Tiranë, producing disruption for months at a time. Although the electrical grid reached rural areas by 1970, the amount of power per household in farm areas was limited to 200 watts, only enough to power light bulbs. The chaos caused by economic collapse led to the destruction of about 25 percent of Albania's 30,000 kilometer power-distribution network.

Albania's mineral resources are located primarily in the mountainous northern half of the country. Albanian miners extract mainly chromium ore, ferronickel, copper, bitumen, and salt. Obsolete equipment and mining techniques have hampered Albania's attempts to capitalize on its mineral wealth. High extraction and smelting costs, as well as Albania's overall economic collapse, have forced mine and plant closures. The government repeatedly has promised to take steps to reopen mines.

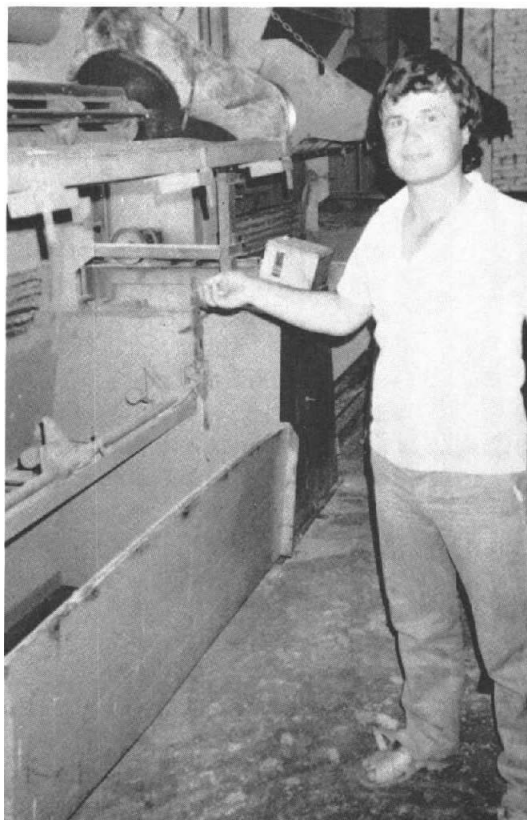
Some production estimates placed Albania just behind South Africa and the former Soviet Union in the output of chromite, or chromium ore, which is vital to the production of stainless steel. Foreign studies estimated that Albania had more than 20 million tons of chromite reserves, located mainly near the towns of Korçë, Mat, Elbasan, and Kukës. Export of chrome and chromium products provided one of Albania's most important sources of hard-currency income. Albania's chromite industry, however, consistently failed to meet plan targets and came under severe criticism in the waning years of the communist regime. Estimates for chromite output during 1989 ranged from 500,000 to 900,000 tons. The drought-related power cuts in 1990 and economic chaos in 1991 forced the closing of ferrochrome enterprises at Burrel and Elbasan, and the government desperately sought sources of foreign capital to invest in technological improvements.

Albania's high-grade chromite reserves had been largely exhausted by 1990. The poor quality of the remaining ore accounted for the country's worsening position in world markets. Impurities present in Albania's highest-grade chrome were largely the by-product of poor mining and smelting techniques and the use of antiquated Chinese equipment. The country's chromium industry also suffered because of inadequate transportation facilities. In the late 1980s, construction was under way on a rail link connecting the main chromium-ore production center at Bulqizë, in central Albania with the port of Durrës and the main line to Yugoslavia. In the late 1980s, Albania exported its chrome products mainly to Sweden, the United States, the Federal Republic of Germany (West Germany), Yugoslavia, and other East European countries.

*A dilapidated industrial plant on the main road between the Yugoslav border and Tiranë
Courtesy Charles Sudetic*



*Repairman in front of the cotton gin at a textile plant in the central coastal region
Courtesy Charles Sudetic*



In 1980 Albanian chrome sales to the United States accounted for about 75 percent of the approximately US\$20 million in trade between the two countries. Despite its reported profitability, the chromium industry suffered from a lack of worker incentive because miners frequently went unpaid. In 1991 one of Albania's top economists revealed that the country had never earned more than US\$60 million a year from chrome exports.

Albania also produced copper, iron, and nickel. The main copper deposits, estimated at about 5 million tons, were located near the northern towns of Pukë, Kukës, and Shkodër. During the 1980s, although the quality of copper ores was generally low, copper was the most successful industry in Albania's mineral-extraction sector. Copper production rose from about 11,500 tons in 1980 to 17,000 tons in 1988. The government aimed to export copper in a processed form and built smelters at Rubik, Kukës, and Laç. The industry's product mix included blister copper, copper wire, copper sulfate, and alloys. Albania's principal iron ore deposits, estimated at 20 million tons in the 1930s, were located near Pogradec, Kukës, Shkodër, and Peshkopi. The Elbasan Steel Combine was Albania's largest industrial complex. In operation since 1966, the steelworks had obsolete Chinese equipment. Annual nickel output ranged from 7,200 to 9,000 tons in the 1980s.

Albanian bitumen and asphalt deposits were located near the town of Selenicë and in the Vjosë River valley. Bitumen and asphalt production rose significantly after World War II, and most of the output was used for paving and waterproofing materials and in the manufacturing of insulators and roofing shingles. Miners had worked the Selenicë deposits continuously for centuries before a lack of soap, boots, and basic equipment forced operations to cease when the centrally planned economy stalled. Geologists estimated that the Selenicë deposits would not be exhausted until several decades into the twenty-first century at normal production rates. Albania also possessed abundant deposits of salt, found near Kavajë and Vlorë. Limestone, a principal raw material for Albania's construction industry, was quarried throughout the country.

Manufacturing

Chemicals

Albania's chemical industry was geared mainly toward producing agrochemicals and chemicals for minerals processing. During the effort to achieve economic self-reliance in the 1970s and 1980s, Albania's government frantically tried to increase fertilizer output at plants in Krujë and Fier, which produced nitrogen and phosphate

from imported rock phosphate. Nitrogen and phosphate fertilizer production totaled about 350 billion tons between 1985 and 1990. A lack of spare parts and raw materials, especially natural gas, halted production in mid-1991. Western economists estimated that the US\$3 million needed for the main phosphate plants' rehabilitation might be too high a price to pay because domestic deposits of key raw materials were projected to last only three to five years at normal production rates. One of Albania's two ammonia-urea plants planned to restart operations in 1992, but it desperately needed spare parts and environmental protection equipment. The country's lone pesticide plant, which did not stop producing DDT until 1982, made lindane as well as products based on sulfur, zinc, copper, and mercury. In 1991 the facility was working at less than 10 percent of capacity, and production was not likely to be stepped up because the plant was in poor condition and environmentally unsafe. Other chemical enterprises included a plastics-fabrication facility at Lushnjë, a rubber and plastics works at Durrës, and a paint and pigment factory in Tiranë.

Engineering

During Albania's long effort to achieve autarky, economic planners focused the country's engineering industry on producing tools, equipment, and spare parts for machinery that would substitute for imports. However, product standards suffered because of the poor quality of domestically produced materials, especially steel, and because of Albania's complete isolation from world technological advances. The continuing operation of machinery long obsolete in the outside world, including a textile mill in Tiranë reminiscent of sweatshops in the turn-of-the-century United States, was a testament to the ingenuity of the workers in the engineering branch who fabricated spare parts. In addition to spare parts, several plants produced finished products, including the Enver Hoxha Auto and Tractor Plant in Tiranë, which produced 75-horsepower tractors, refrigerator compressors, and other products; the Drini Engineering Works in Shkodër, which turned out heavy machinery; the Durrës shipyards and agricultural machinery works; a precision-tool factory in Korçë; and a textile equipment works in Tiranë.

Light Industry

Statistics released in 1989 showed that the light industry sector met about 85 percent of domestic demand for consumer goods and provided about 22 percent of the state's revenue. The sector's output increased markedly from 1960 to 1990. Albanian light industry included textile plants, shoe factories, bicycle assembly plants, and

a host of other factories. The communist government scattered textile plants throughout the country. The largest textile factory, the Tiranë Textile Combine—formerly called the Stalin Textile Combine because it was built with Soviet aid—was shut down frequently by workers striking for higher wages, better local transportation, and a regular supply of steam to run their antiquated equipment. In the early 1990s, Greek businessmen began setting up clothing and yarn factories in Gjirokastër and Sarandë. Also, many Albanian businessmen established workshops producing handicrafts, carpets, weavings, and souvenirs for tourist shops and export. Albania's light industry branch also included nineteen furniture factories, whose production was slashed to 15 percent of capacity or less in 1991 because of a lack of material inputs.

Food Processing

In the early 1990s, Albania's food-processing industry had at least one processing facility for the cereal, meat, and dairy branches in each of the country's twenty-six administrative districts without regard to efficiency or economies of scale. These facilities, which employed about 25,000 people, relied on the Ministry of Light Industry to allocate raw materials, arrange transportation, and market products. Years of depreciation and inadequate investment had left the 200 largest food-processing enterprises and about 750 smaller plants with obsolete, broken-down equipment. As a result, managers had little experience in obtaining materials or marketing, and the plants functioned inefficiently and produced low-quality goods. Minimal hygiene and sanitation standards went unmet. Shortages of raw materials and spare parts, along with transportation problems, forced many food-processing enterprises to curtail operations; in 1991 alone, output fell 35 percent from the previous year. When the government loosened controls on food and vegetable prices in 1991, the official marketing network collapsed, cutting off the supply of raw materials to the country's thirty-one canneries. As unofficial prices rose, supply flows to the twenty-seven state-owned slaughterhouses dried up. The thirty-two district-level and 550 village dairies survived only by paying unofficial prices for milk and cooperating with private traders.

In the early 1990s, Albania's thirty-eight flour mills normally employed between thirteen and 257 people and could grind between eight tons and 160 tons of flour per day. The seventy state-owned bakeries in urban areas produced about 370,000 tons of bread annually. The government privatized many of the country's village bakeries, which had a 200,000-ton total annual production capacity. Albania's lone modern yeast factory could produce about

*Butcher at work
in a private
shop in central
Tiranë, 1991*
Courtesy Charles Sudetic



600 tons annually, which was inadequate to meet the country's needs. Albania had ten pasta factories and two starch factories. Free-market prices four times higher than official levels left state-owned mills and bakeries unable to compete with private millers and bakers for available grain supplies.

State-farm managers and private farmers radically reduced the amount of hectareage producing oilseed, cotton, and tobacco because state prices were low and there were no private markets offering higher prices. Tobacco and sugar-beet production decreased less drastically because state enterprises, including the Durrës tobacco factory and the country's only sugar-beet refinery, offered farmers advance purchase contracts at relatively attractive prices. Albania's vegetable-oil industry consisted of twenty-seven olive-oil plants capable of pressing 755 tons of olives daily; eleven sunflower-oil plants with a daily capacity of 262 tons of seeds; seventeen oil-extraction plants with a daily capacity of 270 tons of olive, cotton-seed, corn, and sunflower pulp; and ten obsolete oil-refinery units with a daily capacity of 110 tons of sunflower oil and soya oil. Town and district plants bottled edible oils. The country also had four soap factories and one margarine plant.

Construction

In the late 1980s, Albania's construction enterprises, which concentrated mostly on adding to the country's housing stock and

industrial capacity, built about 14,000 dwellings annually. Uncertainties about landownership and problems with supplies of building materials, financing, and wages halted the construction industry in the early 1990s. The government legalized private construction firms, and private companies and individuals began applying to the Ministry of Construction for building permits soon after questions concerning property ownership were resolved. Reports in the national press included complaints that many people were constructing homes and buildings on property they did not own or on land better suited to mechanized agriculture. The government proposed a draft law to govern zoning and construction standards.

Cement factories were located in Elbasan and Vlorë, and there was a production facility for prefabricated concrete structures in Tiranë. Brick kilns were located in Tiranë, Elbasan, Korçë, Lushnjë, Dibrë, and Fier.

Environmental Problems

The communist regime's policy of developing heavy industry at all costs caused significant environmental problems. Air and water pollution went unchecked. Despite the scarcity of traffic, a pall of diesel fumes lingered over the country's main roads, a by-product of the poorly refined fuel that powered Albania's trucks and buses. The Elbasan Steel Combine, Albania's largest industrial complex, represented a typical industrial polluter. Proclaimed a symbol of Albania's "second liberation" when it became operational in 1966, the steelworks was equipped with 1950s-vintage Chinese furnaces that filled the Shkumbin River valley with smoke, poisonous gases, and orange-colored particulate. The cyanic acid, ammonia, phenol, and other pollutants that the mill dumped into the river itself rendered it practically lifeless. A United Nations team recommended closing the facility because of the pollution problem.

Transportation and Communications

In the early 1990s, the rock-strewn roadways, unstable rail lines, and obsolete telephone network crisscrossing Albania represented the remnants of the marked improvements that were made after World War II. Enver Hoxha's xenophobia and lust for control had kept Albania isolated, however, as the communications revolution transformed the wider world into a global village. Even internal travel amounted to something of a luxury for many Albanians during communism's ascendancy. For years, peasants needed special passes to visit nearby districts, and until 1990 the government banned private ownership of automobiles. Urban mass transit consisted primarily of bus lines for ferrying workers between home

and work. Breakdowns in Tiranë's bus lines sometimes forced employees to walk to work or pay for rides in the beds of passing trucks. The communications system sustained severe damage in the chaos of the economic collapse as people ripped down telephone lines to use as fencing. Despite generally deteriorating conditions, the importation of fleets of used cars and buses and popular hunger for contact with the outside world raised hopes that matters would improve.

Road Transportation

In 1987 Albania had about 6,700 kilometers of paved roads and between 9,000 and about 15,000 kilometers of other roads suitable for motor vehicles (see fig. 7). The total length of Albania's roads had more than doubled in about three decades, and by the 1980s almost all of the country's remote mountain areas were connected, at least by dirt roads, with the capital city and ports. The country's roads, however, were generally narrow, poorly marked, pocked with holes, and in the early 1990s often crowded with pedestrians and people riding mules, bicycles, and horse-drawn carts. Even in tiny villages, hundreds of people of all ages gathered daily along main roads waving their arms seeking rides, and gangs of children often blocked rural highways hoping to coax foreign travelers into tossing them candy. Heavy snowfalls cut off some mountain areas for weeks at a time. Central government funding of local road maintenance effectively ended in 1991, and the breakdown of repair vehicles because of a lack of spare parts threatened to close access to some remote areas. A group of Greek construction companies signed a protocol with the Albanian government in July 1990 to build a 200-kilometer road across the southern part of the country, extending from the Albanian-Greek border to Durrës. The project was scheduled to last four years and cost US\$500 million.

Despite the appalling quality of Albania's roads, most of the country's freight was conveyed over them in a fleet of about 15,000 smoke-belching trucks. According to official figures, in 1987 Albania's roadways carried about 66 percent of the country's total freight tonnage. In 1991 the Albanian government lifted the decades-old ban on private-vehicle ownership. The country's roads, once almost devoid of motor traffic, began filling up with recklessly driven cars that had been snapped up in used-car lots across Europe. Car imports numbered about 1,500 per month, and a black-market car lot began operating just off Tiranë's main square. Traffic in the capital remained light, but traffic lights and other control devices were urgently needed to deal with the multiplying number of privately owned cars. Albanian entrepreneurs also

imported used Greek buses and started carrying passengers on intercity routes that did not exist or had been poorly serviced during the communist era. Gangs of hijackers and thieves, who preyed on truck and automobile traffic, made road travel hazardous in some regions.

Railroads

In 1991 Albania's 509 kilometers of standard-gauge rail lines linked Shkodër with Durrës, Tiranë, Elbasan, Pogradec, Ballsh, and Vlorë. The country's only international rail link, opened in 1986, connected Shkodër with Yugoslavia's rail system. Albania's communist government focused on developing new rail lines to serve mining regions and the coastal plain. According to official figures, in 1987 and 1988 Albania's railroad carried about 33 percent of the country's total freight tonnage for that period. The opening of the rail link with Yugoslavia facilitated the movement of goods to Europe, and Yugoslav railroads reportedly shipped 174,300 tons of Albanian goods in the first half of 1990, a 19.4 percent increase over the first half of 1989. None of Albania's railroads was electrified. In 1991 vandals and thieves caused so much damage to the tracks and rolling stock that the rail system's transport capacity was cut in half; operations later ceased altogether.

Air Transportation

In 1977 Albania's government signed an agreement with Greece, opening the country's first air links with noncommunist Europe. By 1991 Tiranë had air links with many major European cities, including Paris, Rome, Zurich, Vienna, and Budapest. Tiranë was served by a small airport located twenty-eight kilometers from the capital at the village of Rinas. Albania had no regular domestic air service. A Franco-Albanian joint venture launched Albania's first private airline, Ada Air, in 1991. The company offered flights in a thirty-six-passenger airplane four days each week between Tiranë and Bari, Italy, and a charter service for domestic and international destinations.

Water Transportation

Albania's main seaports are Durrës, Vlorë, Sarandë, and Shëngjën. By 1983 there was regular ferry, freight, and passenger service from Durrës to Trieste, Italy. In 1988 ferry service was established between Sarandë and the Greek island of Corfu. A regular lake ferry linked the Macedonian town of Ohrid with Pogradec. The estimated total displacement of Albania's merchant fleet was 56,000 tons in 1986. The limited capacity of the wharves at Durrës



Figure 7. Transportation System, 1992

caused severe bottlenecks in the distribution of foreign food aid in 1991.

Telecommunications

Until 1990 Albania was one of the world's most isolated and controlled countries, and installation and maintenance of a modern system of international and domestic telecommunications was precluded. Callers previously needed operator assistance even to make domestic long-distance calls. Albania's telephone density was the lowest in Europe, at 1.4 units for every 100 inhabitants. Tiranë accounted for about 13,000 of the country's 42,000 direct lines; Durrës, the main port city, ranked second with 2,000 lines; the rest were concentrated in Shkodër, Elbasan, Vlorë, Gjirokastër, and other towns. At one time, each village had a telephone but during the land redistribution of the early 1990s peasants knocked out service to about 1,000 villages by removing telephone wire for fencing. Most of Albania's telephones were obsolete, low-quality East European models, some dating from the 1940s; workers at a Tiranë factory assembled a small number of telephones from Italian parts. In the early 1990s, Albania had only 240 microwave circuits to Italy and 180 to Greece carrying international calls. The Albanian telephone company had also installed two U-20 Italtel digital exchanges. The exchange in Tiranë handled international, national, and local calls; the Durrës exchange handled only local calls. Two United States firms handled direct-dial calls from the United States to Tiranë.

The communist regime used radio and television for propaganda purposes. In 1992 the Albanian government owned and operated seventeen AM radio stations and one FM station that broadcast two national programs and various regional and local programs. An estimated 514,000 Albanians had radio receivers in 1987, according to the United States government. Nine television stations, also controlled by the communist regime, broadcast to the approximately 255,000 television sets owned by Albanians in 1987. Although the regime gave minimal support to domestic communications, it provided for an extensive external shortwave and medium-wave system. Programs were broadcast in eight foreign languages, in addition to Albanian, and reached Africa, the Middle East, North America, South America, and Europe. Albania's external broadcast service was one of the largest such services in the world. The programming was heavily propagandist, according to Western observers.