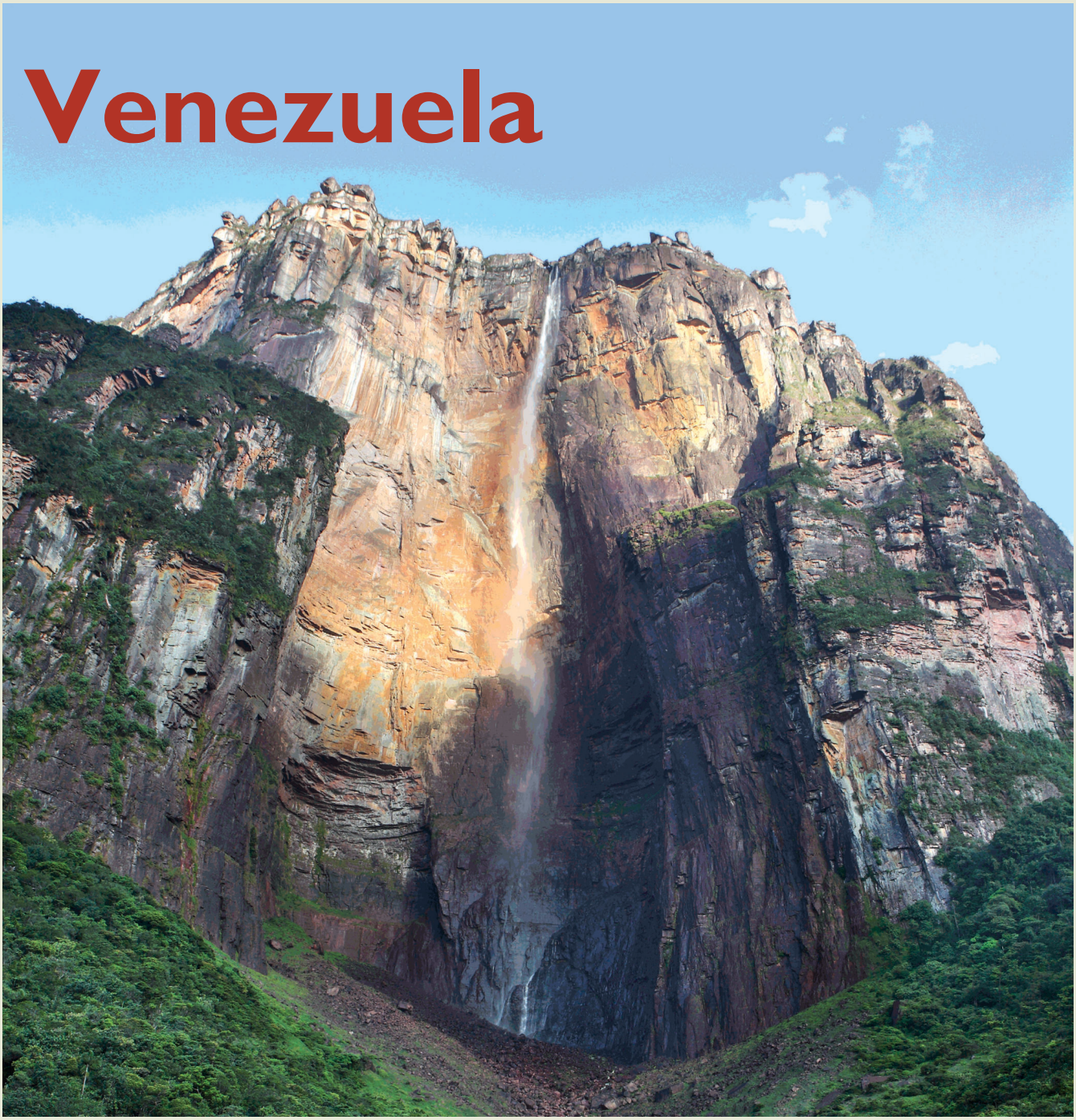
Venezuela



Venezuela is located in the northern part of South America and covers a land area of 916,446 km^2 that includes islands and cays in the Caribbean Sea. Its continental territory borders on the Caribbean Sea to the north, Colombia to the west, Brazil to the south, and Guyana to the east. The country has a diverse geography and extensive biodiversity and natural resources. It is vulnerable to natural disasters, particularly flooding and forest fires. The country is a decentralized federation, with political and administrative divisions that include the Capital District (where Caracas, the capital, is located), 23 states, federal dependencies (311 islands and cays), 335 municipalities, and 1,123 parishes.

Venezuela has experienced demographic changes that are typical for societies in transition. The country's population is aging and life expectancy at birth was 74.3 years in 2010 (77.2 years for women and 71.2 for men). The average annual growth rate is 1.7%, the birth rate is 20.6 per 1,000, and the fertility rate is 2.5 children per woman.

The per capita income was US$ 12,200 in 2010. The average annual growth of the gross domestic product (GDP) from 2006 to 2010 fluctuated at around 3.8%. Social spending as a percentage of GDP was 22% in 2006, dropping to 15.4% in 2010.

Inflation rose from 13.7% in 2006 to 28.6% in 2009. Approximately 64.9% of the population was economically active in 2009, with 92.4% employment; 43.4% worked in the informal sector.

Selected basic indicators, Venezuela, 2005–2010.

Indicator	Value
Population 2010 (millions)	28.9
Poverty (%) (2010)	32.5
Literacy (%) (2007)	95.2
Life expectancy at birth (years) (2010)	74.3
General mortality rate (per 1,000 population) (2007)	5.3
Infant mortality rate (per 1,000 live births) (2009)	14.2
Maternal mortality rate (per 100,000 live births) (2009)	62.9
Physicians per 1,000 population (2007)	1.3
Hospital beds per 1,000 population (2009)	1.1
DPT3 immunization coverage (%) (2010)	78.0
Births attended by trained personnel (%) (2005)	95.0

MAIN ACHIEVEMENTS

Health Determinants and Inequalities

The Gini coefficient of inequalities in income fell from 0.442 in 2006 to 0.393 in 2009. In 2006, the poorest quintile received 4.7% of national revenue and the richest, 49.4%, while in 2009 the poorest quintile received 6.0% and the richest 45.6%. From 2006 to 2010, the level of poverty, measured by household income, declined slightly from 33.1% to 32.5%. Similarly, the proportion of extremely poor households decreased from 10.2% to 7.1%.

In 2009, public spending on education accounted for 6.4% of the GDP. During the 2009–2010 school year, the net rate of enrollment was 70.8% for preschool children, 92.9% in primary education, and 72.1% in secondary schools and diversified and professional institutions.

A project was launched in 2007 to provide immediate and ongoing care to the indigenous populations in extremely vulnerable situations. Another project was developed to strengthen social participation and empowerment of the indigenous peoples and communities.

Access to food has been prioritized as an inalienable human right. In 2008, 659,419 tons of food were provided for the Mercal Network, maintaining the inventories needed to achieve coverage and conserve strategic reserves. In 2009, 627,761 tons of food were distributed at 16,626 points of sale and 9.38 million Venezuelans saved up to 52% in costs for regulated products and 74% compared with supermarket prices.

The Environment and Human Security

Between 2006 and 2009, drinking water coverage and sewerage service reached 95% and 84% of Venezuelans, respectively. In 2009, approximately 32% of wastewater was treated.

Venezuela ratified the Stockholm Convention to eliminate persistent organic pollutants (POPs). In 2008, 721 tons of herbicides were applied to crops, as well as 3,770 tons of insecticides and 4,651 tons of fungicides. Some 47 potentially POP-contaminated sites have been identified.

Health Conditions and Trends

The maternal mortality rate averaged 63.3 deaths per 100,000 live births from 2006 to 2009, decreasing slightly to 62.9 in 2009. The infant mortality rate has continued to decline steadily, reaching 14.2 deaths per 1,000 live births in 2009.

The population at risk for contracting malaria dropped from 23% to 19% between 2006 and 2010. The last confirmed cases of imported measles and indigenous rubella occurred in 2007.

Between 1998 and 2008, the incidence of malnutrition according to weight-for-age in children under 5 years old fell from 5.3% to 3.7%, as a result of the food policies applied beginning in 2003.

In 2010, the youth tobacco survey of 13–15-year-old students in Venezuela showed a significant drop in smoking in this group, from 21.9% in 1999 to 13.2% in 2010.

Health Policies, the Health System, and Social Protection

The Ministry of Health implements policies that aim to guarantee, promote, and protect public and collective health, and is responsible for regulation and oversight of the sector.

Misión Barrio Adentro Programs

In 2006, the new organizational structure of the Ministry of Health was approved, with three Vice-Minister offices: Health Service Networks, Public Health Networks, and Health Resources. The reorganization of the public health system and government care networks has made it possible to institutionalize the Misión Barrio Adentro *programs as a strategy to overcome exclusion, in four phases:*

- Misión Barrio Adentro I: *establishes community primary care clinics, on a national scale. These are the entry portal to the national health system.*
- Misión Barrio Adentro II: *develops comprehensive diagnostic centers, comprehensive rehabilitation wards, high-tech centers, and community clinics. Their purpose is to strengthen the response capacity of the entire primary care network.*
- Misión Barrio Adentro III: *builds community hospitals that provide intensive care services, surgery, and urgent care.*
- Misión Barrio Adentro IV: *expands intensive specialty centers such as the "Gilberto Rodríguez Ochoa" Latin American Children's Cardiology Hospital.*

Public health spending, executed through the Ministry of Health and its dependent institutions, accounted for 1.8% of the GDP in 2007. Private spending was 2.8% of the GDP in 2010. Between 1997 and 2007, funding for public social programs rose significantly (17.4 times), through contributions of extraordinary oil revenues.

The *Misión Barrio Adentro* program, reorganized to strengthen the public health network, has been an effective strategy in addressing the problem of access to services. The care model of this program reinforces the comprehensive community approach and seeks to ensure continuity of care for the needs and problems of the family unit.

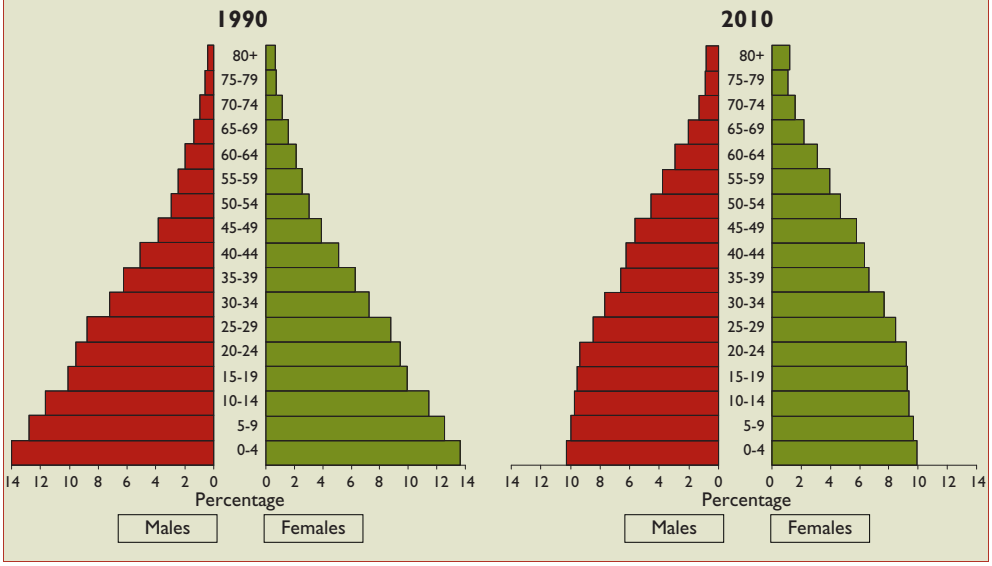
In 2008 a household survey was conducted to determine the population's degree of satisfaction with the health services. Satisfaction reached 75.4% for walk-in clinics and 71.2% for hospital-based services. The reasons for dissatisfaction included lack of specialists and shortages of medication.

The *Misión Madre* project was initiated in 2006, and was later reviewed, redesigned, and relaunched in 2009 as the *Misión Niño Jesús* ("Christ Child Mission"). The purpose of this project is to strengthen the capacity of institutions for comprehensive maternal and neonatal care.

Two strategies have been developed to strengthen the national public health system: the functional integration of facilities into comprehensive community health areas (ASICs, from its name in Spanish) and increasing professional staff through training programs. ASICs enable the health services system that forms *Misión Barrio Adentro I* and *II* to interact with social networks and other service networks through a single area that forms the basis of the system.

Misión Barrio Adentro also included a three-year postgraduate program to train medical specialists in general comprehensive medicine. By 2010 the program produced 984 general practitioners. In addition, 837 community dentists have been trained and a six-year undergraduate training program began for comprehensive community physicians. The program is carried out in primary care centers (*Misión Barrio Adentro I* and *II*) with guidance from the Cuban Medical Mission, and through clinical internships in hospitals, supervised by Venezuelan doctors. In 2010, the first class of comprehensive community physicians (nearly 9,000 students) had completed the program's fifth year. In all, 20,578 medical students have participated at different levels, demonstrating the advantages of providing training in the same communities from which most of the students came and in which they will work in the future.

Population structure, by age and gender, Venezuela, 1990 and 2010.



KNOWLEDGE, TECHNOLOGY, AND INFORMATION

The 2005 Organic Science, Technology, and Innovation Law promoted an increase in financing for projects. Investment in science and technology

increased from 1.8% of the GDP in 2006 to 2.7% in 2007, outranking the investments made by countries such as Canada, the United States, Brazil, Spain, and Portugal.

In 2009 the number of personnel working in science and technology rose 47% as compared with 2006. Researchers work in higher education institutions (88.8%) and the government (9.9%); some 22.2% work in medical sciences and 36.2% in social sciences. Many research articles were published in scientific journals: there were 1,400 articles indexed in the Science Citation Index (SCI), 317 in MEDLINE, 38 in the Institute for Information and Documentation on Science and Technology index (ICYT), and 352 in the Latin American and Caribbean Health Sciences Index (LILACS).

In 2009, the Ministry of Science, Technology, and Industry and the Ministry of Telecommunications and Information joined together to support inclusive, large-scale access to information and communication technologies.

MAIN CHALLENGES AND PROSPECTS

The sustainability of procurement, distribution, and sale of food that is provided through the Mercal network is one of the most important challenges if the population is to be guaranteed access to an improved diet, especially for vulnerable groups.

The country is exposed to several types of natural disasters, which are also influenced by climate change. Between November 2009 and April 2010, the *El Niño* phenomenon caused critically low levels in rivers and reservoirs, resulting in crop losses, shortages of drinking water, and deficits in electricity supply (74% of the country's generated energy comes from hydroelectric power). Some 40,923 hectares of forests burned. In the second half of 2010, the *La Niña* phenomenon caused heavy rainfall across 75% of the country, which resulted in 38 deaths, 31,000 collapsed dwellings, damage to 400 roads, destruction of 39 bridges and 3 reservoirs, and 50,000 hectares of crops lost.

The underreporting of deaths in the country is approximately 10%. In 2006, heart disease was responsible for 24,977 deaths (20.5% of the total) with a rate of 92.4 per 100,000 population. In 2009, the number rose to 27,353 (20.3%), with a rate of 96.4 per 100,000. Cancer is the second leading case of death: in 2006 18,543 people died from cancer (15.3% of deaths), and in 2009, 20,288 died (15.1%).

In 2009, accidents and acts of violence were the fourth leading cause of death. More men died by violent acts (14 times more than women) and in accidents of all types (3 times more than women). In men 20–59 years old, violence was the leading cause of death, accounting for 36.5% of deaths of men in this age group in 2006 and 38.2% in 2009.

Diabetes was the sixth leading cause of death; it was responsible for 7,181 deaths (5.9%) in 2006, with a rate of 26.6 per 100,000 population. In 2009, diabetes caused 8,822 deaths (6.5%), a rate of 31.1 per 100,000 population.

The annual average of cases of American cutaneous leishmaniasis between 2006 and 2009 was 2,400, with the highest number in 2006 (9.4 per 100,000 population). Between 2006 and 2010 an average of 650 new cases of leprosy were detected each year. Two epidemic outbreaks of dengue occurred in 2007 and in 2010, with rates of 293.2 and 433.1 per 100,000 population, respectively.

The prevalence of Chagas' disease was 4.31% in 2010; from 2006 to 2010, three outbreaks occurred by oral transmission. Although the prevalence of Chagas' disease is relatively low, pressure from reinfestation and the trend toward domestication of wild species pose new epidemiological challenges.

Two cases of yellow fever were confirmed in 2008. Between 2007 and 2008, an outbreak of mumps occurred, with 125,000 confirmed cases (474 per 100,000 population). Between 2006 and 2010, whooping cough presented a rate of 2.6 per 100,000 population.

In 2006, 1,567 deaths from HIV/AIDS were reported (5.8 per 100,000 population), and 1,733 in 2009 (6.1 per 100,000). In 2010, respiratory symptoms of tuberculosis were reported in 91,589 people and 3,252 new cases were identified with positive sputum-smear microscopy. The same year there were 248 relapses and 1,077 extra-pulmonary cases.

In 2007, 57,646 work-related accidents were reported (0.66% were fatal). In 2006, 2,066 occupational illnesses were diagnosed. These data reveal a problem that has not been fully addressed in terms of general health care.

In view of the pressing need for health workers and the current fragmentation of public institutions providing services, it is anticipated that strategies such as *Misión Barrio Adentro* will continue and expand, and the training of dentists and comprehensive community physicians will gradually help to strengthen the national public health system and its primary care service network.