
EL SALVADOR

GENERAL SITUATION AND TRENDS

Socioeconomic, Political, and Demographic Overview

In mid-1995 the Salvadorian economy began to decelerate. In 1992 and 1993 the gross domestic product (GDP) had attained a real growth (adjusted for inflation) of more than 7%, but in 1994–1995 it grew only 6%, and by 1996 the rate had fallen to 3%. This reduction in the growth rate was associated with a reduction in internal demand and a slow-down in exports of goods and services as well as a major shift in the business outlook. The result was a sizable cutback in gross domestic investments by the private sector, which went from 16.6% of GDP in 1995 to 11.9% in 1996.

During 1990–1995 the driving force behind economic growth was the internal demand generated by the steady increase in consumption. This was financed with the influx of foreign currency following the Peace Accords, the growing stream of money sent home by Salvadorians residing in the United States and Canada—about US\$ 1 billion a year—and the expansion of credit in the private sector.

As a result of the stabilization policy, inflation dropped to 7.4%, the lowest it had been since 1975. The policy of free convertible currency remained in place in 1996, and the nominal exchange rate was 8.75 Salvadorian colones per US\$ 1.00. Net international monetary reserves increased to US\$ 1,100 million, the equivalent of 81% of the monetary base or five months' worth of imports. This was possible because of a reduced deficit in the balance of trade and in the current account of the balance of payments. Domestic savings and investments have returned to levels of 16% and 18% of GDP, respectively, similar to the levels of the 1970s.

The deceleration clearly affected the economy of the working population. According to a report of the Central American Monetary Council, the rate of open unemployment in 1996 was 10%, whereas two years earlier it had been as low as 7.7%. Nominal minimum wages did not change in 1996, but

when the figures are adjusted for inflation, they declined by 6.7%.

In the political arena, the most noteworthy developments in recent years have been the advances toward reforming and modernizing the State, the progress in political and electoral participation, and the end of the period for compliance with the Peace Accords.

Currently, the national debate between the Government and the sociopolitical sectors centers around the second phase of the structural reform, or modernization of the State. This has required changes that have entailed greater participation on the part of private enterprise, without which it would have been difficult to implement this reform consistently and continuously. Strategies have been discussed for improving social conditions and the national competitive position; maintaining macroeconomic stability; developing modern institutions; increasing the competitive position of the private sector; reforming health, education, and other public services; and finding new ways to participate in the international economy. One of the principles that guides the modernization process is the idea that the government should not be a producer of goods and services. In this vein, the Government has pressed for privatization of many agencies.

At the same time, the period for implementation of the Peace Accords has come to an end, and most of the commitments—the programs for transfer of land, the incorporation of former combatants into productive life, political reform and reform of the judicial sector, changes in the police and armed forces, and political and electoral reforms—have been fulfilled.

If the indicators from the Multipurpose Household Survey conducted in 1991–1992 are compared with those from 1995, it can be seen that the percent of the population who had not finished a single year of schooling went from 26% in 1991 to 21.5% in 1995, and those with more than six years increased from 23% to 28.5%. Net primary school enrollment increased from 79% in 1989 to 94% in 1996, while the primary school

dropout rate fell from 15% to 6% in the same period, the rate of grade repetition went from 8% in 1990 to 6% in 1996, and illiteracy declined from 42% in 1989 to 23% in 1996.

There is a serious problem of overcrowding in makeshift shacks and rural shanties. The most common types of housing are the single-family dwelling (while communal living arrangements decrease), rural shanties, and makeshift urban shacks.

There are major gaps and marked inequalities in basic sanitation between urban and rural areas. Coverage is very low, and the services provided are usually deficient. The data available (1995) indicate that 53% of the population has access to the public water supply. Coverage of the urban population is 86% (80% with household connections and 6% through access to a public tanks) and of the rural population, 17% (16% with household connections and 1% through access to a public tank). Excreta disposal is available to 69% of the population: 57% of the urban population is connected to a sewerage system and 25% has access to latrines, while in rural areas 56% of the population depends on latrines.

In 1994, expenditures on education represented one-tenth of total public spending, and the trend has been rising since 1990. On the other hand, expenditures on housing were only 0.5% in 1995, whereas in 1985 the figure was almost 6%.

Real social expenditure, at constant prices, was 17% less in 1994 (¢1.2 billion) than it was in 1985 (¢ 1 billion). The same was true of real spending on education. Only in the area of health did real spending grow—from about ¢ 280 million in 1985 to almost ¢ 400 million.

Poverty indicators have significantly improved, from levels of about 60% in 1990 to 47.5% in 1995.

As part of its strategy to combat poverty, the Government has promoted a policy of local development aimed at stimulating the economy for small producers by encouraging them to work together in alliances at the local level so that they can compete with local businesses.

The war, which lasted from the 1970s until 1992, when the Peace Accords were signed, caused an abrupt change in Salvadorian population dynamics. During those years, higher mortality in men, combined with migration to other countries and the separation of couples, all contributed to lower fertility.

In 1997 the population was estimated at 5.91 million inhabitants, of whom 49.0% were males and 51.0% were females. The annual population growth rate was 2.1%.

Of the country's 14 departments, the most heavily populated is San Salvador, where 30.7% of the population resides. The concentration of urban population is steadily increasing. In 1996, 56.7% of the population was living in urban areas and 43.3% in rural areas. In 1995 the urban population growth rate (2.6%) was double the rate in rural areas (1.3%). The Salvadorian population is predominantly young, and for every 100 persons of working age there are 72 who depend on them. In 1996 children under 5 years of age represented 13%

of the population; those aged 5 to 14 years, 24%; those aged 15 to 19, 12%; those 20 to 24, 11%; those 25 to 59, 34%; and seniors aged 60 and over, only 6%.

Emigration began to accelerate in the 1970s and continued to increase until it peaked at around 69,000 a year between 1980 and 1985, after which it tapered off and settled down to some 11,000 emigrants a year between 1990 and 1995. It is estimated that during that period the rural population experienced a net annual rate of emigration—either to other countries or to urban areas in El Salvador—of 13 per 1,000 population.

Total fertility in 1990–1995 was 3.1 children per woman in the urban population, and in rural areas, 4.2. For 1995–2000 an average total fertility of 3.2 children per woman is projected.

The crude birth rate in 1990 was 30.1 per 1,000 population, and in 1996 it was 28.3 per 1,000.

Mortality

During 1990–1995 it is estimated that there were approximately 36,000 deaths per year, for a crude annual mortality rate of 7.0 per 1,000 population.

In 1994 a total of 30,541 deaths were registered, with underregistration estimated at around 21%. Diseases of the circulatory system were the leading cause of death, representing 33% of the total. These were followed by external causes, 19% (83% of them in males, with accidents and homicides heading the list); neoplasms, 14.2%; communicable diseases, 10% (with intestinal infectious diseases predominating); and conditions originating in the perinatal period, 4.3%. Except for neoplasms, mortality from all these causes was higher among males.

Of all the deaths occurring in 1994, those in infants under 1 year of age represented 9%; in children aged 1 to 4 years, 2%; 5 to 9 years, 1%; 10 to 19 years, 4.6%; adults 20 to 59 years, 36.2%; and those 60 and over, 47.2%.

Estimated life expectancy during the period 1985–1990 was 63.4 years for both sexes, 59 years for men and 68 years for women; in 1990–1995 it increased to 67.1 years, or 63 years for men and 71 for women.

SPECIFIC HEALTH PROBLEMS

Analysis by Population Group

Health of Children

Infant mortality ranges from 32 to 55 per 1,000 live births. In a study of hospitals managed by the Ministry of Public Health and Social Welfare, the mortality rate in 1994 was 22.8 per 1,000 live births. It is generally accepted that the most real-

istic estimates are those based on the National Family Health Survey (FESAL-93), which set infant mortality at 41 per 1,000.

In 1994 there were 2,653 deaths in children under 1 year of age, approximately 12% fewer than in 1992.

FESAL-93 found higher infant mortality in rural areas, attributable to the high rates of postneonatal mortality (22 per 1,000 versus 13 per 1,000 in urban areas).

In 1994 the cause of 49% of deaths in children under 1 year of age was conditions originating in the perinatal period—29% of them due to retarded fetal growth, malnutrition, and immaturity; 19% to hypoxia, asphyxia, and other respiratory conditions; and 1% to diseases of the mother that affect the fetus and the newborn. In 29% of the deaths in children under 1 year old the cause was communicable diseases; intestinal infectious diseases predominated (57%), followed by pneumonias (29%).

In the group aged 1 to 4 years there were 600 deaths in 1994, and the leading cause was communicable diseases, representing 47% of the total. Of these cases, 60% had intestinal infections. External causes were responsible for 16.3% of the mortality in this group.

With regard to outpatient office visits in 1996, according to morbidity reported by the Ministry of Public Health, acute respiratory infections were the leading cause in infants under 1 year of age, representing 22% of all visits. Second came intestinal parasitic diseases, at 6% of the visits; third were ill-defined intestinal infections, at 4.0%.

In the group aged 1 to 4 years the leading cause of morbidity in office visits during 1996 was acute respiratory infections, representing 41% of all first consultations. Intestinal parasitic diseases accounted for 10%, and ill-defined intestinal infections, 7%.

In this same 1-to-4 age group, the leading reasons for hospitalization in the units under the Ministry during 1996 were pneumonia and bronchopneumonia, which were cited in 19% of all discharges; ill-defined intestinal infections, 13%; asthma and unspecified bronchospasm, 10%; and acute respiratory infections, 4%.

In 1994 there were 302 deaths in children aged 5 to 9 years, 41% of them due to external causes and 20% due to communicable diseases. Among external causes, accidents stood in first place and accounted for 49%, with a much higher frequency among males. Homicides, also mostly in males, represented 7% of deaths from external causes. Among the diseases responsible for most mortality in this age group were intestinal infections, pneumonias, nutritional disorders, and anemia. This distribution pattern of mortality has not changed in recent years.

In the population aged 5 to 14 years, acute respiratory infections were the reason for 30% of all first consultations, followed by intestinal parasitic diseases at 15% and urinary infections at 3%.

Health of Adolescents

In 1994 approximately half of all mortality (46%) in adolescents 10 to 14 years of age was due to external causes. Accidental injuries, homicides, and suicides have been the leading causes of death, with proportions of 55%, 22%, and 20%, respectively, and, except for suicide, occurring predominantly among males.

Diseases of the circulatory system were responsible for 18% of the deaths in the 10-to-14 age group.

In the group aged 15 to 19, external causes ranked first, at 67% of the total; within this category, homicides and unintentional injuries headed the list. In terms of distribution according to sex, there was a marked predominance of homicides in males, whereas suicide predominated in females.

The second-leading cause of mortality in adolescents aged 15 to 19 was cardiovascular diseases; in third place was "all other diseases," among which complications of pregnancy and delivery was the main cause of death.

Of all sexually active women aged 15 to 24, only 4.4% had used contraceptives in their first encounter. Adolescent pregnancy poses problems not only because of the resulting illegitimate births, but also because of the age of the couple; about 30% of these adolescent women are involved with men at least 6 years their senior.

Of the almost 1,300 crimes that take place every month, 69% are committed by adolescents and young people under 25 years old, and many of them are repeat offenders.

According to the 1992 census, 52% of the adolescent population is enrolled in primary school, 7% in high school, and fewer than 1% in institutions of higher learning; 41% either have no schooling or started their schooling late.

The 1988 Assessment of the Food and Nutrition Situation revealed that only 8.5% of families had an adequate intake of iron, and adolescents were among those most affected by iron deficiency. The 1990 National Survey of Endemic Goiter in Schoolchildren revealed iodine-deficiency goiter in 25% of the schoolchildren between 7 and 14 years of age. The prevalence was considerably higher in rural areas (31%) and among girls (28%) as opposed to boys (21%).

Drug use among adolescent students is on the increase. In a study conducted by a national foundation in 1992, alcohol and tobacco were the principal drugs consumed by this age group in the capital, followed at some distance by stimulants and tranquilizers, marijuana, and cocaine. The latter were much more common in upper-class adolescents, whereas in the more disadvantaged groups inhalants are more common.

Health of Adults

In the population aged 20 to 59, a total of 11,056 deaths were registered in 1994. External causes were responsible for

35% of the deaths, and within this category homicides accounted for 50% of the deaths, suicides for 27%, and unintentional injuries for 21%. Whereas suicides predominated in women, homicides and unintentional injuries were more frequent in men.

Diseases of the circulatory system and the category "all other diseases" tied for second place, each with 22%. Under "all other diseases," the leading cause was mental disorders, with alcoholism heading the list.

Malignant neoplasms were responsible for 14.7% of all deaths. The most frequent sites are the digestive organs and peritoneum at 24% of the total, and genitourinary organs at 19%, with a higher rate among females.

In the population 15 to 44 years of age, acute respiratory infections took first place in 1996 as a reason for office visits, representing 11% of all first consultations. Urinary tract infection came second, at 6%.

The leading reasons for hospitalization in 1996 among the population aged 15 to 44 who received care in units run by the Ministry of Public Health were complications of delivery and the puerperium, which were cited in 18.3% of all hospital discharges.

El Salvador's estimated maternal mortality rate in 1993 was 119 per 100,000 live births.

In establishments run by the Ministry of Public Health and Social Welfare, prenatal monitoring of pregnant women increased from 44.6% in 1992 to 55.5% in 1996. In the Salvadorian Social Security Institute (ISSS) coverage of the eligible population (14% of the total population) increased to 98% in 1995, and the average number of office visits per pregnant woman was 5.1.

The percentage of pregnant women enrolled in the Ministry's prenatal monitoring program before the 12th week of pregnancy was 37.3% in 1995 and 38.3% in 1996.

It is estimated that in the private-care population (10% of the total population) prenatal care coverage is over 95%.

In the population covered by the Ministry, the proportion of hospital deliveries increased from 37.1% in 1992 to 42.1% in 1996, and with the ISSS it rose from 10.9% in 1992 to 14.0% in 1996. In that same year it is estimated that the private sector attended 10.0% of all deliveries. If these three sectors are added together, hospital deliveries that year were on the order of 66.3% of the total.

The incidence of cesarean section deliveries under the Ministry increased from 20.0% of all deliveries in 1992 to 22.9% in 1996.

Deliveries at home attended by trained traditional midwives increased from 20% in 1992 to 23% in 1996.

In 1992, in the services under the Ministry, 69% of deliveries were attended by medical personnel, 16% by nurses, and 16% by nursing auxiliaries; in 1995 the proportions were 93%, 3%, and 4%, respectively. In the ISSS and the private sec-

tor, 100% of the deliveries were attended by medical personnel that year. Deliveries attended by trained personnel increased from 68% in 1992 to 79% in 1996.

Health of the Elderly

In 1992 El Salvador had some 379,000 people aged 60 and over, 53.7% of them women and 46.3% men. Of this population, 55% lived in urban areas and 45% in rural areas; 53.4% were illiterate, 23.5% were in the economically active population, 20.8% were retired, 29.9% had no income, and 25.8% did not receive money from family members who were living abroad.

In 1994 there were 14,443 deaths in this age group, and nearly half of them were due to cardiovascular diseases. The second leading cause of mortality was neoplasms, at 20%. In third place, the category "all other diseases" accounted for 18% of the deaths; of these, 10% were due to diabetes, and 69% of the deaths from this disease were in women.

The six reasons most frequently cited in 1996 for the hospitalization of patients in this age group in units under the Ministry were, in descending order, chronic obstructive pulmonary disease, chronic renal insufficiency, pneumonia and bronchopneumonia, diabetes mellitus, abdominal hernias, cerebrovascular diseases, and cataracts.

Analysis by Type of Disease or Health Impairment

Communicable Diseases

Vector-Borne Diseases. In 1995 there were 9,529 cases of dengue fever and 129 cases of dengue hemorrhagic fever—it was considered an epidemic year. Serotypes 3 and 4 were isolated, and July and August were the months when the incidence was highest. In 1996 a total of 795 cases of dengue fever and 1 case of dengue hemorrhagic fever were reported. Incidence was highest in the eastern area of the country. During 1991–1995 all four dengue serotypes were in circulation, and in 1995 serotypes 3 and 4 were in circulation simultaneously.

The Salvadorian population living in malarious areas was nearly 5.5 million in 1996. A total of 2,798 cases were registered in 1994, 3,358 in 1995, and 5,884 in 1996, and the annual parasite index increased from 0.52 in 1994 to 1.0 in 1996. All cases were due to *Plasmodium vivax*.

Of 55,069 blood samples submitted for quality control during 1996, 2.2% were seropositive for Chagas' disease. The most recent entomological survey, conducted in 1997, showed only the presence of *Triatoma dimidiata*, with a household infestation rate ranging from 2% to 47%. In 1995 a study carried out in the departments of Santa Ana, Ahuachapán, and

Sonsonate indicated the presence of *T. dimidiata* in 86% of the dwellings examined, and 63% of the vectors were infested with *Trypanosoma cruzi*. In 1996 a study of 200 pregnant women in the department of Chalatenango showed a seroprevalence of 5%.

Leishmaniasis due to *Leishmania chagasi* is a major public health problem in the department of San Vicente. In 1996 a total of 129 cases were detected—94% in rural areas, 65% in females, and 47% in the group aged 5 to 14 years.

Vaccine-Preventable Diseases. Vaccination coverage with both BCG and three doses of DTP in infants under 1 year old was 100% in 1995 and again in 1996. In 1995, coverage with three doses of oral polio vaccine was 94%, and in 1996 it was 100%. In September 1994 El Salvador was declared free of wild poliovirus. Measles vaccination coverage was 93% in 1995 and 97% in 1996. Two doses of tetanus toxoid were given to 82% of women of reproductive age.

There were 12 cases of whooping cough in 1994, 4 in 1995, and 3 in 1996. No deaths from this disease were registered during the three-year period, nor were there any cases of diphtheria, and there was only one case of measles, which was reported in 1996. The incidence of neonatal tetanus has decreased considerably: in 1994 there were nine cases and four deaths; in 1995, three cases and no deaths; and in 1996, five cases and one death.

As of 1997, national vaccination campaigns were being carried out at a rate of three per year.

Cholera and Other Intestinal Infectious Diseases. In 1991, the year when cholera was first introduced in the country, a total of 945 cases were reported and the case-fatality rate was 3.5%. During the next four years the number of reported cases was 8,106, 5,525, 15,280, and 6,447, respectively, with case fatality rates of 0.6%, 0.2%, 0.3%, and 0.1%. In 1996 only 182 cases were registered, and the case fatality rate was 1.1%.

In 1996 parasitic intestinal diseases were the second leading cause of morbidity, with 233,406 registered cases and an incidence rate of 4,745 per 100,000 population.

Reported cases of diarrheal disease in 1996 came to 146,188, with an incidence of 2,972 per 100,000. That year diarrheal diseases were the third leading cause of morbidity.

Acute Respiratory Infections. In 1994, pneumonia was the cause of 31% of all deaths from communicable diseases, and the populations most affected were infants under 1 year of age and the elderly. In 1995 pneumonia was the second of the 10 leading causes of hospital mortality, with 371 deaths per 14,684 hospitalizations, or a case-fatality ratio of 2.5%.

In 1995, acute respiratory infections were the leading cause of morbidity, accounting for 721,538 office visits; pneumonia

ranked in fifth place, with 99,472 cases. Again in 1996 acute respiratory infections and pneumonia had the same respective rankings as causes of morbidity, accounting for 795,758 and 98,428 office visits, respectively.

Rabies. A total of 15 cases of human rabies were reported in 1993, 13 in 1994, 7 in 1995, and 12 in 1996.

AIDS and Other STDs. A cumulative total of 1,789 AIDS cases were reported between 1984 and December 1996. From 1991 onward there was a steady increase in the annual incidence, which went from 2.5 per 100,000 population in 1992 to 7.6 per 100,000 in 1996. In 1996 there were 417 reported cases of AIDS and 264 persons were diagnosed as HIV-positive.

In 1996 there were three cases of AIDS in men for every two cases in women.

The predominant route of HIV transmission is sexual contact, which accounted for 88.5% of the cases during the period from 1991 to 1996 (75.8% of the cases due to heterosexual exposure and 7.2% and 5.5% due to homosexual and bisexual exposure, respectively). Other routes include vertical transmission from mother to child, 4.1% of cases; intravenous drug use, 1.2%; and blood transfusions, 0.6%.

In the period 1991–1996 there were 80 registered cases of AIDS in children under 12 years old; 50% of those were in infants less than 1 year old. From 1984 until 1996 a total of 1,514 HIV-positive cases were diagnosed in blood banks and public and private laboratories. Of this total, 89% were from urban areas.

The annual incidence of acquired syphilis remained stable between 1992 and 1996 because prevention has not been assigned high priority. In 1992 the incidence of syphilis was 33.6 per 100,000 population, and in 1995 it was 25.6 per 100,000.

The incidence of chancroid in 1992 was 48.6 per 100,000 population, and in 1995 it was 14.7 per 100,000. Lymphogranuloma venereum had incidence rates of 7.4 per 100,000 population in 1993 and 4.2 per 100,000 in 1995. Even though the incidence and prevalence of gonorrhea remains high, the reports reflect a slight decline between 1993 (81.8 per 100,000) and 1995 (79.5 per 100,000). The incidence of genital herpes has remained stable in recent years: in 1993 there were 21 reported cases per 100,000 population and in 1995, 23 per 100,000. The incidence of urogenital trichomoniasis was estimated at 260 per 100,000 population in 1993, 362 per 100,000 in 1994, and 296 per 100,000 in 1995.

Chronic Communicable Diseases. In 1996 the incidence of positive sputum for tuberculosis was 67.3 per 100,000 population. The rate of patients treated was 64.3 per 100,000 population; patients cured, 51.9 per 100,000; patients abandoning treatment, 8.5 per 100,000; and treatment failures, 0.4 per

100,000. The disease exhibited a declining trend in 1995 and 1996, and it was especially marked in the latter year.

Leprosy is in the elimination phase. There are a total of 20 chronic cases and 9 new cases on the register. All the patients are adults. Five of the old cases and two of the new ones have been diagnosed as multibacillary.

Noncommunicable Diseases and Other Health-Related Problems

Nutritional Diseases and Diseases of Metabolism. FESAL-93 measured the weight and height of children under 5 years old throughout the country. The proportion with low height-for-age was 22.8%, or a decline relative to the 31.7% estimated in 1988, and the proportion with low weight-for-age fell from 16.1% to 11.2%. Chronic malnutrition in rural areas, at 28.1%, was greater than in the urban population, for whom it was 13.6%. The percentage of retarded growth in children under 5 years old was five times greater in children of mothers without any formal education (33.6%) than in those whose mothers had 10 or more years of schooling (7.1%). Chronic malnutrition was much more prevalent in the socioeconomically disadvantaged population (31.4%) than in those at the middle level (18.7%), and in this latter population it was greater than at the upper level (9.4%). There were no notable differences between girls and boys.

With regard to acute malnutrition, indicated by low weight-for-height, FESAL-93 revealed that for 1.3% of the children under 5 years old the weight-for-height was lower than the median height by 2 standard deviations.

In 1993 the overall prevalence of malnutrition—i.e., low weight-for-age—was 11.2% at the national level, but the proportion in rural areas (14.0%) was twice as high as in the urban population (7.2%). The percentage of low weight-for-age in children of mothers with little education was five times higher than for mothers with 10 or more years of schooling. The overall prevalence of global malnutrition was 4.8% in children under 1 year old but increased to 14.4% in those aged 12 to 35 months and then declined to 10.6% in children aged 35 to 59 months.

A study conducted in February and March 1994 in 78 high-risk *municipios* to establish a baseline for the National Nutrition Program showed higher prevalences of malnutrition than those reported by FESAL-93. The rate observed for overall malnutrition was 14.9%; for the chronic form, 25.5%; and for the acute form, 3.8%. According to a food intake analysis, in these 78 *municipios* 58% of the pregnant women were not meeting their caloric needs and 40.5% were not getting enough protein.

Iodine, vitamin A, and iron deficiencies are important public health problems for the country. The 1990 National Survey

of Endemic Goiter in Schoolchildren reported that endemic goiter was found in 24.8% of schoolchildren aged 7 to 14 years (28.4% in girls and 20.8% in boys) and is a serious problem. The prevalence in rural schoolchildren (30.6%) is greater than in their urban counterparts (20.7%). In 1996, 90% of the salt produced in the country contained a biologically significant amount of iodine (>20 mg/kg).

The 1988 Assessment of the Food and Nutrition Situation found that vitamin A intake was insufficient for a very large proportion of the population. More than 70% of children in rural areas consumed less than half the recommended dose. In a 1994 study to establish a baseline for the National Nutrition Program, it was estimated that the intake of vitamin A was insufficient to meet the physiological needs of 95% of pregnant women, 96% of nursing mothers, and 99% of children aged 6 to 36 months.

Also in the 1988 assessment of the food and nutrition situation, only 8.5% of the families had an adequate intake of iron. The investigation showed that in the metropolitan area the greatest source of iron intake for the population was products of animal origin, whereas in rural areas the iron came mainly from beans, and the average intake of this nutrient was much less. In 23% of the children under 5 years of age their levels of hemoglobin were indicative of anemia (<11 g/dl). The group most affected was adolescents aged 12 to 17, 51% of whom had anemia. According to the 1994 survey for the National Nutrition Program, in the 78 *municipios* studied the diet of 93% of pregnant women, 68% of nursing mothers, and 85% of children aged 6 to 36 months lacked sufficient iron to meet their needs.

According to FESAL-93, fewer than 25% of the 3-month-old babies had been breast-fed exclusively; most of them were receiving supplements to their mother's milk. The most common supplement for babies under 3 months of age was water; consumption of gruel or solid food was minimal. The average duration of exclusive breast-feeding was estimated at less than 1 month, that of complete nursing at 2.8 months, and that of any type of nursing at 15.5 months.

The proportion of breast-fed babies declined from 93.1% in 1988 to 91.2% in 1993, attributable mainly to changes in the population of the metropolitan area. During the same period there were minimal increases in the average duration of breast-feeding. The proportion of breast-fed babies was lower in the metropolitan area (86.4%) than in rural areas (94.0%). The incidence and duration of breast-feeding were lower in families at higher educational and socioeconomic levels. Women working outside the home did not have as high a rate of breast-feeding as housewives. For babies born in hospitals the percentage of breast-feeding was lower than it was for those delivered by midwives. The lowest figures for breast-feeding were found with babies born in private or Social Security hospitals.

Cardiovascular Diseases and Neoplasms. In 1994 cardiovascular diseases were the number-one cause of death, accounting for 33% of the total, and they were predominant in men, who accounted for 51.8% of all deaths from this cause.

Neoplasms were the fourth cause of death in 1994, representing 14.2% of all deaths, 60.4% of them in females and 39.6% in males. The most frequent sites of malignant neoplasms as a cause of death were the digestive organs, at 30.2%. It is estimated that in 1996 in the country as a whole there were a total of 5,436 first consultations because of malignant neoplasms. The leading site was the uterine cervix, at 43% of the total, followed by the stomach, at 14%.

External Causes of Morbidity and Mortality and Behavioral Problems. Unintentional injuries, or "accidents," and violent deaths together represented the third leading cause of death in 1994 (19% of all deaths), with a predominance in males, at 84% of all deaths. Almost 90% of the deaths from external causes were in the age groups ranging from 15 through 59 years of age.

In 1995 a total of 4,210 sexual crimes and 9,912 cases of domestic violence were registered. The Institute of Forensic Medicine reported 667 cases of domestic violence, in which 84% of the victims were women; they were almost always assaulted by a companion, husband, or father.

In 1994 the Ministry of Public Health reported 1,961 cases of pesticide poisoning; in 1995, 1,439 cases; and in 1996, 1,469 cases. The poison investigation form was introduced in 1996, and 506 cases of poisoning (59% in males), 40 of them (8%) resulting in death, were investigated. In 50% of the cases, attempted suicide was the reason for the poisoning; in 19% the poisoning was the result of occupational exposure; and in 1% of the cases, homicide. Organophosphates were the cause of 27% of the reported poisonings; fumigants (phosphoamines), 23%; herbicides (bipyridyls), 16%; and carbamates, 14%.

It is considered that the most frequent mental health problems are depression and anxiety syndromes, and alcoholism.

Disabilities. In 1992 there were 81,721 disabled persons, 53.3% of them males. Slightly more than half of them (50.9%) resided in urban areas. The impairments reported were blindness (22.2%), deafness (17.6%), mutism (4.3%), mental retardation (16.2%), loss of an upper extremity (15.5%), loss of a lower extremity (13.9%), or more than one impairment (10.3%).

In 1993, a census of persons disabled as a result of armed conflict, promoted by the United Nations Development Program and the European Union, counted a total of 12,114 who were physically disabled from the armed conflict, of whom

83% were men (11% were women and sex was not recorded for the remainder).

Natural Disasters and Industrial Accidents. El Salvador's geographical location and its geology give rise to frequent geological and meteorological phenomena that often cause heavy loss of life and property. Flooding is common in the lower part of the Lempa and Grande de San Miguel basins, especially from July to September.

There is a preference for groundwater because approximately 90% of the surface water is highly contaminated by organic waste, agrochemical products, industrial runoff, and extensive erosion caused by unchecked deforestation. Because of the seasonal variation in rainfall, 97% of the annual precipitation takes place during the rainy season from May to October, when 84% of all the country's water resources are produced. As a result, water is scarce during the dry season.

In 1997 the SILCA industry had a chemical spill when liquid gas was being transferred from a container truck to individual drums. Because proper safety precautions had not been followed, some 500 people were poisoned; 20 of the cases were serious.

In the metropolitan area of San Salvador, which has 13 *municipios* and a population of 1.5 million, trash collection coverage is very low, reaching only about 60% of the households. Some 600 tons of trash pile up uncollected every day, which has led to the creation of illegal dumps in vacant lots, public thoroughfares, and ravines. In the rest of the country's *municipios* the situation is even worse.

Measurements taken in the metropolitan area of San Salvador point to a clearly rising trend in atmospheric concentration of suspended particulate matter from the burning of fuel by vehicles and factories, agricultural slash-and-burn practices, and trash incineration.

The use of leaded gasoline was prohibited starting in June 1996, and emissions of CO, CO₂, and hydrocarbons began to be regulated in diesel engines as of January 1998.

A major cause of indoor air pollution is the use of firewood as fuel; because of the size and layout of rural dwellings, families cannot avoid inhaling the smoke.

It is believed that accidents in the workplace are greatly underreported, because ISSS counts only those cases for which official reports are filed by employers. In 1992 a total of 14,056 work-related accidents were reported, and in 1996, 18,225. From 1992 to 1996, most accidents occurred in the manufacturing and construction industries and in areas related to commerce.

Between 1992 and 1995 a total of 540 deaths from work-related accidents were reported. The most frequent occupational illnesses were lung diseases, contact dermatitis (from touching cement), and lead poisoning.

RESPONSE OF THE HEALTH SYSTEM

National Health Plans and Policies

The Comprehensive Development Plan for the five-year period 1994–1999 calls for thorough reorganization and modernization of the public sector in the context of the Government's Public Modernization Program. In the health sector, the general policy set by Ministry authorities is "to improve the level of health of the Salvadorian population through modernization of the sector and the development of interinstitutional programs that focus on comprehensive health care for individuals and the reduction of risks and damage to the environment." In this context, the following principal strategic components have been identified.

Reorganization and restructuring of health sector institutions based on transforming the bureaucratic organization into an organization that generates innovation and added value.

Decentralization of health program and administrative systems by transferring the functions of planning, administration, procurement, and resource allocation for health services delivery from the central level to other public or private entities, while endeavoring to ensure that the organizational structures are prepared for their new responsibilities.

New approaches to health services delivery to improve their currently limited population coverage. The plan is to provide services by using new approaches that will guarantee free access by the entire population to a basic package of prevention-oriented health services. The Ministry of Public Health and Social Welfare will also guarantee access to a package of essential clinical services, including second-level care such as delivery care, general surgery, outpatient treatment, and hospitalization in the four basic specialties; emergency treatment for trauma and poisoning; and treatment of tuberculosis and acute infections referred from the primary level of care. The indigent population will be subsidized by the State and the rest of the population will have access to these services based on a formula that combines direct installment payments and a compulsory minimum health insurance program.

Revision of the Legal Framework. The aim of revising and updating the legal framework in the health sector is to ensure that El Salvador has the legal instruments that will enable it to strengthen the State and the institutions that comprise it in terms of their normative and regulatory function as it applies to the sectoral level (public and private entities).

Social Participation. The decisive role of civil society in the management of its own affairs is recognized. This includes giving it the protagonist role that it should have in the

administration of social welfare programs. Social participation, in its multiple manifestations, should be encouraged and facilitated as one of the most important strategies for the production of health. A pilot plan is currently under way to delegate technical and administrative responsibility to primary-level health establishments by assigning these establishments to nongovernmental organizations. For example, in the case of the health unit in the *municipio* of San Julián, Sonsonate Department, the provision of services is the responsibility of the Salvadorian Health Foundation.

Organization of the Health Sector

Institutional Organization

The public subsector is composed of social security, the services of the Ministry of Public Health and Social Welfare, and other health sector services. The Ministry has a national network of 427 services, broken down as follows: 16 hospitals, 14 health centers, 313 health units, 32 health posts, 11 community posts, 8 dispensaries, and 33 rural nutrition centers. As far as hospital beds are concerned, the Ministry has 2,964 and ISSS has 1,583.

Eighty percent of the total national population is assigned to the Ministry, although actual coverage is lower than that.

The following entities also belong to the public subsector: the National Telecommunications Association (ANTEL), the Electric Lighting Company (CEL), Teachers' Welfare, and the Military Health Service. These institutions, which cover workers (or their respective members) and their families, together provide health services to 2.3% of the population. Both the public health services of CEL and of Teachers' Welfare function as a mixed group with public financing and services provided by private entities.

Social security, represented by ISSS, provides coverage to workers in private enterprises and government employees, along with their respective beneficiaries, and takes care of 17% of the population. ISSS has 10 hospitals, 35 medical units, and 24 community clinics.

The private system has second- and third-level hospitals and clinics, which are concentrated in the country's three main departments.

Nongovernmental organizations in the health sector usually provide basic health services. Several of them use health counselors for extramural activities.

ISSS offers mainly curative care, which is provided by university-educated professionals (physicians, dentists, etc.) based on the needs of its subscribers. The unit costs are higher in ISSS than in the Ministry—as much as four times higher in some cases.

ISSS medical services are provided free to its subscribers and there is no restriction on use of the services, nor are there any mechanisms for preventing abuse. Since 1996 there has been an effort to establish community clinics, which are intended to fulfill a function similar to that of the Ministry's first level of care, with an emphasis on prevention.

Recently, steps have been taken to form committees of patients with chronic noncommunicable diseases that are of epidemiological interest—for example, diabetes and arterial hypertension. ISSS also has established specific programs relating to diseases of institutional interest, such as its diabetes and tuberculosis programs.

According to data from the Ministry of Public Health and Social Welfare, between 1994–1995 and 1995–1996 the total number of medical consultations in the country went from 2.4 to 3.2 million, and dental consultations went from 265,000 to 369,000. There were 275,700 hospital discharges in 1994–1995 and 280,400 in 1995–1996. In the same years, surgical interventions numbered 123,700 and 113,800, respectively, and there were 65,000 and 69,000 attended deliveries.

Organization of Health Regulatory Activities

Authorization to practice a given health profession is granted by an oversight board composed of professionals from that discipline. There are boards for medicine, dentistry, chemistry/pharmacy, psychology, veterinary medicine, clinical laboratory science, and nursing.

The Superior Public Health Council is responsible for regulating the use of drugs. The mechanisms for regulating and controlling the importation of drugs are based on the Health Code and the Pharmaceutical Specialties Regulations.

Private pharmacies and health establishments purchase drugs directly. Drug quality control is handled at the national level by the Ministry of Public Health. A recent change in legislation on the use of drugs specifies that tranquilizers and other psychotropic agents may be sold only upon presentation of a prescription signed by a physician specifically authorized to prescribe those drugs.

The Ministry coordinates the surveillance of processed foods with support from the Consumer Protection Bureau within the Ministry of Economy and from the universities, where additives and chemical and biological contaminants are studied as part of thesis research.

Responsibility for regulating and controlling food quality is being assumed by the food production sector itself, using its own laboratories and with the support of other entities such as the Salvadorian Foundation for Economic and Social Development (FUSADES) and the universities. The Ministry oversees compliance with technical standards.

The Epidemiological Surveillance System has been established and mechanized in the 18 departmental health districts. Reports from penal institutions, nongovernmental organizations, the ISSS, and private hospitals have been incorporated into the network. Also, statisticians from the districts and departments have been trained in the use of computer programs for epidemiological surveillance.

Health Services and Resources

Organization of Services for Care of the Population

The Ministry of Public Health and Social Welfare has implemented comprehensive health care programs in rural areas. One of the priorities of the Healthy Schools Program is basic sanitation, including installation of sanitary structures such as latrines, manual pumps, and drinking water treatment systems. The Community Health Program has given water supply and sanitation coverage to communities whose schools benefited from the Healthy Schools Program.

In 1996, the Ministry and the Government of Switzerland signed a cooperation agreement to carry out a project to monitor and study water quality, and in 1997 the Ministry entered into a technical cooperation agreement with the Executive Secretariat for the Environment under which the Ministry's Department of Environmental Sanitation assumes responsibility for the Environmental Unit and participates in the Environmental Impact Assessment System and the National Environmental Information System.

In addition, the Critical Areas Program is being carried out under an agreement between the Government of El Salvador and the Inter-American Development Bank. This program focuses on solid waste, air pollution, and water pollution. Recently, general provisions have been formulated with regard to automobiles that have problems with catalytic converters, and drivers are fined if their vehicles are found to have any problems that increase pollution.

The program dealing with occupational and environmental aspects of pesticide exposure in Central America got under way in 1997, in coordination with PAHO and with support from the Danish Cooperation for International Development (DANIDA). This program focuses on strengthening the health sector in order to better respond to problems caused by pesticides and includes occupational, epidemiological, toxicological, educational, environmental, and research aspects.

Organization and Operation of Personal Health Care Services

Various activities have been undertaken to improve the population's nutritional status. There is an intersectoral food

security plan coordinated by the Ministry of Agriculture that sets policies on prices, production, and credit. The Nutritional Surveillance and Growth Monitoring Program comes under the Ministry of Public Health and is executed at the community level by health promoters, who assess children's nutritional status and take the necessary steps to help improve nutritional status or recover its optimal level. There also are programs in place to train volunteer nutrition counselors, fortify food with essential micronutrients, and distribute food supplements to vulnerable families.

In 1996 the Ministry of Public Health launched the National Nutrition Education Program with a view to improving families' food and nutrition practices. The program has three components: nutrition for pregnant women, breast-feeding and diet for nursing mothers, and nutrition for infants. In 1995, the Healthy Schools Program was established, which has helped to identify and treat cases of malnutrition.

Various actions have been taken to prevent iodine deficiency disorders. Supplementation with iodized oil and Lugol's solution is provided for 8% of the school population covered by the Healthy Schools Program (some 240,000 schoolchildren). Preventive care began to be given in 1997 to the population in areas where there was a high prevalence of iodine deficiency. In 1993, the law on salt iodization was reviewed, updated, and ratified; a cooperation agreement was signed by the Government, the salt industry, and external cooperation agencies (World Bank, PAHO/INCAP, and UNICEF), and iodized salt was gradually put on the market.

With regard to iron deficiency disorders, steps have been taken to intervene with ferrous sulfate supplementation for pregnant women, children under 5 years of age, and schoolchildren. Since 1996 all wheat flour produced in the country has been fortified with iron, folic acid, and B-complex vitamins.

To combat vitamin A deficiency in the Salvadorian population, the Ministry distributes vitamin A supplements to children 1 to 6 years old and to nursing mothers. Sugar also is fortified with vitamin A. In 1994, a law was passed on the fortification of sugar with vitamin A, and in 1995 the corresponding regulations and technical standards were developed. According to the Ministry, in 1995–1996, 85% of a series of sugar samples had retinol levels higher than 6 mg/kg and 61% exceeded 10 mg/kg. This means that the program's quality and coverage have improved considerably, although the optimum goal has not yet been reached. In a household survey conducted in 1995, retinol was found in 80% of the sugar samples taken. The target is for at least 90% of the samples to have retinol levels of 5 mg/kg.

Human Resources

For every 10,000 inhabitants, El Salvador has 9.1 physicians, 5.4 midwives, 3.8 nurses, and 2.1 dentists.

The public system has 3,473 physicians, 334 dentists, 5,274 nurses, 2,367 administrative staff, 3,404 service and maintenance staff, 1,499 health promoters, and 536 environmental health inspectors. ISSS has 1,621 physicians, 176 dentists, 1,973 nurses, 244 laboratory technicians, 87 X-ray technicians, and 40 health promoters.

Sixty percent of all physicians, nurses, and dentists are concentrated in the capital, and 70% of all specialized physicians are working in establishments at the second level of care such as hospitals and health centers in the public system, the ISSS, and the private sector. The rest of them work in establishments at the first level of care under hourly contracts.

To reduce the human resources problem in the national health system, training has been given to workers in technical, financial, administrative, strategic planning, and information areas, and efforts have been made to integrate training entities with the Ministry's activities so that occupational profiles can be updated as needed in order to provide better primary health care. The Interinstitutional Human Resources Development Group is composed of representatives from the universities and a delegate from the Ministry.

The impact of the budgetary adjustment in terms of the health labor market for the Ministry's workers has been quite acceptable compared with other institutions.

The Ministry has made some recent changes in the management of human resources. There has been greater participation in the areas of human resources, and activities have been decentralized in each hospital and department. Decentralization has enabled human resource program heads to participate in decision-making, in development of plans of work, and in administration of resources under their jurisdiction.

Expenditures and Sectoral Financing

The 1997 operating budget for the Ministry of Public Health and Social Welfare was US\$ 151.30 million, distributed as follows: expenditure on preventive health services (including drugs and medical and surgical supplies), 33%; expenditure on outpatient and hospital services (including drugs and medical and surgical supplies), 59%; secretariat, 6%; and investments, 2%.

The ISSS operating budget for 1997 was US\$ 49.74 million, of which 21% corresponded to pharmaceutical expenditures; spending on medical, surgical, and laboratory supplies, 2%; and payroll and miscellaneous (77%).

External Technical and Financial Cooperation

In 1996 the Ministry's Department of External Cooperation received international or foreign aid amounting to over

US\$ 44.5 million; 86% of this aid was received through the execution of 57 projects. Funds were contributed by Germany, Canada, Denmark, the Netherlands, Luxembourg, Norway, Sweden, Switzerland, INCAP, the OAS, United Nations World Food Program (WFA), UNICEF, EU, the World Bank, Social Investment Funds, USAID funds to promote social development projects at the national level, the Spanish International

Cooperation Agency, GTZ, and the United Nations Population Fund. The largest contribution was from the Government of Sweden, in the amount of US\$ 1,083,000, followed by the Netherlands, which provided US\$ 347,000. The largest contributions from international agencies and banks were from the Social Investment Funds, in the amount of US\$ 20,226,000, and the World Bank, which came to US\$ 11 million.