
HONDURAS

GENERAL SITUATION AND TRENDS

Socioeconomic, Political, and Demographic Overview

Honduras has a surface area of 112,492 km² and a population density of 46 inhabitants per km². In urban areas, the population density is 184 inhabitants per km². The terrain is predominantly mountainous, with 19 watersheds. The country's principal environmental problem is deforestation. Between 1964 and 1990, forests were reduced by some 25,899 km² (34%), with an annual deforestation rate averaging 800 km². It is estimated that between 1992 and 1993, as much as 7% of the forest cover reported in 1990 was lost, which indicates a deforestation rate of more than 1,000 km². The country is divided into 18 departments and 297 *municipios* with 3,730 towns and 27,764 small rural communities. With the adoption of the Municipal Government Law (1990), decentralization was strengthened and 5% of Government revenues were transferred to the municipal governments.

In 1990 a program for structural adjustment of the economy was established and policies and incentives were gradually put in place to promote the most efficient use of resources, coupled with social compensation programs, such as the Honduran Social Investment Fund, the Family Allocation Program, and the Social Housing Fund. These programs are designed to relieve the effects of the adjustment in the poorest segments of the population. The share of these three programs in social spending increased from 3.6% in 1990 to 13.6% in 1995.

The per capita gross domestic product (GDP) was US\$ 702.7 in 1990 and US\$ 722.0 in 1995, with an average annual growth rate of 0.58%. In the same period, the country's total foreign debt increased 23.5%, climbing from US\$ 3,517.8 million in 1990 to US\$ 4,343.5 million in 1995; public debt accounted for 90% of this amount.

Although the predominant economic activities continue to be agriculture, forestry, hunting, and fishing, Honduras expe-

rienced sustained growth in the manufacturing industry (export processing and assembly) in the 1990s; this economic activity generated some 50,000 jobs as of 1994 compared with about 6,000 in the mid-1980s.

The economically active population (EAP) makes up 35% of the total population. In 1995 the underemployment rates were 34% in rural areas and 17% in urban areas. In 1993 women made up 31% of the EAP: 40% of the urban EAP and 22% of the rural EAP. Twenty-four percent of households are headed by women and 65% of those are poor.

Young people of both sexes face discrimination when they enter the job market. In 1994, unemployment and underemployment affected 73% of young men and 69% of young women aged 15–19 years. Among those aged 20–29, in contrast, the percentages were 43% among males and 45% among females; in the group aged 30–44 years 29% of males and 40% of females were unemployed or underemployed.

Inflation rose from 21.7% in 1994 to 29.5% in 1995. The impact of this increase was felt especially in the cost of the basic market basket of food, which jumped 144% between 1990 and 1995. It is estimated that the national population consumes, on average, only 77% of the required daily caloric intake. During the 1980–1994 period, per capita availability of food fell 10% because production grew at a slower rate than the population.

A study by the Secretariat for Coordination and Budget, based on average per capita consumption or expenditure per month per household and the cost of a basic market basket of goods and services in March 1994, revealed that in 1994 the percentage of households that fell below the poverty line was 75.6% (54.5% of households were indigent). Only 24.4% of households were above the poverty line.

During the 1990–1994 period, illiteracy declined from 31.3% in 1990 to 22.8% in 1994; the highest percentage reduction occurred in rural areas (from 39.8% to 29.0%) and among women (from 31.6% to 22.6%). However, illiteracy in rural areas remained 49% higher than in urban areas. The

average level of educational attainment for the total population in 1994 was 4.2 years; it is estimated that 60% of the EAP has fewer than three years of schooling.

The housing shortage in 1995 totaled 700,000 dwellings. Of urban dwellings, 64% are overcrowded, 33% do not have a regular supply of drinking water, and 41% lack sanitation systems. In rural areas, only 16% of dwellings are considered adequate; more than 81% have no access to drinking water, excrta disposal services, and electricity.

Based on the last population census, carried out in 1988, the estimated population in 1996 was 5.6 million (49.9% female), with a growth rate of 2.8%. In 1996 the population aged 0–4 years made up 15.7% of the total; the population aged 5–9 years, 14.2%; the population aged 10–14 years, 12.9%; the population aged 15–19 years, 11.5%; the population aged 20–24 years, 9.6%; the population aged 25–39 years, 18.9%, the population aged 40–59 years, 12.1%; and the population aged 60 and over, 5.1%. As this distribution indicates, children under 15 make up the largest proportion of the population (42.8%). The absolute numbers of persons under 15 and over 65 increased between 1992 and 1996.

There are eight culturally differentiated ethnic groups in Honduras: the Lencas, the Pech, the Garifunas, the Chortis, the Tawahkas, the Tolupanes or Xicaques, the Miskitos, and the English-speaking black population. A study conducted in 1993 with a view to characterizing the indigenous peoples of Honduras estimated the size of this population at 253,790 (5.97% of the total population). The areas inhabited by the indigenous population are often not covered by the health situation analyses that the Ministry of Public Health carries out, and they have little access and a limited basic infrastructure of services, subsistence economies, and ecological problems.

It is estimated that in 1995 urban dwellers made up 43% of the total population. Most of the urban population is concentrated in two cities: Tegucigalpa and San Pedro Sula (32.9% and 16.2% of the total urban population, respectively). This concentration is due mainly to migration from rural areas to the country's political and economic centers, whose annual growth rate is 4%. There is a significant geographic/sex differential in this migration: females tend to migrate primarily to the departments of Cortés and Francisco Morazán, especially the major urban centers in those departments (San Pedro Sula and Tegucigalpa), whereas males migrate mainly to agricultural areas. In 1995, the total estimated net rate of internal migration was –1.6% (–1.7% for males and –1.4% for females). Most migrants are between 15 and 44 years of age, and the largest proportion are in the 20–29 age group. Emigration also has been increasing: in 1989 the net emigration rate was –1.1% (–1.3% for males and –1.0% for females).

Life expectancy at birth, which was 64 years for the total population in the period 1985–1990, was estimated at 71 years for women and 66 years for men in 1996. The estimated

total fertility rate, according to the 1991–1992 National Epidemiology and Family Health Survey (ENESF), was 5.2 children per woman, compared with almost 7 in 1970. In the 1991–1992 period, the total fertility rate was 6.4 children per woman in rural areas and 4.3 in urban areas. The 1995–1996 ENESF survey reported a total fertility rate of 4.9 children per woman nationwide, 6.3 in rural areas, and 3.9 in urban areas. The birth rate per 1,000 population was 36.6 in 1992 and 33.4 in 1996.

It is estimated that about 80% of the population has access to public health care services: 60% is covered by the Ministry of Public Health and approximately 11% by the Honduran Social Security Institute (IHSS). The private sector covers a relatively low percentage (around 5% of the total population), which means that many Hondurans do not have access to any health services.

Mortality Profile

The limited development of the country's vital statistics system is reflected in the underreporting of deaths. In 1990, the last year for which information is available, an estimated 44.2% of deaths went unreported. According to estimates of the Secretariat for Planning, the crude death rate in 1996 was 5.8 per 1,000 population; a total of 32,666 deaths occurred, of which 18,510 were males and 14,156 were females. Of the total number of deaths, 15% (5,355) were reported in connection with hospital discharge figures.

In 1990, the five leading causes of death in the general population were ischemic and hypertensive diseases, diseases of pulmonary circulation, and other forms of heart disease (19.0%); accidents and violence (13.0%); diseases of the respiratory system (9.5%); intestinal infectious diseases (9.0%); and malignant neoplasms (8.2%). The leading causes of infant mortality in 1990 (1,624 registered deaths with 638 attributed to ill-defined conditions) were intestinal infectious diseases (28.2%); diseases of the respiratory system (21.8%); and certain disorders originating in the perinatal period (20.6%).

Because of the aforementioned problems with the registration of deaths, the country relies on other sources to calculate mortality figures. These include national surveys conducted on specific subjects and population censuses carried out in certain geographical areas, which provide mortality data based on various methodologies. The data on maternal mortality are considered reliable and are based on prospective studies carried out in 1990, which indicate a rate of 221 maternal deaths per 100,000 live births. The infant mortality rate decreased from 50 per 1,000 live births in 1990 to 42 per 1,000 in 1994.

Hospital deaths increased in absolute numbers from 4,433 in 1993 to 5,355 in 1996 and from 10% to 16% with respect to

total deaths for those years, which were estimated at 33,300, and 32,666, respectively. The leading causes of hospital death between 1993 and 1996, based on ICD-9 classification, were diseases of the respiratory system (11.8%); ischemic and hypertensive diseases, diseases of pulmonary circulation, and other forms of heart disease (9.1%); and accidents and violence (8.2%). These three leading causes are the same (although not in the same order) as those reported in 1990. Other important causes of death were malignant neoplasms (5.7%), viral diseases (5.4%), and AIDS (5.4%).

SPECIFIC HEALTH PROBLEMS

Analysis by Population Group

Health of Children

During the 1980s, the percentage of children with low birthweight who were delivered in health facilities of the Ministry of Public Health and the IHSS ranged from 7.0% to 8.7%. The figure increased to 9.2% in 1992. The percentage of malnutrition in children under 5 increased from 48.6% in 1987 to 52.5% in 1991 and, according to the Ministry of Public Health, 2.1% of infant mortality in 1990 was associated with malnutrition, compared with 0.9% in 1980.

The percentage of exclusively breast-fed infants (in the 0- to 3-month age group) increased from 36.7% in 1991 to 42.4% in 1995. Of this proportion, 52.2% were children of low-income families, 51% lived in Tegucigalpa or San Pedro Sula, and 49.0% lived in rural areas. The proportion of children aged 6–9 months who were being breast-fed with supplementary feeding was 69.2%, and the proportion who continued to be breast-fed into the second year of life (20–23 months) was 45.4%. The average duration of exclusive breast-feeding is 2.1 months.

A comparison of the leading causes of death in children under 5, based on the last two epidemiological surveys, reveals that acute respiratory infections continue to be in the forefront, accounting for 22% of deaths in 1991–1992 and 23% in 1996. The next leading cause is diarrheal diseases, which increased from 19% to 21% during the same interval. The results of a survey on socioeconomic indicators in 1994 show that the geographic areas with the lowest rates of drinking water service coverage have the highest prevalence of diarrhea. Taking into account deaths due to prematurity as well as those due to complications of childbirth (sepsis, asphyxia, and birth trauma), perinatal conditions are a leading cause of death, accounting for around a third of mortality in the under-5 age group.

In 1994, an estimated 73.1% of children aged 5–9 years were enrolled in school. Available data for this population

group relate to nutritional status and come from several height censuses of schoolchildren aged 6–9 carried out between 1986 and 1996. The proportion of malnourished children remained at 39%. In 1996, 33.3% of girls and 42.2% of boys suffered from chronic malnutrition, an insignificant change with respect to 1986. In 1996, malnutrition affected 26.2% of the urban population in this age group and 44.6% of the rural population. This situation has worsened since 1991, when the percentages were 24.4% and 40.8%, respectively. The prevalence of low height-for-age has clearly risen with age: in 1996, the rate was 28.8% for 6-year-olds, 40.7% for 7-year-olds, 50.9% for 8-year-olds, and 58.9% for 9-year-olds.

Health of Adolescents (10–14 and 15–19 Years Old)

Honduran law defines young people as those between the ages of 13 and 25 years. In 1994 this group made up 28% of the total population and 47% of the total EAP; 7.5% of the households in the country are headed by persons in this age group. In 1993, 46% of young people lived in urban areas and 54% lived in rural areas. According to the Ministry of Public Health, in 1995, 16.3% of AIDS cases in the country occurred in the group aged 10–24, 20% in the group aged 25–29, and 21% in the group aged 30–34.

According to the 1995–1996 ENESF, almost 45% of 18-year-old women are sexually active and one-half of them have been pregnant; 8.5% of 15-year-olds and about 40% of 18-year-olds are married; by age 20, 50% of women are mothers. Among women aged 15–19 years who live with a male partner, 27.6% use some method of contraception; the most frequently used method is oral contraception.

In the group 16–19 years old, illiteracy declined from 11.9% in 1990 to 8.2% in 1994. Among males, this proportion dropped from 14.4% to 10.1%, and among females, from 9.4% to 6.2% in the same period. In the Central District, there are 70 known *maras* (gangs or groups of juvenile delinquents) with some 1,500 members aged 10–25 years; most of them are male. These groups operate in the marginal sectors of the middle- and low-income strata.

Health of Adults (15–60 Years Old)

Mortality studies on women of childbearing age conducted in 1990 (IMMER-90) found that the maternal mortality rate was 221 per 100,000 live births in that year, with higher rates in departments with poor socioeconomic conditions and little access to basic health services (Gracias a Dios, Intibucá, La Paz, Lempira, Ocotepeque, Atlántida, Colón, and Comayagua). According to the same study, the leading cause of death was

hemorrhage (32.8%), followed by infections (20.7%) and hypertensive disorders (12.3%). Abortion accounted for 8.7% of all maternal deaths; in 79% of these cases, the cause of death was infection. At the hospital level, the principal cause of maternal death was infection (30.4%), followed by hypertensive disorders. Together, these two causes accounted for 50% of all hospital maternal deaths, and hemorrhage caused 15.2%. The IMMER-90 estimated that 5 of every 100 deaths of women aged 15–49 were attributed to cervical cancer. In 1996, childbirth was associated with the largest proportion (70.4%) of hospital discharges in the group aged 15–49 years; 1.6% of the discharges were associated with alcohol dependency syndrome.

Although recent data are not available, improvements in other indicators suggest that maternal mortality may have declined since 1990. For example, between 1991–1992 and 1996, the proportions of women receiving prenatal care and institutional care for childbirth increased by 14% and 18%, respectively, and use of family-planning methods increased around 7% among women living with a male partner.

Health of the Elderly (60 Years Old and Older)

The aging of the population, which has come about as a result of increases in life expectancy, translates into a greater demand for health care for problems characteristic of the elderly. This, in turn, implies additional costs for health services at a time when the health care needs of the younger population are still not being fully met. There is no comprehensive information on the health status of the elderly population. Hospital discharge data from 1996 reveal that 17.9% of discharges in the group aged 50 and over were associated with alcohol dependency syndrome and 16.6% were associated with diarrheal diseases.

Workers' Health

According to estimates of the National Occupational Health Commission, which drafted a national plan on workers' health in 1992, the EAP represented an estimated 31.8% of the total population in that year. The Commission also found that working conditions often were poor and posed a threat to workers' health. Six major health problems were identified: accidents in the workplace, pesticide poisoning, noise pollution in the manufacturing sector, reproductive health of workers, widespread use of chemical products, and mental health problems (such as depression and alcoholism). Little information is available on these problems, except for some studies on pesticide levels in prepared foods and breast milk and on cholesterol levels in agricultural workers.

Health of the Disabled

In Honduras, 4.5% of the population has some disability requiring rehabilitation services. Although the age and sex distribution of the disabled population is unknown, there are isolated reports from specific institutions such as the IHSS, the general hospitals, the home for the disabled, and a Fundación Teletón, a local foundation. The latter has three centers (in Tegucigalpa, San Pedro Sula, and Santa Rosa de Copán), which served 26,139 patients between 1990 and 1995. It is estimated that in the *municipios* of Siguatepeque and La Esperanza, 4.5% and 4.8% of the population, respectively, have some disability, which has led to strengthening of the process of community-based rehabilitation.

Health of the Indigenous Population and Border Populations

The country's working-age, indigenous population comprises persons from 8 to 59 years old. Malnutrition is widespread, affecting 95% of the indigenous population under the age of 14. Of every 100 indigenous people born, 68 die of infectious diseases. In 1993, estimated life expectancy in this group was 36 years for males and 43 years for females; in the general population, life expectancy was estimated at 67 years (64.8 years for males and 69.6 for females).

In localities located along the Honduras-El Salvador border, where 71,043 people reside, the five leading causes of mortality in 1994 were respiratory diseases, intestinal infectious diseases, certain conditions originating in the perinatal period, accidents, and pneumonia in the departments of La Paz and Intibucá (Honduras), and diarrheal diseases, malnutrition, respiratory diseases, accidents, and heart diseases in the department of Morazán (El Salvador). Immunization coverage in 12 border *municipios* averages 60.3%.

Analysis by Type of Disease or Health Impairment

Communicable Diseases

Vector-Borne Diseases. The available data indicate that the number of cases of malaria increased from 70,838 in 1992 to 74,487 in 1996, with annual parasite indices (API) of 18.05 and 16.49, respectively. The disease mainly struck the country's northern and southern areas, which together accounted for 52% of the cases reported in 1996. However, the highest incidence rates per 1,000 population (46.4 in 1994 and 74.3 in 1995) occurred in the swampy region on the east. In 1996, 98.9% of all cases were due to *Plasmodium vivax* and 1.1% (1,003 cases) to *Plasmodium falciparum*. In 1995, three hospital deaths were registered, two of whom were females over the

age of 50. In the period between 1993 and 1995, the largest proportion of malaria cases occurred in females aged 15–49 years (51% in 1993, 62% in 1994, and 53% in 1995).

In 1993, 2,687 clinical cases of dengue were reported. In 1994, the number was 4,687 (74% more than in 1993); in 1995, 28,064; and in 1996, 7,564. In 1995, most dengue cases (16 were cases of dengue hemorrhagic fever) were diagnosed in the central and northern areas of the country, which accounted for almost 50% of all cases. The most critical months were between August and November, the rainy season, when 86% of the cases for the year were reported. In 1993–1994, most cases occurred in women and more than half were in the population over 15 years of age.

Rhodnius prolixus and *Triatoma dimidiata* are the vectors of Chagas' disease in Honduras. The former is found in the mountainous rural areas that extend from the southern border with Guatemala north to the border with El Salvador and Nicaragua. The latter is widely distributed throughout the country, in both rural and urban areas. Fourteen clinical cases of Chagas' disease were reported in 1994, 94 in 1995, and 66 as of October 1996. A clinical-epidemiological study conducted in 1995 showed a 35% prevalence of heart disease in seropositive adolescents and adults in highly endemic areas, and data on patients who received pacemakers during the period 1994–1996 indicate that 25% had the disease; the average age of these patients was 32. A study conducted in 1996 in the *municipio* of San Francisco de Opalaca, located in the department of Intibucá (where Chagas' disease is highly prevalent), found that 17.7% of children under 5 were infected.

In 1992, 992 cases of cutaneous leishmaniasis were reported, and in 1994, 1,083. The number increased 13% in 1995, when 1,230 cases were reported, 70% of which occurred in the department of Olancho; in 1996, 1,234 cases were reported. Hospital records do not indicate the number of cases of atypical and visceral leishmaniasis, but in 1996 the central laboratory of the Ministry of Public Health reported 3,866 laboratory-confirmed cases, of which 1,678 were the ulcerated cutaneous form, 238 the mucocutaneous form, 169 the visceral form, and 1,781 the nonulcerated cutaneous form.

Vaccine-Preventable Diseases. No cases of poliomyelitis have been reported since 1989. There was one reported case of measles in 1995 and four in 1996; since 1991, no measles deaths have been registered. Immunization coverage among children under 1 year old was 91% in 1996. The rate among children under 5 increased with respect to earlier years, and in 1996 it was 97.3% for the oral polio vaccine, 96.5% for DTP, 98.7% for measles, and 100% for BCG.

In 1990 the country made a commitment to eliminate neonatal tetanus. By 1995, coverage with two doses of tetanus toxoid in women of childbearing age was 93%. Only three and four cases of neonatal tetanus were reported in 1995 and

1996, respectively, which represents a reduction of 50% with respect to 1994. In the 1990–1994 period, 63% of the cases were reported in urban areas.

A campaign to vaccinate all health workers against hepatitis B was launched in 1994. By 1995, 50% had been vaccinated and by 1996, 67.8%. In 1996, 200 cases of whooping cough were reported. There have been no cases of diphtheria since 1981, although surveillance was intensified in response to reports of outbreaks in the Region. Eleven cases of tuberculous meningitis were reported in 1994, 8 in 1995, and 10 in 1996.

Cholera and Other Intestinal Infectious Diseases. The prevalence of diarrheal diseases in children under 5 in Tegucigalpa and San Pedro Sula decreased from 25.5% in 1987 to 18.8% in 1991 and 14.8% in 1996. In rural areas, the prevalence has been variable (31.9% in 1987, 19.1% in 1991, and 21.1% in 1996). Cholera re-emerged in the country in October 1991, causing a hospital case fatality rate in children under 5 of 4.2% in 1992 and 2.0% in 1996. In 1995 there were 4,748 cases of cholera nationwide, with a case fatality rate of 1.6% (77 deaths); 56% of the cases were in males and 76% of those occurred in persons aged 15 and over. In 1996 there were 708 cases and 14 deaths, with a case fatality rate of 1.9%; 53.2% of the cases occurred in men and, of these, 40% were aged 15 and over.

Chronic Communicable Diseases. There were 45 cases of tuberculous meningitis in 1992, 23 in 1993, and 15 in 1994, with 6, 5, and 11 cases, respectively, in children under 5. The number of cases of tuberculosis reported from 1992 to 1996 was 4,267, with a morbidity rate of 83.3 and a mortality rate of 4.9 per 100,000 population in 1992. These rates were 70.6 and 5.0 per 100,000 population, respectively, in 1996.

In the period 1993–1995, tuberculosis was associated with an annual average of 1,289 hospital discharges, with a predominance of cases in males (60%) and in those over the age of 15 years. The central and northeastern regions of the country have the greatest number of cases. Extrapulmonary tuberculosis occurred at a rate of 5.2 cases per 100,000 population in 1989 and 2.0 cases in 1996. All detected cases of pulmonary tuberculosis have been treated; only one drug-resistant case has been identified. Of the 416 patients who received the directly observed treatment, short-course, 380 were cured and 36 abandoned treatment (this information relates to 50% of the cases diagnosed by sputum smear microscopy during the first half of 1995).

The prevalence of leprosy remained constant at 0.1 (84 cases) per 10,000 population from 1992 to 1995; an average of 3 new cases per year were diagnosed between 1992 and 1995.

Acute Respiratory Infections. The 1991–1992 ENESF survey found that acute respiratory infections were more fre-

quent in Tegucigalpa and San Pedro Sula (38.2%) than in other smaller cities or in rural areas (32%) and that children under 1 year were most often affected. Among 4-year-olds, the prevalence of acute respiratory infections is 25%, compared with 38% in children under 1. Thanks to the strengthening of activities to promote community management of pneumonia and to train volunteers, the case fatality rate from these infections has decreased.

Rabies and Other Zoonoses. In 1992, two cases of human rabies were reported from the Tegucigalpa metropolitan area; in 1993, no cases were reported; in 1994, one case was reported from the country's southern area; and in 1995, two cases were reported, both from the metropolitan area. All but one case involved persons under the age of 10. In 1996, no cases of human rabies were reported. The number of cases of canine rabies decreased from 14 in 1995 to 9 in 1996.

With respect to cysticercosis, a study carried out in 1995 in animals slaughtered in metropolitan meat-packing plants showed that 3% of the pigs analyzed were infected with cysticerci. The most affected departments are Olancho, Francisco Morazán, El Paraiso, and Choluteca.

AIDS. In 1993 a rate of 19.0 AIDS cases per 100,000 population was reported. In 1995, the rate was 17.7. The predominant route of transmission is through heterosexual contact (82.9%). The male-female ratio of 4:1 registered at the beginning of the epidemic has shifted steadily over the years and is now approaching parity. The 25–29 age group is most affected (21.8%), although the number of cases diagnosed in children under 5 has been increasing (from 1.9% in 1987 to 4.8% in 1996). Geographically, the largest proportion of AIDS cases are in the northern region of the country (47.6%), followed by the central region (20.4%). Of the cumulative total of 6,005 cases registered up to 1996, 1,041 have died. The percentage of infected women also has risen: from 30.3% of 752 cases in 1992 to 38% of 734 in 1996. In 1991, in San Pedro Sula the prevalence of HIV infection was 3.6% among pregnant women and 14% among prostitutes. The registered prevalence rate in pregnant women was 2.8% in 1992 and 2.5% in 1993. Among prostitutes, the prevalence was 16.3% in 1992 and 15% in 1993. In Tegucigalpa the prevalence of HIV infection among pregnant women remained constant at 0.3% in 1992 and 1993.

Candidiasis ranks first (37.7%) among opportunistic diseases, followed by tuberculosis, in both the pulmonary form (19.8%) and the disseminated form (3.6%). This association between tuberculosis and AIDS has shown a rising trend, with the rate increasing from 0.11 per 100,000 population in 1986 to 1.4 in 1996. No strains of tuberculosis resistant to conventional treatment have been detected.

Other STDs. The incidence of other STDs continues to be higher in the metropolitan region and in the northern part of the country. In the 1992–1995 period, the number of cases of these diseases dropped gradually from 2,004 to 1,026. In 1996, 1,112 cases were reported, with a rate of 19.8 per 100,000 population. According to hospital discharge records, syphilis is most frequent in women and in the group aged 15–49 years; the second most frequently affected age group is children under 1 year of age, in whom the disease is detected at birth. With regard to gonorrhea, the number of reported cases fell from 5,952 in 1992 to 2,146 in 1996.

Noncommunicable Diseases and Other Health-Related Problems

Nutritional Diseases and Diseases of Metabolism. Rates of chronic protein-energy malnutrition—stunted growth—in children under 5 remained relatively stable between 1987 (39.1%) and 1994 (39.7%). Although the problem has decreased since 1987 in the group aged 1–5 years (from 43.9% in 1987 to 36.7% in 1996), the prevalence remains high, suggesting that it is due to prolonged periods of inadequate feeding accompanied by continuous mild morbid processes. Malnutrition—wasting—has been reduced and is not currently a major problem. A rate of 1.9% was registered in 1987, 2.4% in 1991–1992, and 1.9% in 1993–1994. Rates of underweight (low weight-for-age) during the 1987–1994 period remained at around 20% (20.6% in 1987, 21% in 1991–1992, and 19.0% in 1993–1994). The most serious nutritional problems are found in the western rural areas of the country, where the prevalence of chronic malnutrition is 59.5% and that of overall malnutrition is 32.5%. This situation is closely related to the high poverty levels (96.1%) in that area.

Subclinical vitamin A deficiency affects 13% of the population aged 1–3 years. The problem is most severe in rural areas in the western and northern regions and in several urban areas. There are no current data on the prevalence of goiter due to iodine deficiency in schoolchildren (in 1987 the rate was 8.8%); however, iodine level studies conducted in 1995 in sentinel sites suggest that it is not a major problem. Deficiency of these micronutrients has been treated through a successful program of fortifying sugar with vitamin A and salt with iodine. Iron deficiency is prevalent and in 1996 affected 30.2% of children aged 1–3; 0.5% of these children were severely anemic. The problem occurs throughout the country. Twenty-six percent of women of childbearing age and 32% of pregnant women with deficient levels of hemoglobin were found to be anemic.

Cardiovascular Diseases. The only available information on cardiovascular disease is from hospital discharge and

mortality records: discharge rates per 100,000 population were 99.0 in 1993 (2,030 patients), 116.6 in 1994 (4,768 patients), and 126.3 in 1995 (6,189 patients); hospital mortality rates per 100,000 population were 11.7, 14.8, and 13.6, respectively, for the same years. Women over the age of 50 made up the largest proportion of patients with cardiovascular disease discharged from hospitals. The largest proportion of deaths (38%) were due to cerebrovascular diseases. Although these data do not make it possible to identify a national trend, a rise in both mortality and hospital discharges associated with these causes has been observed.

Malignant Neoplasms. Of the 173,961 cytology exams carried out in 1995 in the country as a whole (34.8% coverage of women aged 30–59 years), 0.4% of the samples were found to be abnormal. The largest number of cases were detected in the northwestern area of the country; 53% occurred in women aged 30–49, and 25% were in women aged 50 and over. Since 1990 there has been a cancer registry in the San Felipe General Hospital (Tegucigalpa), which is the national cancer referral center and the only hospital with a cobalt-60 unit. In 1990 and 1995, 389 and 870 new cases of cancer were treated, respectively. In 1994, 60% of the cases were uterine cancer; 8% were breast cancer; 4% were cancer of trachea, bronchus, and lung; 4% were skin cancer; and 3.6% were stomach cancer. The Department of Statistics within the Ministry of Public Health reported that hospital mortality from malignant neoplasms was 60 per 100,000 population in 1993, 51 per 100,000 in 1994, and 43 per 100,000 in 1995. The principal cancer sites are the digestive system, the genitourinary system, the respiratory system, and bones and tissue.

Accidents and Violence. According to information provided by the Bureau of Criminal Investigation, violence at the community level has been increasing throughout the country. The Public Security Force reports that the homicide rate increased from 20.7 per 100,000 population in 1989 to 40.0 per 100,000 in 1995. Firearms were used in most homicides (69.6%). The age at which criminal activities begin has fallen (10 years).

Mortality from traffic accidents increased from 7.6 per 1,000 population in 1989 to 13.8 in 1994; the rate of domestic violence was 65.5 per 100,000 population in 1996 when records on this type of violence began to be kept. Crimes against minors (between 1 and 18 years of age) reached a rate of 66.0 per 100,000 population in 1996. In that same year, the reported incidence of rape was 3.0 per 100,000 women and 5.3 per 100,000 girls.

Behavioral Disorders. The age at which young people begin to use alcohol and tobacco has dropped. A study on children and alcohol carried out in eight marginal neighborhoods

in the Tegucigalpa metropolitan area in 1992 revealed that the age at which alcohol was consumed for the first time ranges from 10 to 16 years and that this first experience usually takes place in the home or in a friend's house. In 78% of homes in which young people reside, some drug is used; tobacco and alcohol are the most frequently used substances. Forty-two percent of traffic accidents are associated with alcohol consumption by the driver, and 61% of occupational accidents (injuries and mutilations) occur among workers who consumed excess alcohol the previous day. Fifty-one percent of divorces occur in marriages in which one of the spouses, usually the man, is an alcoholic and exhibits personality disorders.

In a study conducted by the Honduran Institute for the Prevention of Alcoholism, Drug Addiction, and Drug Dependency on the use of alcohol and drugs among students in teachers' schools in Honduras in 1996, four of every five students reported that children and adolescents could easily obtain alcohol in their neighborhoods or communities, and approximately half the respondents (47%) reported the same about tobacco. With regard to illegal drugs, fewer than 17% said that marijuana could be easily obtained in their communities.

Natural Disasters. In 1993, tropical storms Bert and Gert affected 4,000 households, 30,000 people, and 2,000 km² of agricultural land in the northern region of Honduras. In November 1996 there were floods due to heavy rainfall in the Chamelecón, Ulúa, Luán, and Aguán river basins, which affected an estimated 80,840 people. Corn, beans, sorghum, rice, and banana crops worth approximately US\$ 7.7 million were also lost, and several roads and about 10 bridges were damaged.

RESPONSE OF THE HEALTH SYSTEM

National Health Plans and Policies

The effort to modernize and decentralize the government has included the health sector. Between 1994 and 1997 the Ministry of Public Health stepped up the process of decentralizing functions to health areas and to municipal government agencies. The Ministry also enlisted other key players in the promotion of the process of increasing access to health services as a fundamental aspect of health reform. This process has become the Ministry of Public Health's main focus, as well as its primary response to reform pressures coming from outside the sector; for example, demands from the National Commission on State Reform, the Ministry of the Treasury, the Department of the Interior, and other agencies of the central administration involved in structural State reform, as well as from international lending institutions.

The aging of the population and changes in the epidemiological profile, coupled with increased violence, mental illnesses, drug addiction, and chronic diseases such as cancer and cardiovascular disorders, have added to the complexity of the country's epidemiological profile. In addition, the country has experienced rapid urbanization without the necessary service infrastructure; a more educated population demands timely and quality care, while at least 30% of the population has no access to even basic health services.

The national access initiative, which seeks to address these problems by extending service coverage and transforming the country's basic health institutions—under the leadership and regulation of the Ministry of Public Health—encompasses three basic strategies: adaptation of local health systems, with an emphasis on health areas; social control of the management of health systems; and development and improvement of human resources. The definition of an appropriate health policy and of basic strategies for applying that policy have strengthened the political management capacity of the Ministry of Public Health as well as its power to negotiate with the various relevant agents and its ability to enlist support at the national level. As many management and planning aspects have become decentralized, it has become necessary for central and intermediate regulatory entities, which are used to a centralized management of vertical programs, to amend their approaches. International cooperation agencies are also coordinating their actions, taking these national processes into account, and are decentralizing their cooperative activities to the most underserved health areas in order to achieve the greatest possible impact in terms of equity, efficiency, effectiveness, and social participation, which are the basic principles of Honduras's health policy.

The Ministry of Public Health has promoted specific policies, such as rapid extension of services through universal access to basic health packages; coordination of international cooperation; reorganization of the health system, with an emphasis on the local levels; environmental and health protection; health financing; food security; development of institutional and community human resources; and identification of solutions to critical problems, such as shortages of drugs and medical supplies. The 1994–1997 government plan provides for increasing the coverage of water and sanitation services in the areas at highest epidemiological risk, as well as protecting the environment through the application of the sustainable local human development concept.

Organization of the Health Sector

Institutional Organization

The health system in Honduras comprises public and private subsystems. In the public subsystem, services are pro-

vided mainly by the Ministry of Public Health, which covers 60% of the population and functions as both a service provider and a regulatory agency. The Honduran Social Security Institute serves between 10% and 12% of the population. Smaller proportions of the population are covered by the Armed Forces Health System; the National Social Welfare Agency; and the Department of Occupational Medicine, Hygiene, and Safety within the Ministry of Labor. The public health subsystem also oversees the National Autonomous Water Supply and Sewerage Service (SANAA). The private subsystem comprises 15 hospitals and an undetermined number of private physicians and clinics, some of which are financed and administered by religious groups. It is estimated that the private sector provides care to some 10% of the population.

The services provided by the Ministry of Public Health are organized in six levels of care, linked in a weak referral system. For administration and management of the services, the Ministry has organized nine health regions, which, in turn, are divided into 41 health areas; this division does not mirror the country's political-administrative division. In 1994 the Ministry's network of services consisted of 978 establishments, including 28 hospitals, 214 physician-staffed health centers, 727 rural health centers, and 9 maternal and child clinics. Of the 28 hospitals, 6 are considered national reference hospitals, 6 are regional hospitals, and 16 are area hospitals.

The public subsector has 4,803 hospital beds, 4,141 of which are in Ministry of Public Health establishments and 662 are in IHSS establishments (a rate of 0.8 public-sector beds per 1,000 population). In 1995 the Ministry of Public Health recorded 35.1 hospital discharges per 1,000 population, of which 40% were patients admitted for childbirth. The private subsector accounts for some 30% of all hospital discharges in the country. The average occupancy rate in hospitals of the Ministry of Public Health was 73%. In rural areas, the vast majority of deliveries are attended by traditional birth attendants; in urban areas, most deliveries are attended in hospitals.

To coordinate activities and avoid duplication of primary and tertiary care services, agreements for shared services have been established between the Medical-Surgical Hospital of the IHSS and the national hospitals of the Ministry of Public Health in the areas of psychiatry, ophthalmology, oncology, nephrology, intensive care, and cardiology.

Health Legislation

The current Health Code was approved in 1991. Through the Law on Municipal Government (Decree No.134-40, October 1990) progress has been made in decentralizing the health sector and in coordinating and executing measures and activities to ensure the health and general well-being of the population.

The General Law on the Environment, enacted in 1993 to encourage environmental protection, established the Office of the Environment, the National Environmental Advisory Board, and the Technical Advisory Committee to support the Ministry of the Environment and the Office of Environmental Law.

The Law on Modernization and Development of the Agricultural Sector, enacted in 1992, regulates the registration of agrochemical and biological products for agricultural or veterinary use as a way to prevent environmental risks. In 1993, regulations were adopted on the sanitary control of food sold in public places.

In 1993 a procedural law was adopted that provides special benefits for the elderly, retirees, and pensioners, including discounts on recreational activities, travel, hospitalization, and other services.

There is a health commission within the National Congress, which is responsible for studying and issuing opinions on proposed legislation to be submitted to the legislature for approval. In the context of Central American and Latin American integration movements, this commission also participates in the Central American Parliament (PARLACEN) and the Latin American Parliament (PARLATINO).

Organization of Health Regulatory Activities

Certification and Practice of Health Professionals. The health sector's work force, as are workers in other sectors, is regulated by the current Law on Civil Service, whose enforcement falls under an office of personnel and human resources. For physicians, the statute on employment of physicians regulates issues such as procedures for hiring and retaining medical personnel, work days, promotions, and salary increases. Professional associations, especially for medical and nursing personnel, are in the process of revising the regulations that govern the practice of those professions.

Drug Market. Between 7,000 and 9,000 drugs are marketed in Honduras. Of these, the Ministry of Public Health has granted marketing authorization for 5,071 products—4,011 brand-name and 1,060 generic products. The drugs consumed in the country are marketed through a network of distributors consisting of 115 wholesale dealers, 620 pharmacies, and 215 drug retail outlets.

The Ministry of Finance controls the price and markup of imported drugs. The price of domestic pharmaceutical products is not subject to any controls. Between 1992 and 1994, official price indexes for imported pharmaceutical products increased 26%, which was similar to the reported increase in health care costs (30%) in the same period.

Environmental Quality. The contamination of rivers has been investigated only where pollution is obvious. Bacterio-

logical contamination has been detected in most water systems in rural areas. In urban areas, such as Tegucigalpa and Choluteca, drinking water often becomes contaminated because supply systems are obsolete. According to the records of SANAA, only 11 of the 55 major sewerage systems in the country have wastewater treatment systems. It is estimated that 82% of the population is provided with excreta disposal systems consisting of a sewerage system, septic tank, or latrine.

The country combats air pollution in several ways. The Ministry of the Environment, together with the Ministry of Finance and the Treasury, have carried out activities aimed at introducing unleaded gasoline in the country. The Center for the Study of Pollution continually monitors pollution from motor vehicle emissions and other pollutants. The Ministry of Public Health conducts studies on hospital waste.

The Ministry of the Environment was created in 1993 to oversee enforcement of the General Law on the Environment, formulate policies, and coordinate actions with other institutions, including the Ministry of Natural Resources, SANAA, and international cooperation agencies in order to protect the environment nationwide. The legal mechanisms for protecting health and the environment are, in addition to the aforementioned General Law on the Environment, the General Environmental Regulations, the Health Code, and the Law on Municipal Government. The latter assigns powers to municipal governments specific for managing natural resources and treating and controlling pollution, among other functions. Nearly no municipal government currently has sufficient technological capacity to implement environmental policy measures.

During 1996 the establishment of environmental quality indices was initiated in 45 cities, with a view to assessing and controlling various environmental risks through low-cost technology.

Food. Honduras has no programs for protecting food quality. Activities in this area involve quality-control measures provided for under the Health Code and various laws, such as those concerning fortification of foods with micronutrients (addition of vitamin A to sugar and iodine to salt) and enrichment of wheat flour.

Health Services and Resources

Organization of Services for Care of the Population

Health Promotion and Community Participation. The Ministry of Education coordinates sports activities designed to improve and promote healthy lifestyles. Violence has been acknowledged as a public health problem and various entities have been created to address it, including a national commis-

sion for the prevention of abuse, a governmental office on women's issues, and 20 interinstitutional regional councils on the treatment and prevention of domestic violence. In addition, there are offices specifically dealing with cases involving women and children, as well as the National Directorate to Combat Drug Trafficking.

The Honduran Congress has drafted a new code on child health and welfare, various laws aimed at controlling alcoholism and drug addiction, and a new criminal procedural code. In addition, it has adopted a law creating an institute for childhood and family issues and a special law on domestic violence. The National Commission for the Protection of Human Rights also has been strengthened, with special attention to provisions relating to juvenile offenders, abused children, and battered women. In June 1994 an agreement on support for child protection activities was signed.

Health communication activities are increasingly being incorporated into municipal health plans as a way to disseminate messages that address the population's health problems.

IHSS provides services to 14,680 pensioners and retirees throughout the country. The Retirees and Pensioners Unit of the IHSS offers seminars on preparing for retirement and courses in handicrafts, and it provides support for project management (cooperatives and microenterprises).

Disease Prevention and Control Programs. The Ministry of Public Health oversees various disease prevention and control programs, among them the programs for control of cancer, STDs and AIDS, rabies, vector-borne diseases, tuberculosis, and leprosy (the last program operated until 1996).

Epidemiological Surveillance Systems and Public Health Laboratories. The epidemiological surveillance system has maintained coverage levels of under 60% for weekly national reporting of diseases, although there are significant differences among the various health regions of the country. The system encompasses diseases under international surveillance (cholera, plague, smallpox, yellow fever, influenza, and malaria), as well as diseases under surveillance by the national disease alert system and the Expanded Program on Immunization: typhoid fever, dengue, meningitis, and encephalitis.

Most of the control programs have established their own information systems, but they are not linked together. As a result, efforts have been made to design an integrated information system that would generate information needed for timely decision-making. At the subregional level, Honduras participates in epidemiological monitoring of diarrheal diseases, amebiasis, tuberculosis, rabies, leishmaniasis, and AIDS. As part of a process of applying health situation analysis methodologies, training has been given in 76% of the health areas in preparation for municipal and area plans.

The laboratory network is made up of 28 hospital laboratories, 8 regional laboratories, and 1 central reference laboratory. Sixty-five percent of the human resources in this area work in the health regions, 26% in the hospitals, and 8.2% in the central reference laboratory.

Water Supply and Sewerage Systems. Regulatory and control functions are carried out by the National Drinking Water and Sewerage Commission (CONAPA), a decentralized technical agency of the Ministry of Public Health that has considerable operational and financial independence. Some services are currently being decentralized with the participation of the private sector; the decentralization process involves transfer of SANAA-operated systems to the *municipios*.

SANAA has adopted a pricing structure that establishes different categories of users, sets basic charges, and takes into account water use. In rural water supply systems, the community sets the charges for services. In general, the rates applied do not generate sufficient resources to ensure sustainability of service.

The two principal service providers in the country's two major cities (SANAA in Tegucigalpa and the Municipal Water Department in San Pedro Sula) suffer from relatively high rates of water losses, lack of up-to-date records of users, and lack of water meters. The rural systems constructed by SANAA include an important community participation component, and their management is delegated to administrative boards made up of users. Smaller urban systems and rural systems constructed by other public agencies and by non-governmental organizations follow similar practices; responsibility for their operation is entrusted to the municipal governments, boards of trustees, or administrative boards. There continue to be significant discrepancies in service coverage depending on area of residence; coverage of drinking water and sanitation services is 94.5% in urban areas, compared with 63% for water and 57% for sanitation in rural areas.

Solid Waste Disposal Services. The most common method of treating household solid waste is open-air burning, which causes air pollution. Communities with greater managerial capacity and larger populations generally have systems for waste management, with a coverage level that ranges from 20% to 50% in medium-sized communities and from 50% to 80% in larger cities (Tegucigalpa and San Pedro Sula).

Food Aid Programs. Honduras has four food aid programs: the maternal and child supplementary feeding program (PAMI), the program of food and nutritional assistance for at-risk groups and promotion of food production for personal consumption, the school lunch program (PME), and the "food for work" program (PAT). These programs were incor-

porated in 1995 as strategies under the national food security plan. During the 1990–1993 period, PAMI served 220,907 people, distributing food through 1,153 food and nutrition centers. During the same period, PME served an annual average of 434,939 schoolchildren and in 1993–1994 covered nearly 50% of the public schools.

Organization and Operation of Personal Health Care Services

Outpatient, Hospital, and Emergency Services. The mobile surgery project is aimed at providing maximum access to health services and attending the most frequent minor surgical needs in the most remote and underserved areas of the country, especially among children. A mobile unit began operating in May 1996 and that year performed 468 surgeries—46% at the primary level and 52% at the secondary level.

Auxiliary Diagnostic Services and Blood Banks. There are a total of 25 blood banks and transfusion services. Of the six national hospitals, only three have blood banks and transfusion services; regional and area hospitals have their own blood banks. In the Ministry of Public Health, a unit has been created to structure the organization and operation of the blood bank network. This unit and the network of blood banks are overseen by microbiologists. As of 1997 operation of the blood banks was not subject to established technical standards and procedures. Quality assurance consists of screening.

Specialized Services. The Ministry of Public Health provides dental services through 34 local oral health clinics in schools and 84 health centers and hospitals. There are four high-productivity centers. The services provided are basically curative and the vast majority are extractions. The ratio of 1.68 dentists per 10,000 population is insufficient to meet the oral health care needs of the Honduran population.

Two national psychiatric hospitals are located in Tegucigalpa. In San Pedro Sula, there is a psychiatric care clinic that refers patients to one of the two hospitals in Tegucigalpa. Each general hospital has two or three beds available for psychiatric patients.

There are two homes for the elderly, which are financed by voluntary contributions and offer basic inpatient services.

Inputs for Health

A 1% tax is levied on imported drugs. Raw materials imported for production of drugs are taxed at a rate of 5%, and products used in the production process (accessories, bottles, stoppers, cardboard boxes) are taxed at a rate of 1%.

The total supply of drugs in the Honduran pharmaceuticals market during the 1992–1995 period increased 26%. Imported drugs account for a high percentage of the national market (54.8% in 1990 and 60.7% in 1994) and represented 23% of Honduras' total imports in the period 1993–1995; their value rose from US\$ 24 million in 1990 to US\$ 40 million in 1996.

The public sector (Ministry of Public Health and IHSS) accounted for 27.2% of the total supply of drugs on the market in 1993 and 29.0% in 1994. The Ministry of Public Health accounted for 19.2% of the total in the network of services in 1993 and 24.8% in 1994, which is an indirect indicator that access to drugs is low. The IHSS accounted for 8.0% of supply in 1993 and 4.2% in 1994.

Vaccines for the Expanded Program on Immunization are acquired through PAHO. Spending on biological products totaled US\$ 1,328,976.08 in 1996 and US\$ 1,292,976.08 in 1997.

Human Resources

Type of Resource. In the public and private health sectors, there are an average of 6.5 physicians per 10,000 population (33% in the public sector); 2.4 professional nurses (48% in the public sector); 8.4 auxiliary nurses (87% in the public sector), and 0.2 dentists (18% in the public sector). This situation is more critical for some categories of technical and auxiliary personnel because training is available in the country in only four technical areas (radiology, laboratory, anesthesia, and medical records) and auxiliary nursing personnel are scarce or nonexistent in the areas of dental hygiene, nutrition, and equipment maintenance.

There are insufficient numbers of human resources in the public sector for the majority of the professions, which limits their ability to respond in a timely fashion to demands for services. The situation is exacerbated by the unequal geographical distribution of resources; in some communities in the country, the job market for health personnel is saturated, whereas in others—generally those that are most inaccessible—many positions are vacant.

Education of Health Workers. The education of health professionals is the responsibility of the National Autonomous University of Honduras (UNAH). In the period 1992–1996, an average of 272 physicians, 19 nurses, and 41 dentists were graduated each year. The education of auxiliary and mid-level technicians is the responsibility of educational establishments administered by the Division of Human Resources of the Ministry of Public Health. In 1990, several new categories of health workers were recognized: environmental health technician, teacher in public health, and nurse specialist in maternal and perinatal health; in addition, a special

secondary school curriculum with a health orientation was instituted. The UNAH school of journalism is currently studying the feasibility of creating a program in health journalism.

Continuing Education of Health Workers and the Health Labor Market. The public sector, including IHSS, employs 69% of all health workers in the country. There are groups in the nine health regions that offer continuing education on topics such as the process of increasing access to health services, maternal and child health, sexuality, and AIDS.

Health Research and Technology. At present there are no complete records of all the studies conducted in the area of health. There is little applied research in health, owing to a shortage of human resources with training in research techniques, lack of financing, and, especially, the absence of a national policy on health research. The university is responsible for the majority of the activities that are carried out in this field, although some research is also conducted under the aegis of the Ministry of Public Health, IHSS, the Center for the Study and Control of Pollution, the Ministry of the Environment, municipal governments, and nongovernmental organizations as well as by independent investigators.

The majority of funding for research comes from the United States Agency for International Development (USAID), the Japanese International Cooperation Agency (JICA), PAHO/WHO, the World Bank, and the Governments of the United Kingdom and Sweden.

Expenditures and Sectoral Financing

Health expenditures, as a proportion of GDP, increased from 2.7% in 1990 to 3.0% in 1995, a rate that continues to be low. As a proportion of total public spending, health expenditure has shown an erratic pattern: from 8.1% in 1990 it dropped to 6% in 1993 and then rose to 9.2% in 1995, which is indicative of the vulnerability of the sector to the overall situation of fiscal constraints during that period. Similar fluctuations were observed in health spending as a percentage of total central government expenditures (10.4% in 1990, 9.0% in 1993, 13.4% in 1995) and as a proportion of real social spending (34.1% in 1990, 30.4% in 1993, and 38.4% in 1995).

Despite these variations, which unquestionably affected the services provided in the years in which the decline was

most marked, health expenditure per capita increased from US\$ 18.9 in 1990 to US\$ 21.5 in 1995. Current spending decreased from 70.9% in 1990 to 61.4% in 1995; the greatest decline occurred in the category of compensation (40.5% in 1990 and 31.0% in 1995), which resulted in a 9.5% decrease for the period, which had an evident impact on the supply, availability, and quality of public health care services.

Although the amount allocated in the health budget for procurement of goods and services increased 20%, inflation (29.5% in 1995), which led to devaluation of the lempira with respect to the dollar, has had a marked impact on the procurement of supplies, drugs, and medical and surgical materials, with negative consequences on the supply and quality of services.

Capital spending has increased significantly: from US\$ 26.0 million in 1990 to US\$ 41.2 million in 1995, which is a 58% increase for the period, with an average annual growth rate of 9.6%. In addition, capital spending as a percentage of total health expenditures rose from 29.1% in 1990 to 38.6% in 1995.

With regard to the distribution of expenditures by programs, although those of the Ministry of Public Health continue to be concentrated in the delivery of hospital services, this proportion dropped from 40.1% in 1990 to 28.5% in 1995, while the share of spending on the communicable disease control program increased from 18.9% in 1990 to 22.4% in 1995. The proportion of spending on studying and constructing health facilities rose from US\$ 4.58 million in 1990 to US\$ 10.9 million in 1995. This increase is reflected in the larger number of facilities and in improvements to the existing infrastructure.

External Technical and Financial Cooperation

Of the total resources available for the health sector during the period 1990–1995, 78% were public funds and 22% was foreign funding channeled through the Ministry of Finance and Public Credit. Bilateral cooperation accounts for 53.3% of international cooperation for health, and the United States is the largest donor (45.2%); however, since 1990 there has been a decline in the amount of bilateral assistance, which has been replaced by cooperation from agencies of the United Nations system and financial institutions such as the Inter-American Development Bank and the World Bank. In 1992, the three largest bilateral donors were the United States (US\$ 38.4 million), Italy (US\$ 37.4 million), and Japan (US\$ 19.4 million).