Azerbaijan

An Economic Profile

March 1995

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Azerbaijan: An Economic Profile

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Azerbaijan:
An Economic Profile

Preface

This is one in a series of profiles on the republics of the former Soviet Union that is intended to provide basic reference material as a backdrop for assessing future developments in these new states. The profile provides a description of the geography, population, and economy of Azerbaijan and compares its level of development, growth, and social welfare with that of Turkey and Mexico.

International comparisons, particularly for aggregate measures such as GDP, are difficult to make because of differences in definitions and methods used by various countries in compiling statistics. International currency exchange rates are deficient for this purpose because they do not reflect the relative purchasing power of different currencies over the whole range of goods and services included in GDP. Because of the lack of these parities, alternative measures have been selected. These measures include primarily data for which comparable international statistics are available.

For the most part, official statistics in the public domain were used in compiling the tables and other numerical entries. The annual statistical abstract for 1988 for Azerbaijan, *Narodnoye Khozyaysto Azerbaijanskoy SSSR (National Economy of Azerbaijan SSR)* and for 1990 *Azerbaijan v Tsifrakh (Azerbaijan in Figures)* were the most important sources of data, along with publications issued by the statistical committee for the Commonwealth of Independent States (CIS). Extensive use was also made of *Trud v SSSR (Labor in the USSR)* and the *Perepis' naseleniya, 1989 (Population Census)*. Reference country comparisons relied on the information found in those countries' yearbooks and in various UN and OECD publications covering national accounts, agricultural production, food consumption, and the like. More detailed data on Azerbaijan are included in the appendix.

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Azerbaijan

Azerbaijan:
An Economic Profile

Geography and Climate

With an area of 86,600 square kilometers—a little larger than Maine and roughly the same size as Portugal—Azerbaijan placed ninth in size among the republics of the former Soviet Union. It occupies the eastern corner of the Transcaucasus region that lies separated from Russia by the southern flanks of the Greater Caucasus Mountains; from its western neighbors by religion and ethnicity; and from the Central Asian Muslim republics to the east by the waters of the Caspian Sea. To the south lies Iranian Azerbaijan.

Azerbaijan is characterized by a variety of different landscapes based on its relief, drainage patterns, and climate. More than 40 percent of its territory is taken up by lowlands, about half lies between 400 and 1,500 meters above sea level, and 10 percent lies above 1,500 meters. The highest peaks are part of the Greater Caucasus, which forms a natural northern boundary for the republic. The Lesser Caucasus range, in southwest Azerbaijan, is the second-most important mountain system and includes the Karabakh Upland. The Talish Mountains lie along Azerbaijan's southeastern border with Iran. Plateaus dominate the central portion of the republic, and the Kur-Araz Ovaligi (Kura-Araks Lowland) takes up much of eastern Azerbaijan. Named after its main river and its tributary, this swampy lowland, much of which has been reclaimed, includes the Shirvan, Mili, and Mugan Steppes.

The territory of Azerbaijan can be divided into three climatic zones. The Greater Caucasus forms an important climatic divide, constituting a high barrier to atmospheric movement and sheltering Azerbaijan from northern air during the winter months. The western and northern mountains have a continental climate, with a cold winter and a dry, hot summer (except at the very highest elevations, where tundra conditions prevail). A dry subtropical climate prevails in central and eastern Azerbaijan, characterized by a mild winter and a long and very hot summer, with

Baku Bay

average temperatures about 81° Fahrenheit (27° Celsius). Near the mouth of the Kur (Kura) River, annual rainfall reaches only1 inch (25 millimeters). Southeast Azerbaijan has a humid subtropical climate, with precipitation between 48 and 56 inches (1,200 and 1,400 millimeters) a year, most of which falls in the winter. This is the region of the Lankaran Ovaligi (Lenkoran Lowland), one of only two areas of humid subtropical climate in the former Soviet Union.

Because of a lack of precipitation, vegetation is mostly steppe and semidesert; the Kura-Araks Lowland is actually an outlier of Central Asia. Gray soils and saline solonchaks underlie the plains, with gray alkaline solonetz and chestnut brown soils on the plateaus in the higher regions. The mountain slopes of Azerbaijan are generally low-lying enough to be forested and are covered mostly with beech, oak, and pine trees.

Historic Baku

History and Government

The area that is now Azerbaijan has been inhabited since the ninth century B.C., when three ancient states, Mana, Midya, and Caucasian Albany, arose. Later, the area became an important migratory route and was fought over by Arabs, Khazars, and Turks, whose control from the 11th through the 18th centuries resulted in domination by Shiite Muslims (as in Iran). This distinguished Azerbaijan from neighboring, Christian-oriented Georgia and Armenia. By the 19th century, Azerbaijan came under the control of Russia, entering the Russian Empire in 1828. By the end of the century, it was an important component of the Empire's economy, reflecting its role as the world's leading oil producer with more than half the world's oil output.

Following the Bolshevik Revolution, Azerbaijan declared its independence on 28 May 1918. Russian control, however, was reasserted by the Red Army, with a pro-Moscow regime instituted in April 1920. Azerbaijan was part of the newly established Transcaucasian Soviet republic until 5 December 1936, when it became a separate union republic. More recently, the republic has been in severe turmoil regarding the status of the former Nagorno-Karabakh Autonomous Oblast, an ethnic Armenian enclave.

Azerbaijan issued a declaration of sovereignty on 23 September 1989; it was the first of the former Soviet republics after the Baltic states to do so. Following the failed coup in Moscow, independence was declared on 30 August 1991. Azerbaijan was admitted as a member of the United Nations on 2 March 1992.

The Azerbaijani Government structure is a fluid arrangement, loosely based on the much-modified 1978 republic constitution, and it is expected to change significantly in 1995. Azerbaijan has a modified presidential form of government. The president is elected in a popular vote to a four-year term to serve as head of state. Elections for the current president, Heydar Aliyev, however, were held three years prematurely, following the ouster of his predecessor. The president appoints a prime minister, who oversees the government and answers to the president and the legislature. Azerbaijan's acting legislature is the 50-member Milli Mejlis, appointed by the two prevailing

Government building

political parties following independence in 1991. The 360-member Supreme Soviet, elected in 1990, technically remains the national parliament but has not met since being superseded by the Milli Mejlis. Azerbaijan intends to hold nationwide elections for a new legislature in 1995, but a new election law and further constitutional changes will be required.

Population and Labor Force

Selected Demographic Characteristics

Azerbaijan is the sixth-most-populous former Soviet republic—with a population of roughly 7.3 million in 1992, much smaller than that of Mexico's 88.6 million or Turkey's 59.6 million. Azerbaijan is also much less urbanized than either Mexico or Turkey, with 54 percent of its population living in urban areas compared with 71 percent in Mexico and 61 percent in Turkey. The share living in urban areas in Azerbaijan changed little between the 1979 and 1989 censuses, while in reference countries the urban proportions have grown (see table 1).

The fertility level in Azerbaijan is lower than in either Mexico or Turkey. Mexico and Turkey had total fertility rates in 1990 that were comparable to Azerbaijan's total fertility rate in 1979. As a result, population growth in Azerbaijan was lower than in the reference countries, growing at 1.5 percent a year during the 1980s, while Mexico and Turkey grew at 2.1 percent and 2.4 percent, respectively.

Although there are differences in fertility, the mortality levels in these three countries are similar. Life expectancy in Azerbaijan has been comparable to that of Mexico and slightly higher than that of Turkey. As with the other former Soviet republics, however, expectancy at birth began to decline in Azerbaijan in the early 1990s. In 1991, life expectancy was 70.5 years, which is lower by half a year than the 1990 level.

In 1989, Azeris comprised 83 percent of the population, their share having increased by 5 percentage points over 1979. Russians and Armenians are the two second-largest ethnic groups in Azerbaijan. Each group accounted for 6 percent of the population in 1989. Government estimates in mid-1994 indicate that most Russians and Armenians have left the country, reducing their shares of the population to slightly over

Table 1
Selected Demographic Statistics, Selected Years

	Azerbaijan		Mexico		Turkey	
	1979	1989	1980	1990	1980	1990
Population						
Total *(thousands)*	**6,027**	**7,021**	**68,685**	**85,120**	**45,121**	**57,130**
Male	2,933	3,424	34,175	42,055	22,890	28,949
Female	3,093	3,597	34,511	43,066	22,230	28,181
Average annual growth rate *(percent)*		1.5		2.1		2.4
Age dependency ratios[a] *(per 100 persons)*						
Total	**70**	**60**	**92**	**76**	**80**	**70**
Young *(0-14)*	60	52	85	69	73	62
Old *(over 64)*	10	8	7	7	8	8
Percent urban	53	54	66	71	44	61
Total fertility rate[b] *(births per woman)*	**3.5**	**2.8**	**4.7**	**3.5**	**4.6**	**3.6**
Life expectancy *(years)*	68	71	67	71	63	69
Largest cities *(thousands)*	Baku	1,150	Mexico City	13,879	Istanbul	6,407
	Ganca[c]	279	Guadalajara	2,265	Ankara	3,022

[a] Age dependency ratios are the number of people younger or older than the working ages (15 to 64) per 100 working-age persons.
[b] Total fertility rate represents the number of children a woman would bear in her lifetime if she survived to the end of the reproductive age and was subject over this period to the age-specific fertility rates observed in a given country and year.
[c] Formerly Kirovabad.

2 percent each and increasing the Azeri share to over 90 percent.

The Azeri language is part of the southern branch of the Altaic languages. In 1922, a Latin script was substituted for Azeri in place of an Arabic script, and in 1937 there was a further switch to a Cyrillic alphabet. In 1989, 99 percent of ethnic Azeris living in Azerbaijan spoke Azeri, and of these, 32 percent also spoke Russian. Only 14 percent of the Russians living in Azerbaijan had Azeri as a second language.

Education

As with the other former Soviet republics, the level of education in Azerbaijan is relatively high. Sixty-nine percent of the population over the age of 15 had at least completed secondary school in 1989, up from 50 percent in 1979. The share of the population that had completed higher education also increased from just under 8 percent to just under 11 percent. There are, however, sizable differentials in educational attainment by gender. In 1989, three-quarters of men, age 15 and older, had completed secondary education compared with 63 percent of women. Educational levels have been increasing over time and by gender. For those age 25 to 44 in 1989, 90 percent of the men and 83 percent of the women had completed secondary education compared with those aged 65 and older, for whom 38 percent of the men and only 17 percent of the women had completed secondary education.

Azerbaijani folk musicians

Table 2
Distribution of Labor Force by Sector

	Azerbaijan	Turkey	Mexico
	1992[a]	1991[b]	1990
Total national economy (*millions*)	**2.9**	**20.3**	**26.1**
Total national economy (*percent share*)	**100.0**	**100.0**	**100.0**
Industry and construction[c]	26.0	20.5	26.4
Agriculture and forestry	32.6	47.1	22.0
Transportation and communications	7.2	4.3	4.3
Trade and public dining	6.2	11.3	12.9
Credit and insurance, other services, and miscellaneous	28.0	16.8	34.4

Note: Because of rounding, components may not add to the totals shown.
[a]The number of people in the labor force is for 1992; distribution is for 1990.
[b]The number of people in the labor force is for 1991; distribution is for 1990.
[c]Includes mining and quarrying industries.

Labor Force

The distribution of the labor force in Azerbaijan shows some similarities to those in Mexico and Turkey (see table 2). About one-quarter of all workers in Azerbaijan and Mexico are employed in industry and construction, as compared with one-fifth in Turkey. Azerbaijan's share of agricultural employment (nearly one-third) was between its shares in Mexico and Turkey. Trade and public dining accounted for a notably smaller share relative to the other two countries.

The size of the labor force as a share of the population is somewhat larger in Azerbaijan (39 percent) than in either Mexico (32 percent) or Turkey (35 percent). The higher share in Azerbaijan stems partly from much higher labor force participation rates, especially among females, which were a consequence of Soviet policies that relied on large annual infusions of labor as a means of stimulating economic growth. About two-fifths of Azerbaijan's state sector work force is female, as compared with about one-third in Turkey and Mexico.

Another noteworthy feature of the labor force is that Russians are disproportionately represented in the traditionally higher paying sectors, such as industry, construction, transportation, and "science," while ethnic Azeri presence in the traditionally lower paying sectors, such as agriculture and health, exceeds their population share (see table 3). This pattern is repeated in most non-Russian republics of the former Soviet Union, reflecting, in part, the earlier Soviet policy of dispatching comparatively more skilled Russians to the republics to staff new industrial enterprises. The departure of so many highly skilled Russians has adversely affected the Azerbaijani economy.

Structure and Performance of the Economy

Aggregate Measures

Well documented, aggregate measures, such as Gross Domestic Product (GDP) accounts comparable to those of the West, are available for Azerbaijan for only a few years and, then, only in a very aggregate

Table 3
Ethnic Azeri Share in State Sector Employment, 1987

Percent

Total	**83**
Industry	69
Agriculture[a]	90
Transportation and communications	74
Construction	73
Trade and public dining	78
Housing-communal economy and other personal services	76
Health, physical culture, and social security	88
Education	80
Culture and art	79
Science and scientific services	60
Government administration	78

[a]State farms only.

Table 4
Gross Domestic Product by Sector of Origin, 1990

Percent

	Azerbaijan	Mexico	Turkey[a]
Total	**100.0**	**100.0**	**100.0**
Industry	24.5	25.7	32.9
Agriculture and forestry	33.2	8.0	15.4
Construction	10.8	4.0	4.0
Transportation and communications	6.8	8.3	10.0
Trade and distribution	5.3	26.1	17.2
Services and other	19.4	27.9	20.5

[a]1989.

form. Preliminary estimates suggest, however, that industrial, agricultural, and construction activity probably contributed nearly 70 percent of GDP in 1990 as compared with just over half in Turkey (1989) and two-fifths in Mexico (see table 4). Trade and services probably accounted for less than one-quarter of Azerbaijan's GDP, compared to nearly two-fifths in Turkey and over one-half in Mexico.

A preliminary measure of Azerbaijan's domestic product among final uses (consumption, investment, and government services) differs somewhat from reference country patterns (see figure 2). According to these estimates, Azerbaijan devotes a larger share of its GDP to consumption than does Turkey but a slightly lower share than Mexico. Moreover, the share of investment in Azerbaijan's GDP was lower than it was in the reference countries.

Preliminary estimates for Azerbaijan suggest that GDP increased 2.9 percent annually during the period 1981-88. This was 2.6 times the average annual growth registered by Mexico (1.1 percent), but substantially below the average annual growth of 5.4 percent achieved by Turkey. Between 1989 and 1993 GDP in Azerbaijan declined greatly. By 1993, national income by official measures was only about half the level attained in 1988.

Industry

Among the republics of the former Soviet Union, Azerbaijan in the 1980s had the highest per capita value of industrial output. A well-developed chemical industry based on the fuels branch, taken together with food processing and light industry branches based on the farm sector, accounted for nearly two-thirds of overall industrial output (see table 5).

During the 1980s, industrial output grew at an estimated average annual rate of 2 percent.[1] While approximating the rate of growth achieved by Mexico (2.4 percent), it was only one-third the rate posted in Turkey (7.0 percent). During 1990-94, industrial production fell by almost 50 percent, according to official statistics.

Petroleum is Azerbaijan's single most important natural resource, and its industrial sector is based mostly on oil (see table 6). Specifically, oil is found where the Kura depression adjoins the eastern end of the folds of the Greater Caucasus. Exploitation began in the 1860s and, by the turn of the century, the Baku field was pro-

[1] Official data record an average annual growth rate for 1981-89 of 3.1 percent, a rate that is believed to be biased upward because of failure to correct properly for price inflation.

Figure 2
Gross Domestic Product by End Use, 1991

Percent

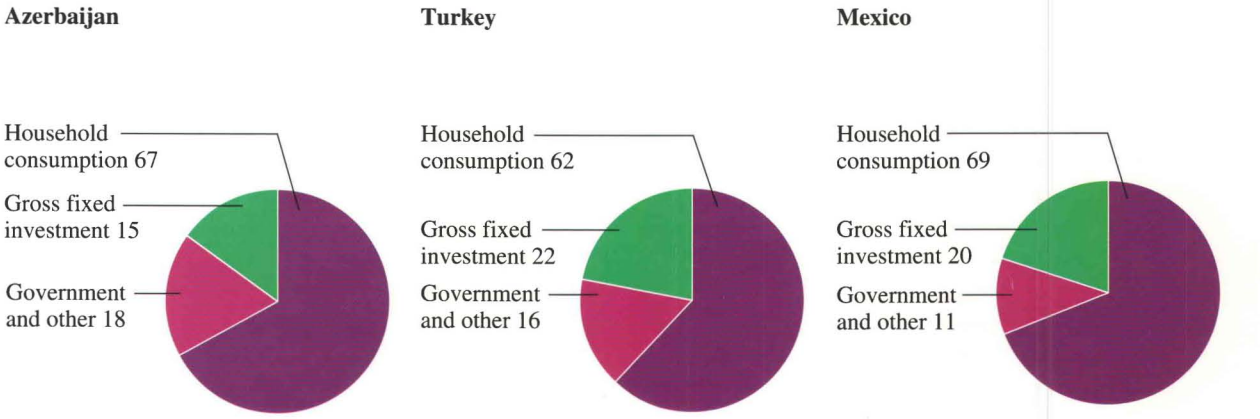

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Table 5
Structure of Industrial Output by Branch[a]

Percent share

	Azerbaijan[b] (1988)	Mexico (1989)	Turkey (1985)
Electric power	7.2	4.6	13.2
Fuels	20.2	9.4	17.2
Chemicals and petrochemicals	27.9	16.4	5.5
Metals	4.6	5.6	5.9
Machinery	15.1	16.8	13.8
Wood, paper, and pulp	1.4	8.7	5.1
Construction materials	6.0	5.9	3.9
Light industry	7.2	8.7	11.6
Food processing	7.0	22.0	14.8
Other industries, n.e.c.	3.4	1.9	9.0

[a] Value-added measures were used in this comparison.
[b] Shares reflect domestic prices, which in terms of world prices tend to substantially undervalue fuels and metals and overvalue many manufactures.

ducing half of the world's petroleum. In more recent years, Baku's production has been dwarfed within the former USSR, first in the 1950s by the Volga-Urals field in Russia (the "Second Baku") and then in the 1970s by West Siberian oil and gas.

The increasing costs of extracting Siberian oil, however, led Moscow planners to explore alternative sources during the Soviet period, notably offshore fields near Baku in the Caspian Sea. Four major offshore fields were discovered in the 1980s, and development of one of these fields was begun. Offshore platforms now reach out as far as 100 km from the Abseron Yasaqligi (Apsheron Peninsula). Smaller oilfields occur near the mouth of the Kur River. Most of the oil is shipped by tanker from Baku.

Figure 3
Selected Industrial Activity in Azerbaijan

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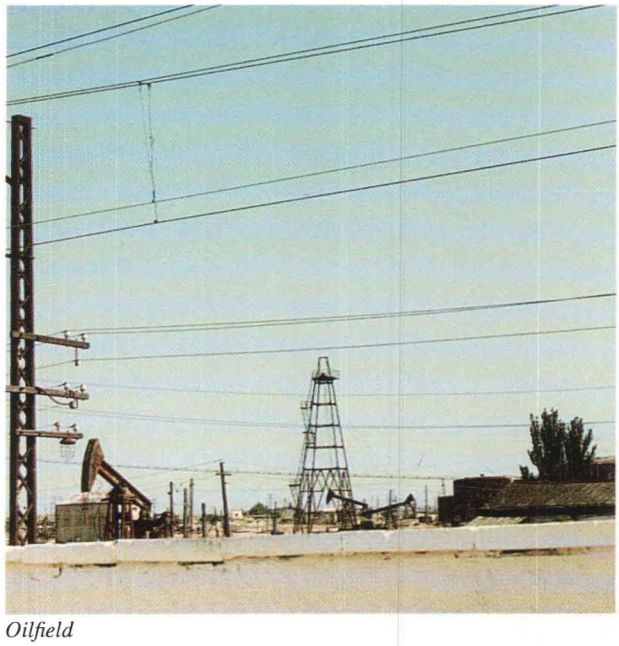
Table 6
Azerbaijan: Energy Production, Consumption, and Imports, 1991

	Production in Natural Units	Thousands Barrels Per Day Oil Equivalent
Total primary energy production		**385**
Oil *(thousand b/d)*	234	234
Natural gas *(billion cubic meters)*	9	145
Coal *(million tons)*	0	0
Electric power *(billion kWh)*	1	6
Consumption		
Total *(percent shares)*	**100**	**460**
Oil	48	
Gas	50	
Coal	0	
Other[a]	2	
Net imports[b]		**75**

Note: Because of rounding, components may not add to the totals shown.

[a]Primary electricity.
[b]Net imports are calculated by subtracting production from cosumption.

Azerbaijan also produces substantial amounts of natural gas, although it must still import half of its gas needs. About half of the gas produced comes from the large but declining field at Bakhar, 40 km from Baku. Both oil and gas production have declined since 1988, and foreign investment will be needed to exploit potentially huge oil and gas resources. Besides oil and gas, Azerbaijan also has other natural resources, such as lead, zinc, iron and copper ores, and building materials (marble and limestone). The republic produces its own electricity, about 10 percent from hydropower. Hydropower is utilized at the Mingacevir (Mingechaur) dam and reservoir complex on the Kur River. This is a multipurpose scheme involving hydroelectricity, irrigation, flood protection, and river transportation.



Oilfield

Azerbaijan has developed a largely petroleum-based but fairly diversified manufacturing sector. Major industries include petrochemicals, oil refining, and the manufacturing of specialized equipment for the oil industry such as turbo-drills, pipes, compressors, and storage tanks and are centered primarily in Baku, Ganca, and Mingacevir (see table 7). Sumgayit (Sumgait) is the center of ferrous metallurgy, in addition to being a leader in the chemical industries that produce mineral fertilizers, herbicides, synthetic rubber, and plastics. Light industries (such as textile manufacturing and footwear) and food processing are distributed throughout most of the cities in Azerbaijan, but these branches are much less important in the industrial structure than they are in Mexico and Turkey.

Table 7
Production of Selected Industrial Products, Selected Years

	Azerbaijan			Mexico			Turkey		
	1985	1990	1991	1985	1990	1991	1985	1990	1991
Primary energy									
Electric power *(billion kWh)*	20.7	23.2	23.5	96.7	127.0	124.0	33.3	57.5	60.2
Oil *(million metric tons)*[a]	13.1	12.5	11.7	136.0	133.0	139.0	2.1	2.9	4.4
Natural gas *(billion cubic meters)*	14.1	9.9	8.6	24.1	22.8	22.7	0.1	0.2	0.2
Metallurgy									
Crude steel *(million metric tons)*	0.9	0.7	0.6	7.4	8.7	7.9	4.9	9.3	9.3
Rolled ferrous metal *(million metric tons)*	0.7	0.5	0.5	5.7	6.0	5.6	1.3	9.5	9.4
Machinery									
Trucks and buses *(thousands)*	2.1	3.1	3.2	151.0	222.0	269.0	NA	NA	NA
Chemicals									
Mineral fertilizers *(million metric tons)*	0.3	0.2	0.2	1.4	1.9	1.9	1.3	1.2	1.0
Synthetic plastics and resins *(thousand metric tons)*	58.9	68.4	84.5	690.0	1,000.0	1,050.0	134.0	465.0	485.0
Synthetic detergents *(thousand metric tons)*	70.6	81.5	62.6	582.0	839.0	850.0	172.0	300.0	315.0
Tires *(millions)*	1.7	1.1	0.9	10.5	11.9	12.0	5.6	4.8	7.5
Forestry products									
Sawn timber *(thousand cubic meters)*	280.0	126.0	86.7	1,990.0	2,017.0	2,100.0	4,900.0	NA	NA
Particle board *(thousand cubic meters)*	46.3	43.0	44.6	395.0	352.0	447.0	NA	NA	NA
Construction materials									
Cement *(million metric tons)*	1.3	1.0	0.9	20.3	24.5	22.9	17.6	24.6	24.5
Light industry goods									
Cotton and wool fabrics *(million square meters)*	150.4	112.7	104.5	364.0	335.0	NA	592.0	456.0	NA
Stocking and hosiery goods *(million pairs)*	42.2	37.8	35.1	NA	NA	NA	68.0	128.0	126.0
Consumer durables									
Radios *(thousands)*	485.0	6.0	7.4	428.0	NA	NA	164.0	103.0	43.3
Refrigerators and freezers *(thousands)*	302.0	330.0	313.0	366.0	396.0	NA	488.0	987.0	1,020.0
Processed foods									
Vegetable oil *(thousand metric tons)*	54.8	40.7	36.2	603.0	NA	NA	225.1	NA	NA

NA Data are not available.

[a]Includes gas condensate.

Figure 4
Major Energy Facilities in Azerbaijan

Agriculture

Reflecting the low levels of precipitation, irrigation means the difference between desert infertility and a relatively productive agriculture in much of the country. Roughly 70 percent of crop production comes from irrigated land. As a result, the republic produces substantial quantities of high-value farm products—long staple cotton, tobacco, citrus fruits, tea, rice, grapes, and olives—as well as small amounts of low-value grains.

Until recently, the private sector, even though contributing one-third of farm output, had practically no individual holdings. State and collective farm households were permitted to cultivate private plots of one-half to one acre (less than 0.5 hectare) and to maintain up to two head of livestock. In addition, nonagricultural households had, and still have, very small "garden-size" plots for cultivation.

Although reforms over the last four years have permitted the creation of private farms and the expansion of private plots, Azerbaijani agriculture remains dominated by some 1,900 large state and collective farms, the latter comprising somewhat over three-fifths of the total. The collective farms are organized nominally as "producer cooperatives," whereas state farms, which have become much more numerous and smaller in size in recent years, are organized along the lines of state-operated industrial enterprises. The data in table 8 suggest the immense size of these enterprises. In contrast, Turkey has 3.7 million privately operated farming units that produce all farm output. In Mexico, nearly one-half of farmland is owned by communal or *ejido* farmers, while the rest is distributed across 4.3 million private farms. Until recently, the holders of communal land did not have property rights. They could pass cultivation rights to direct descendants but could not sell land, rent it, or use it as collateral for credit. Communal lands could be utilized either individually or collectively. In 1992, these constraints on Mexican farm productivity were lifted, permitting the individual communal member to lease or transfer land to other members and providing an environment that could foster private-sector investment in agriculture.

During the 1980s, farm output in Azerbaijan remained unchanged, as compared with increases of 23 percent in Turkey and 20 percent in Mexico. Production fell sharply in Azerbaijan in both 1992 and 1993. Overall, when average production of crops and livestock for 1989-90 are valued by US "farm gate" prices (1988), Azerbaijan's farm output was roughly one-sixth of that in both Turkey and Mexico. The dollar value of livestock production as a share of the value of total farm output varied widely, ranging from one-fourth in Azerbaijan to slightly more than one-fifth in Turkey to about three-fifths in Mexico. Production of important commodities in Azerbaijan is given for a series of years in table 9.

Table 8
Selected Characteristics of Agricultural Enterprises

	Azerbaijan[a]	Mexico[b]	Turkey[c]
Number of farms	1,926	4,280,220	3,650,910[d]
Agricultural land per farm *(hectares)*	2,266	26	62
Cattle *(per farm)*	412	5	4
Hogs *(per farm)*	64	2	...[d]
Sheep and goats *(per farm)*	1,410	NA	19
Number of workers *(per farm)*	342	1.2[e]	3[e]

[a]State and collective farms only. Data are for 1992.
[b]Data are for 1988. Private sector only.
[c]Data are for 1988.
[d]Zero or negligible.
[e]Data are for 1990 and include workers in forestry and fishing.

As a reflection of higher yields associated with irrigated agriculture, crop productivity in Azerbaijan compares well with a comparable measure for Turkey while lagging behind Mexico. When yields of six major crops (average 1988-89) are weighed together, Azerbaijani and Turkish overall yield indexes are roughly one-third of the Mexican level.

In contrast, average milk yield per cow in Azerbaijan is roughly the same as in Mexico and two-thirds above that of Turkey. This performance is the result of relatively high productivity in the socialized sector. Milk

Table 9
Azerbaijan: Production of Major Agricultural Products, Selected Years

Thousand metric tons

	1980	1985	1990	1991	1992	1993
Meat	139.0	168.0	176.0	153.0	113.0	90.0
Milk	796.0	951.0	970.0	948.0	850.0	760.0
Eggs (*million units*)	721.0	948.0	985.0	958.0	812.0	660.0
Wool	10.7	11.2	11.2	10.5	9.5	8.6
Grain	1,100.0	1,249.0	1,364.0	1,346.0	1,285.0	1,096.0
Cotton	754.0	784.0	543.0	540.0	336.0	NA
Vegetables	824.0	871.0	856.0	805.0	555.0	486.0
Fruit, berries, and grapes	1,759.0	2,134.0	1,515.0	1,622.0	1,008.0	758.0

production per cow among private holdings in Azerbaijan is one-fourth of the average for collective and state farms and one-third of the Mexican level. Dairy operations in countries such as Mexico and Turkey are characterized by small individual household holdings where livestock feeding is limited mostly to poor-quality hay and other forage crops. High-energy (grains) and high-protein (oil seeds) feeds comprise a relatively higher share of feed rations in Azerbaijan's collective and state farms.

Transportation

The transport network in Azerbaijan is comparatively dense. There is, in general, more length of roads and railroads, per unit of area, than in the reference countries (see table 10). Railroads (about 40 percent of whose distance is double tracked) have typically carried two-thirds of all freight traffic (see appendix, table A-7). The principal goods are oil products, building materials, timber, and grain. The major rail lines traverse the Kur Valley and connect Baku with T'bilisi and Bat'umi in Georgia. A railroad also follows the Aras (Araz) Valley through the Lesser Caucasus, along the boundary with Iran and Turkey and links Baku to T'bilisi, via Gyumri (formerly Leninakan). Motor transport is used extensively for both freight (short-haul) and passengers (see appendix tables A-8, A-9, and A-10), particularly in mountainous regions not served by railroads. Air transport has played a large role in passenger transport in the past.

Baku is a major port, featuring nine general cargo berths, a large ferry terminal, and facilities for loading/unloading large quantities of oil products and construction materials. In addition, the port handles considerable amounts of cotton, grain, and timber. By contrast, river transport is not significant, as most waterways in Azerbaijan are not navigable.

Azerbaijan is well connected to the oil and gas pipeline systems of the former Soviet Union. The country's oil pipelines were originally built to carry oil extracted from the Caspian Sea bed to refineries in neighboring Russia and Georgia. After Azerbaijan's oil production peaked, however, the line to Georgia fell into disuse and the flow through the Russian pipeline was reversed to allow Russian crude to be sent to underutilized refineries in Azerbaijan. Baku is considering the construction of a new oil export pipeline by the end of the decade as a result of the recent agreement it signed with a consortium of Western firms to develop oil resources in the Caspian Sea. Azerbaijan is also well connected to the former Soviet Union gas distribution system, with direct links to Georgia, Russia, and Iran. An additional link to Armenia was closed several years ago following renewed fighting in

Table 10
Land Transport Networks, 1991

	Azerbaijan	Mexico	Turkey
Length *(kilometers)*			
All Roads	36,700	292,294	280,953
Paved	31,800	81,961[a]	44,449
Unpaved	4,900	NA	236,504
Rail	2,090	26,510[a]	10,393
Pipelines	3,000	53,004	4,767
Crude oil	1,130	28,200	1,738
Petroleum products	630	10,150	2,321
Natural gas	1,240	13,254	708
Petrochemicals	NA	1,400	NA
Density *(kilometers per 1,000 square kilometers)*			
All Roads	424	126	365
Paved	367	35[a]	58
Unpaved	57	NA	307
Rail	24	14[a]	13
Pipelines[b]	34	27	6
Crude oil	13	14	2
Petroleum products	7	5	3
Natural gas	14	7	1
Petrochemicals	NA	1	NA

NA Data not available.
[a]Data are for 1989.
[b]Pipeline data for Mexico and Turkey are for 1993.

the Nagorno-Karabakh region. Azerbaijan currently gets the bulk of its gas needs from Turkmenistan via the Russian pipeline system.

As a result of the conflict over the status of Nagorno-Karabakh and the disintegration of the Soviet Union, transport activity in Azerbaijan has declined markedly, and its facilities have deteriorated. Roughly one-third of the rail network reportedly needs to be rebuilt. Also, roughly 60 percent of the country's highway network is in disrepair, in part, because of a drastic decline in routine road maintenance. Moreover, many trains, trucks, and buses have been in service for up to 40 years, considerably increasing requirements for fuel and spare parts. Only half the country's 65 airports reportedly are in use, and its passenger aircraft total only 30.

Baku port

Investment

Growth of investment in Azerbaijan in the 1980s proceeded at an average annual rate of 2.5 percent, somewhat below the former Soviet Union average. On average, Turkish investment grew somewhat faster (4.2 percent), while investment in Mexico declined by more than 20 percent during the decade. The structure of investment in Azerbaijan is roughly in keeping with the other former Soviet republics' emphasis on industry and agriculture (over two-thirds of the total when combined, see table 11). Consumer-oriented investment in the 1980s in housing, trade, and services came to about one-fifth of the total. In contrast, Turkey devoted more than one-third of its investment to industry and agriculture and more than two-fifths to housing, trade, and services. Comparable data for Mexico are not available. In the 1980s, Azerbaijan devoted roughly 30 percent of all industrial investment to development of the fuels and electric power branches, some 3 percent to chemicals, and 6 percent

Table 11
Investment Allocations by Sector

Percent

	Azerbaijan[a]	Turkey[b]
Agriculture	18.7	6.9
Industry	46.0	29.8
Construction	2.4	. . .[c]
Transporation and communications	11.2	22.1
Trade and services	12.9	16.2
Housing	8.8	25.0

[a]1986-88 average.
[b]1990.
[c]Believed to be included under "trade and services."

Table 12
Azerbaijan: Employment by Form of Property

Percent

	1990	1991	1992	1993
Total	**100**	**100**	**100**	**100**
State	77.9	73.8	71.6	73.7
Collective farms	12.0	11.5	13.6	12.2
Cooperatives	2.2	2.8	1.8	1.1
Private *(nonagricultural)*	0.1	0.1	0.1	0.1
Private agriculture	7.8	11.8	12.9	12.9

to the machinery branch. As in the other former Soviet republics, total investment in Azerbaijan has declined precipitously since 1990, falling by over 55 percent during 1991-93.

Economic Reform

Both some early basic legislation and repeated statements of successive leaderships proclaim the intent to create a market economy in Azerbaijan with substantial private ownership of property. Beset by political instability and the debilitating conflict with Armenia over the status of Nagorno-Karabakh, Azerbaijan has made only minimal progress toward that goal. In the financial area, the country introduced its own currency—the manat—in 1993, revamped its tax system to replace Soviet-style profits deductions and turnover taxes with corporate profits and value-added taxes, and separated its central bank from commercial banks. Although privatization and antimonopoly legislation has been adopted, implementation has scarcely gotten off the ground. The government continues to exert considerable control over production, prices, wholesale and retail trade, and foreign economic relations. IMF pressure has begun to yield some specific promises from Baku, but progress continues to be slow.

Privatization

At the end of 1993, 74 percent of Azerbaijan's labor force was employed in the state sector, roughly 12 percent on collective farms, and 13 percent in the private sector, mainly on private plots in agriculture but also in businesses established under legislation adopted prior to independence (see table 12). Legislation to privatize the bulk of state property was not adopted until January 1993, and a program to implement it was not approved by the President until April 1994. This program, which still needs parliamentary approval, calls for privatizing 8,000 small firms in 1995, using special bank accounts given to citizens; auctions are to be used only if the unit's employees decline to purchase it. Under a separate program, 10,000 state-owned housing units (6 percent of the total) have been transferred to private owners. There were only 700 private farms as of mid-1994, although the size of the traditional private plots has been expanded. The press reports that some 180 private commercial banks have been registered.

Inflation and Unemployment

Because of pervasive price controls maintained by the Soviet government, the people of Azerbaijan experienced little open inflation before 1991. In that year,

however, retail prices doubled as a result of partial decontrol of many prices and sharp increases in controlled prices. Following Russia's lead, Azerbaijan freed most prices in January 1992 and raised others later in the year. As a result, prices of consumer goods and services rose by nearly 1,500 percent in 1992. Prices increased by another 810 percent in 1993 and continued to rise rapidly in 1994.

During the Soviet period, unemployment was not officially admitted, and statistics were not collected on it. In 1991, following establishment of a State Employment Fund, the government began to report the number of unemployed persons who were registered with the Employment Service. That number rose from 3,800 in 1991 to 23,500 in late 1994, just under 1 percent of the labor force. According to press reports, however, many thousands more workers have been forced to work part-time or are on unpaid leave because of the sharp decline in industrial production and the financial plight of many firms. The unemployment rate was 12 percent in Turkey in 1993 and an estimated 11 percent in Mexico in 1992.

Foreign Economic Relations

Foreign trade provides Azerbaijan with important supplies of industrial materials and consumer goods and with outlets for surplus domestic production, notably that associated with its oil industry. In 1989, imports accounted for 21 percent of domestic consumption, and exports took 27 percent of production. Other Soviet republics supplied 74 percent of Azerbaijan's imports and purchased 95 percent of its exports in 1990. In that year, Russia took 61 percent of Azerbaijan's exports and supplied 53 percent of imports; corresponding shares for Ukraine, the second most important trading partner, were 11 percent and 20 percent. Since 1991, trade with other former Soviet states has dropped by at least 50 percent, and Azerbaijan has had modest success in expanding its exports to states outside the former Soviet Union.

Azerbaijan's principal exports have been refined petroleum products, machinery (especially that related to the oil industry), chemicals and petrochemicals, textiles, and some food and alcoholic beverages. Principal imports traditionally have been crude oil, natural gas, industrial inputs, grain, processed foods, and manufactured consumer goods.

Azerbaijan has been seeking foreign investment, primarily to develop its oil resources. Its foreign investment law was adopted in February 1992, but falls considerably short of international standards, particularly with regard to guarantees against expropriation and the ability to repatriate profits. There were 201 active joint ventures at the start of 1993, the largest number being with Turkish partners. Over the past few years, the Azerbaijani Government has been engaged in protracted negotiations with Western oil companies over projects to develop offshore oil reserves in the Caspian Sea. Overall, lack of an adequate legal system, excessive state regulations, and widespread corruption have contributed to a poor investment climate.

Living Standards and Social Indicators

Personal Income

Most families in Azerbaijan derive the bulk of their income from wages earned in state employment. In line with past Soviet policy, wage differences have been fairly narrow. Above average wages traditionally have been paid by the state in industry, construction, transportation, and science, while the lowest paid were health, culture, and communications (see appendix table A-3). In the past, wages paid in government administration and in finance were below average, but since 1990 they have been substantially above average. Azerbaijan's collective farmers have typically been paid wages above those of state farmers, and the difference increased during the 1980s. When all incomes (money and in-kind) are taken into account, however, average per capita income of collective farm families fell below that of all state employee families by 7 percent in 1990.

Until recently, very little information has been available on the distribution of income within the former Soviet Union and its constituent republics. Data

Baku street scene

available for 1992 indicated that nearly a third of the population in Azerbaijan had incomes below 1,000 rubles per month, probably well below the officially designated minimum subsistence level. At the same time, less than 3 percent of the population had incomes over 3,000 rubles per month. Although unambiguous statistics on income distribution are difficult to obtain for international comparisons, the information available suggests that incomes in the past have been distributed more equally in Azerbaijan than in either Turkey or Mexico, but inequality has increased markedly in Azerbaijan since 1991:

	Per capita monthly income, 1992
Average Monthly Income *(rubles)*	Share of Population *(percent)*
Less than 1,000.0[a]	31.2
1,000.1 to 1,500.0	33.7
1,500.1 to 2,000.0	19.3
2,000.1 to 3,000.0	12.8
3,000.1 to 4,000.0	2.4
More than 4,000	0.5

[a] Includes pensions.

In 1990, families in Azerbaijan spent more than 50 percent of their after-tax income on food, over 35 percent on nonfood goods, and about 9 percent on services. By 1993, however, expenditures on food had risen to almost 70 percent of expenditures, while spending on other goods and services dropped sharply.

Food Consumption

The caloric content of the average daily diet in the latter half of the 1980s in Azerbaijan (2,855 calories), as well as in Turkey (3,324 calories) and Mexico (3,048 calories), exceeded both US and internationally recommended dietary allowances.[2] The share of calories from starchy staples (potatoes and grain products), a rough indicator of dietary quality, was above those in the developed West in all three countries, a reflection largely of their relatively lower levels of per capita income.[3] The share of calories from starchy staples (54 percent) in the Azerbaijani diet was above the former Soviet average (42 percent) but considerably below that of Turkey (68 percent). The composition of diets is affected by the fact that the relatively high cost of livestock products in both Turkey and Azerbaijan leads to a heavier reliance on basic starchy staples.

[2] Recommended daily caloric allowance for US adults: male, 2,650; female, 1,950.

[3] As household incomes rise, consumers tend to substitute animal products, vegetables and fruits, vegetable oils, fats, and other "quality" foods for the "inferior" starchy staples.

As prices skyrocketed and food production and trade dropped, the caloric content of the average daily diet fell, averaging about 2,200 calories during 1991-93. Moreover, the share of calories from livestock products dropped to under 20 percent. Per capita consumption of meat, milk, and eggs declined by 10 to 25 percent, while consumption of grain products increased about 10 percent.

Inventories of Selected Consumer Durables

Although not on a par with families in most other former Soviet republics, Azerbaijan's families generally are moderately well supplied with consumer durables. In 1991, most families had television sets, refrigerators, and sewing machines. On the other hand, only 16 percent had cars. The tabulation below provides ownership rates of selected consumer durables for the three countries:

Holdings per 1,000 population

	Azerbaijan (1991)	Mexico (1988-89 average)	Turkey (1988-89 average)
Telephones	91	127	120
Televisions	211	120	172
Automobiles	4	102	37

Because the higher quality of Mexican and Turkish consumer durables results in greater reliability, enhanced operating life, and fewer repairs, numerical measures do not capture the full difference.

Housing

As of the late 1980s, the provision of housing in Azerbaijan was below that in Turkey. In 1989, the average Azerbaijani was provided with 12.1 square meters in urban areas and 11.1 square meters in rural areas. By contrast, the average Turk in urban areas had roughly 21 square meters. Data are not available for Mexico. In 1989, roughly 60 percent of all Azerbaijani urban housing was owned by the state, while the remainder was held privately or by housing cooperatives. In rural areas, the share held by the state was less than 4 percent. Overall, the private share of the total housing stock increased from 64 percent in 1990 to 67 percent in 1992. In terms of availability of housing amenities, Azerbaijani levels are below the levels of the two reference countries for those amenities for which data are available. Provision of amenities is much poorer in rural areas than in cities:

Percent share of housing equipped with amenities

	Azerbaijan	Mexico	Turkey[a]
	1989	1990	1989
Running water	46	79	99
Hot water	11	NA	NA
Central heating	25	NA	17
Sewerage	35	75	95
Bathing facilities	27	NA	99

NA Data not available.

[a] Does not include housing outside municipal boundaries or squatter housing, where amenities are far less available.

Rents on state-owned apartments in Azerbaijan have been low and heavily subsidized, covering only roughly one-fifth of current maintenance costs. As a result, much housing is in poor repair, with few opportunities for families to improve their housing conditions. In 1989, 12.7 percent of Azerbaijani families (the same as for the former Soviet Union as a whole) who were on waiting lists for better housing upgraded their circumstances. Such quantitative and qualitative shortages have been chronic and persistent, despite a sizable program to build new housing in the 1980s.

Social Security, Health, and Welfare

The people of Azerbaijan are covered by a Soviet-style comprehensive system of social security that has been dispensed without direct charge. Currently, three separate funds provide benefits to the population: Social Protection Fund, Employment Fund, and Social Assistance. The Social Protection Fund provides old-age, disability, and survivor pensions, along with children and family allowances, which are funded by state and local budgets. Starting in 1992, a 1-percent insurance tax and a 35-percent payroll tax were added. Sick leave, maternity leave, and other similar benefits are funded solely by a 6-percent payroll tax introduced in 1992. The Employment Fund is financed by the state

budget and a 2-percent payroll tax initiated in 1992 and provides cash benefits to laid-off workers for up to six months, job-search services, and training services. Finally, Azerbaijan provides minimal social assistance to the disabled and destitute through the state budget.

As in Azerbaijan, the populations of Mexico and Turkey are covered by social welfare programs and unemployment compensation schemes. In Turkey, three separate social insurance funds exist: the Government Employees Retirement Fund, the Social Insurance Institution, and Bag-Kur (Social Security Organization for the Self-Employed). The Mexican Social Security Institute provides basic sickness, disability, and old-age benefits to all eligible people, while private health insurance and pension programs provide supplemental benefits.

In both Turkey and Mexico, the retirement age is 65; in Azerbaijan it is 60 for men and 55 for women who have met a minimum service requirement. Men who do not meet the service requirement would receive benefits at age 65; women at age 60. Unlike Mexico and Turkey, retirees in Azerbaijan may continue to work nearly full time and still receive benefits. Although comparisons are tenuous, it appears that the reference countries' social safety nets are generally not as comprehensive as Azerbaijan's. Roughly two-thirds of the eligible population received monthly old-age benefits in Turkey in 1990, whereas Azerbaijan's net extended to the entire eligible population in 1990. In Mexico, the law excludes people in isolated areas of the country, and not all self-employed people have registered with the Social Security Institution. Perhaps a more meaningful measure would be the share of population that receives pension benefits: nearly 18 percent of the population receives benefits in Azerbaijan in 1991, while only 5.4 percent received benefits in Turkey in 1990. Finally, Turkey's programs are indexed to inflation; Mexico's benefits are not. Azerbaijan's benefits are increased through periodic government decrees, but high rates of inflation make it difficult for the government to keep up with rising costs of living.

Following the Soviet model, health care in Azerbaijan has been universally available and provided without direct charge. Private practice has supplemented this system to a small extent, but significant steps toward general privatization of the health care system have not yet been taken. All hospitals and other health facilities have traditionally been state owned and their personnel have been government employees. In addition, some industrial enterprises have their own clinics that provide health care to their employees. Both Mexico and Turkey have mixed health care systems in which the state dispenses some care, while private facilities and insurance programs provide care or provide the means to receive care for the balance of the population.

The quality of medical training and support facilities in Azerbaijan and the two reference countries appears to fall short of the standards of the developed West. Although Azerbaijan appears to have adequate numbers of doctors and hospital beds, it is evident that the medical facilities are poorly supplied and lack modern equipment. Moreover, rising prices and the breakdown of the Soviet distribution systems have resulted in a deterioration of medical care since 1991.

Because it is extremely difficult to make direct international comparisons on the quality of health care, a less ambiguous procedure compares health-related outcomes between Azerbaijan and the reference countries rather than inputs. In 1992, the life expectancy of the people of Azerbaijan (70.4 years for both sexes) was marginally higher than Turkey (69.9), but somewhat less than Mexico (72.2). Infant mortality in Azerbaijan was above the average for all of the former Soviet Union, and its estimated rate of 37 deaths per 1,000 births in 1992 was also higher than Mexico's (30.2), but less than Turkey's (55.2). The two leading causes of death in Azerbaijan were circulatory illnesses (number one) and respiratory illnesses (number two). In Mexico, the two leading causes of death were circulatory illnesses and accidents, while in Turkey, the two leading causes of death were circulatory illnesses and cancer.

Rising waters of the Caspian Sea

Pollution

Environmental problems in Azerbaijan are heavily concentrated in the leading cities. The low level of industrialization outside these cities may account for this relatively favorable situation. Rural areas, however, face pollution problems that are related to agricultural activity.

The environment in several of Azerbaijan's leading cities has been damaged by their energy-related industries and a shortage of air and water pollution control equipment. Smokestack emissions from Baku's century-old oil industry, some of whose original factories continue to operate (the larger of Baku's two oil refineries opened in the 1870s), cause considerable environmental damage. Smokestack emissions have been particularly severe because fewer than 30 percent of smokestacks have emission control devices, and, because they constrain production, many frequently are not utilized. This presumably contributes to high concentrations of particulates in Ganca (formerly Kirovabad), and nitrous dioxide in Baku, Ganca, and Sumqayit (Sumgait). The natural gas extraction industry also is a major polluter, generating one-sixth of the country's hydrocarbon emissions. In addition, although motor vehicle traffic is a lesser source of air pollution in these cities, pollutants from auto emissions combine with methane vented near oilfields to form smog. On the other hand, air pollutant concentrations elsewhere in the country conform to health standards.

Although two-thirds of funding was devoted to reducing water pollution in 1990, such pollution remains widespread. The principal river in Azerbaijan, the Kur, becomes increasingly polluted as it approaches the Caspian Sea, largely due to considerable runoff of agricultural pesticides and fertilizers. As a result, water in the lower river is suited only for industrial use. Unprocessed sewage dumping is another major problem. Just 35 of 75 Azerbaijani cities have sewage treatment plants, processing just 37 percent of the country's sewage emissions. And half of the sewage from Baku, a city of 1.8 million, is dumped into the Caspian Sea without purification. Industrial pollution also contributes to the problem. Baku's oil refineries and petrochemical plants emit hydrocarbons, ammonia, phenol, and other contaminants into the Caspian Sea. In addition, oil leaks from decaying off-shore

Table 13
Social Indicators in Azerbaijan, Mexico, and Turkey

	Azerbaijan	Mexico	Turkey
Consumption measures			
Per capita living space *(square meters per capita)*	12[a]	NA	21.0[b]
Running water *(percent of urban living space)*[c]	70[b]	79[d]	99[b]
Central heating *(percent of urban living space)*	49[b]	NA	17.3[b]
Doctors *(per 10,000 persons)*	38[e]	10.8[f]	9[b]
Telephones *(per 1,000 persons)*	91[a]	127[f]	120[f]
People			
Suicide *(per 100,000 persons)*	3.2[b]	2.2[g]	20.9[h]
Total fertility rate *(births per woman)*[i]	2.8	3.3	3.4
Average family size *(members)*	4.8[b]	NA	NA
Divorces *(per 1,000 persons)*	1.7[b]	2.0[a]	.5[b]
Life expectancy *(years at birth)*[i]	70.4	72.2	69.9
Males[i]	66.5	68.6	67.6
Females[i]	74.5	75.9	72.3
Infant mortality *(per 1,000 births)*[i]	37.0	30.0	55.0
Net migration *(per 1,000 persons)*[i]	–2.52	–3.21	0

NA Data are not available.

[a] Data are for 1991.
[b] Data are for 1989.
[c] Includes all urban housing, regardless of ownership.
[d] Data are for 1990.
[e] Data are for 1992.
[f] Data are for 1988.
[g] Data are for 1986.
[h] Data are for 1987.
[i] Data are estimates for 1992.

drilling platforms in the Caspian Sea threaten the sturgeon population, a source of superior caviar. The potential for future leaks could increase when three large undersea fields discovered during the 1980s are developed but, if development of these fields by Western firms goes forward, Azerbaijan would presumably benefit from more environment-friendly techniques and equipment.

Other Social Indicators

A collection of social indicators describing aspects of Azerbaijan society not covered in other sections is shown in table 13. According to official data and Western estimates, Azerbaijan compares well with the reference countries for some indicators, less favorably for others, and is similar for still others. For example, urban housing in Azerbaijan is more extensively equipped with central heat than in Turkey. In addition, Azerbaijan has many more doctors relative to its population than do the reference countries, although many doctors are engaged in public health and administrative functions that are normally performed by non-physicians in other countries. On the other hand, it has less urban housing space, relative to its population, than does Turkey. Azerbaijan also has considerably fewer telephones than do either of the reference countries. However, in terms of rates of suicide, divorce, and infant mortality, Azerbaijan fell somewhere in the range of the two reference countries.

Appendix

Selected Economic Statistics

Table A-1
Azerbaijan: Nationality Structure, 1989

	Total population	Azeri		Russian		Armenia		Lezgin		Avar	
	Thousands	*Thousands*	*Percent*	*Thousands*	*Percent*	*Thousands*	*Percent*	*Thousands*	*Percent*	*Thousands*	*Percent*
Total	**7,021.2**	**5,805**	**82.7**	**392.3**	**5.6**	**390.5**	**5.6**	**171.4**	**2.4**	**44.1**	**0.6**
Baku City	1,794.9	1,184.2	66	295.5	16.5	180	10	38.1	2.1	. . .[a]	. . .[a]
Naxcivan Republic	293.9	281.8	95.9	3.8	1.3	1.9	0.6	. . .[a]	. . .[a]	. . .[a]	. . .[a]
Nagorno-Karabakh	189.1	40.7	21.5	1.9	1	145.5	76.9	. . .[a]	. . .[a]	. . .[a]	. . .[a]
Remaining territory	4,743.3	4,298.3	90.6	91.1	1.9	63.2	1.3	133.2	2.8	43.3	0.9

[a] Zero, negligible, or data not available.

Table A-2
Azerbaijan: Births, Deaths, and Natural Growth of the Population, Selected Years

Per 1,000 persons

	1985	1988	1989	1990	1991	1992	1993
Births	26.6	26.4	26.4	26.4	27.0	25.2	23.3
Deaths	6.8	6.8	6.4	6.2	6.3	7.1	7.1
Natural growth	19.8	19.6	20.0	20.2	20.7	18.1	16.2

Table A-1 (continued)
Azerbaijan: Nationality Structure, 1989

Ukrainian		Tatar		Jewish		Talysh		Turks		Other	
Thousands	*Percent*	*Thousands*	*Percent*	*Thousands*	*Percent*	*Thousands*	*Percent*	*Thousands*	*Percent*	*Thousands*	*Percent*
32.3	**0.5**	**28**	**0.4**	**25.2**	**0.4**	**21.2**	**0.3**	**17.7**	**0.3**	**93.5**	**1.3**
18.3	1	24.3	1.4	22.3	1.2	. . .[a]	. . .[a]	. . .[a]	. . .[a]	32.2	1.8
. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	6.4	2.2
. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	1	0.5
. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	20.9	0.4	. . .[a]	. . .[a]	93.3	2

Table A-3
Azerbaijan: Average Monthly Wages for Wage and Salary Workers by Branch of the Economy, Selected Years

Rubles 1985-92, manats 1993

	1985	1988	1989	1990	1991	1992	1993
Total	**163**	**171**	**179**	**195**	**320**	**2,703**	**2,185**
Industry	182	197	209	219	400	3,589	3,109
Agriculture	159	134	140	164	261	1,072	1,120
Construction	240	271	277	291	453	3,715	3,278
Transportation	175	191	202	216	345	2,991	2,623
Communications	132	143	161	175	310	2,954	2,270
Trade and public dining[a]	121	125	133	151	230	1,261	1,164
Housing-communal economy[b]	114	122	127	141	246	1,912	1,640
Health, physical, and social services	109	122	123	132	227	2,405	1,294
Education	146	165	166	177	255	2,984	2,012
Culture	108	122	122	125	292	1,959	1,439
Art	134	142	151	176	339	. . .[c]	. . .[c]
Science and scientific services	170	195	224	247	364	3,176	2,597
Credit and social insurance	144	155	171	271	615	5,814	6,431
Government administrative services	147	162	182	259	421	2,997	3,478

[a]Includes material-technical supply and sale, and procurement.
[b]Includes other domestic services.
[c]In 1992 and 1993, Art is included in the Culture category.

Table A-4
Azerbaijan: The Structure of Gross Industrial Output, Selected Years

Percent

	1985	1987	1988	1989	1990
Total industry	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Heavy industry	48.8	53.0	52.0	51.9	50.9
Fuels[a]	14.7	15.3	14.7	13.5	13.4
Machinery	16.4	19.1	19.2	19.3	19.2
Chemical-forestry	8.7	9.0	8.6	8.5	7.9
Construction materials	3.2	3.4	3.2	3.0	2.9
Heavy industry, n.e.c.	5.8	6.1	6.3	7.6	7.5
Light industry	20.7	20.7	19.8	20.0	18.9
Food processing	28.9	23.9	26.3	28.1	30.2
Industry, n.e.c.	1.6	2.4	1.9	0.0	0.0

[a]Includes electric power.

Table A-5
Azerbaijan: Structure of Capital Investment, by Sector of the Economy, Selected Years

Percent

	1985	1990	1991	1992
Total	**100**	**100**	**100**	**100**
Industry	42.2	36.6	35.8	36.4
Agriculture	22.6	14.5	15	5.9
Construction	2.1	2.2	2.7	1.3
Transportation and communications	11.9	7.4	8.2	3.5
Housing and other[a]	10.9	19.8	23.4	36.6
Other sectors[b]	10.3	19.3	15	16.3

[a] Includes private construction.
[b]Includes forestry, trade, communal economy, science and culture, art, education, and health.

Table A-6
Azerbaijan: Production of Selected Industrial Products, Selected Years

	1980	1985	1989	1990	1991	1992	1993
Primary energy							
Electric power *(billion kWh)*	15.1	20.7	23.3	23.2	23.5	19.8	19
Thermal *(percent share of total)*	92.6	93.6	91.3	92.8	92.5	91.2	NA
Hydro *(percent share of total)*	7.3	6.4	8.7	7.2	7.5	8.8	NA
Oil *(million metric tons)*[a]	14.7	13.1	13.2	12.5	11.7	11.1	NA
Offshore *(percent share of total)*	65.5	70.3	77	79.4	80.8	NA	NA
Onshore *(percent share of total)*	34.5	29.7	23	20.6	19.2	NA	NA
Natural gas *(billion cubic meters)*	14	14.1	11.1	9.9	8.6	7.9	NA
Metallurgy							
Crude steel *(thousand metric tons)*	816	853	820	703	573	NA	NA
Rolled ferrous metal *(thousand metric tons)*	658.1	699	658	522	459	300	200
Steel pipes *(thousand metric tons)*	575	582	584	493	411	260	146
Iron ore *(million tons)*	NA	2.3	2.1	1.9	1.6	NA	NA
Primary aluminum *(thousand metric tons)*	58	56	36	27	26	20	NA
Alumina *(thousand metric tons)*	239	385	380	239	276	240	NA
Machinery							
AC electric engines *(thousands)*	314	390	372	266	208	95	NA
Trucks and buses *(thousands)*	NA	2.1	3	3.1	3.2	0.4	0.1
Bulldozers *(thousands)*	NA	0.4	2.1	2	1.4	NA	NA
Chemicals							
Mineral fertilizers *(thousand metric tons)*	219.7	305.9	275	212	188	81.2	32.3
Sulfuric acid *(thousand metric tons)*	652.2	782.3	768	603	552	269	141
Synthetic rubber *(metric tons)*	127	146	107	85	78	28	NA
Caustic soda *(thousand metric tons)*	167.1	227	219	160	171	92.4	48.8
Synthetic plastics and resins *(thousand metric tons)*	55.3	58.9	105	68.4	84.5	14	21
Synthetic detergents *(thousand metric tons)*	61	70.6	85.1	81.5	62.6	48.2	NA
Tires *(thousands)*	1,681.2	1,666.1	1,327	1,123	870	479	250
Diesel fuel *(thousand metric tons)*	3,581	4,500	4,236	3,899	3,635	3,211	NA
Gasoline *(thousand metric tons)*	2,204	1,989	1,523	1,472	1,174	1,035	1,100
Lubricants *(thousand metric tons)*	1,138	1,118	934	818	763	391	NA
Forestry products							
Sawn timber *(thousand cubic meters)*	244	280	157	126	86.7	23	3
Particle board *(thousand cubic meters)*	NA	46.3	57.3	43	44.6	NA	NA
Construction materials							
Cement *(thousand metric tons)*	1,196	1,253	1,058	990	923	827	600
Construction bricks *(millions)*	90	117	140.6	132	129	81	NA
Window glass *(thousand square meters)*	7,192	5,448	5,413	5,320	5,895	4,708	NA
Slate *(millions pieces)*	101	112	85	66	78	70	

Table A-6 (continued)
Azerbaijan: Production of Selected Industrial Products, Selected Years

	1980	1985	1989	1990	1991	1992	1993
Light industry goods							
Fabrics *(million square meters)*	169	188.1	169.7	151.3	138.2	105	116
Cotton *(million square meters)*	114	135	121	102	95.3	77	NA
Wool *(million square meters)*	19	15.4	14.1	10.7	9.2	7	NA
Silk *(million square meters)*	36	36.4	29.7	33.5	30.1	21	NA
Other *(million square meters)*	NA	1.3	4.9	5.1	3.6	3	NA
Footwear, all types *(million pairs)*	18.2	22.9	17.1	15.3	10.3	5.2	4
Stocking and hosiery goods *(million pairs)*	37.8	42.2	43	37.8	35.1	32	22
Consumer durables							
Radios *(thousands)*	243	485	0	6	7.4	NA	NA
Refrigerators and freezers *(thousands)*	267	302	354	330	313	223	229
Home air conditioners *(thousands)*	401	429	400	309	295	268	NA
Processed foods							
Meat, industrial production *(thousand metric tons)*	58.9	76.8	82	61.6	48.1	28.2	17.1
Bread and bread products *(thousand metric tons)*	565	598	543	586	699	872	NA
Butter *(thousand metric tons)*	4.7	4.8	4.7	3.8	3.1	2.9	2.3
Vegetable oil *(thousand metric tons)*	49.3	54.8	49.5	40.7	36.2	22.5	14.5
Margarine *(thousand metric tons)*	16	16.6	21.3	19.1	18.3	10	NA
Canned foods *(million cans)*	469.9	619.9	728.9	653	628	508	NA
Confectionary goods *(thousand metric tons)*	80	94.9	111.2	106	87.6	38	NA
Dairy products *(thousand metric tons)*	187.7	219.6	224.3	203	175	81	NA

[a]Includes gas condensate.

Table A-7
Azerbaijan: Freight Traffic, Selected Years

Million ton-kilometers

	1985	1987	1988	1989	1990	1992	1993
Total	**61,579**	**64,262**	**65,766**	NA	NA	**21,349**	**12,892**
Rail	39,367	41,362	43,290	NA	NA	1,3775	7,301
Sea	11,377	11,793	10,797	NA	NA	5,509	4,358
Truck	9,518	9,365	9,934	9,425	8,264	1,277	599
Pipeline	1,277	1,702	1,705	NA	NA	759	609
Air	40	40	40	NA	NA	29	25

NA Data are not available.

Table A-8
Azerbaijan: Freight Tonnage, 1985, 1989-93

Million tons

	1985	1989	1990	1991	1992	1993
Total	**209**	**223**	**204**	**199**	**94**	**58**
Railroad	42	39	33	31	23	18
Pipeline	NA	NA	NA	16	12	11
Sea	27	20	18	15	8	7
Truck	140	163	153	137	51	22
Air	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]	. . .[a]

Note: Because of rounding, components may not add to the totals shown.

NA Data are not available.

[a] Zero or negligible.

Table A-9
Azerbaijan: Passenger Transport, Selected Years[a]

Million passenger-kilometers

	1985	1987	1988	1989	1990	1992	1993
Total	**13,616**	**14,534**	**14,243**	**NA**	**NA**	**11,362[b]**	**9,924[b]**
Rail	2,054	2,215	2,148	NA	NA	1,629	1,330
Bus	7,089	7,678	7,246	7,185	6,698	6,441	6,138
Air	4,366	4,533	4,733	4,924	4,869	3,292	2,456
Sea	107	108	116	NA	NA	NA	NA

NA Data are not available.

[a] No data available on taxi or private auto transport.

[b] Excludes sea transport.

Table A-10
Azerbaijan: Passenger Transport, 1985, 1988-93[a]

Million passengers

	1985	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**
Total	**1,128**	**1,099**	**1,060**	**983**	**973**	**807**	**753**
Bus	763	708	697	636	641	557	533
Taxi	60	95	91	89	81	42	NA
Trolley	97	90	73	51	55	44	NA
Rail	19	21	18	15	14	12	9
Tramway	41	39	25	21	18	12	NA
Subway	146	143	153	167	161	137	NA
Air	2	2	2	2	2	2	2
Sea	1	1	1	1	NA	NA	NA

[a] No data available on private auto transport.

Table A-11
Azerbaijan: Republic Trade in Domestic Prices in 1990

Million rubles

	Interrepublic Trade		Extrarepublic Trade		Total Trade	
	Exports	Imports	Exports	Imports	Exports	Imports
Total	**6,104.7**	**4,247**	**325.1**	**1,504.9**	**6,429.8**	**5,752.1**
Industry	5,845.8	3,984.3	319.4	1,373.4	6,165.2	5,357.7
Power	46.4	16.3	0	0	46.4	16.3
Oil and gas	747.3	428	101.6	1.9	848.9	429.9
Coal	0	4.8	0	0	0	4.8
Other fuels	0	0	0	0	0	0
Ferrous metals	71.2	218.5	6.8	49.1	78	267.6
Nonferrous metals	80	100.8	1.2	0.1	81.2	100.9
Chemicals	518	488	5.6	87.5	523.6	575.5
Machinery	936.3	1,119.4	112.4	348.8	1,048.7	1,468.2
Wood and paper	15.1	117.1	0	26.4	15.1	143.5
Construction material	63	93.9	0.2	14.3	63.2	108.2
Light industry	1,365.8	707.9	61.2	403.2	1,427	1,111.1
Food processing	1,748.6	500.9	30.4	431	1,779	931.9
Other industry	254.1	188.7	0	11.1	254.1	199.8
Agriculture	134.1	145.8	2.8	131.1	136.9	276.9
Other production	124.8	117.1	2.9	0.4	127.7	117.5

Table A-12
Azerbaijan: Republic Trade in Foreign Trade Prices in 1990

Million rubles

	Interrepublic Trade		Extrarepublic Trade		Total Trade	
	Exports	Imports	Exports	Imports	Exports	Imports
Total	**4,575.8**	**4,307.6**	**423.3**	**826.1**	**4,999.1**	**5,133.7**
Industry	4,386.8	4,103.6	419.9	733.7	4,806.7	4,837.3
Power	69.6	24.5	0	0	69.6	24.5
Oil and gas	1,683.2	1,334.4	258.1	2.2	1,941.3	1,336.6
Coal	0	4.5	0	0	0	4.5
Other fuels	0	0	0	0	0	0
Ferrous metals	83.7	266.3	9.9	65.3	93.6	331.6
Nonferrous metals	133.6	168.1	2	0.1	135.6	168.2
Chemicals	427.2	430.1	4.4	61.8	431.6	491.9
Machinery	958.2	1,126.2	106.1	300.9	1,064.3	1,427.1
Wood and paper	9.3	83.6	0	16.2	9.3	99.8
Construction material	53.8	93.5	0.1	4	53.9	97.5
Light industry	442.4	208	29.2	103.2	471.6	311.2
Food processing	364.7	246.6	10.1	176.6	374.8	423.2
Other industry	161.1	117.8	0	3.4	161.1	121.2
Agriculture	47.8	71.2	0.6	92.1	48.4	163.3
Other production	141.2	132.8	2.8	0.3	144	133.1