CHILE

Capital. Santiago
Area· 756,950 km²
Population. 13,385,800 (1991) (a)
Population density: 17.6/km²
Urban population: 85%
Per-capita GDP in USD: 1,510 (1988) (b)
Life expectancy at birth· 71.8 years (c)
Infant mortality rate. 20‰ live births (d)
Illiteracy. 5% (e)
Population under poverty line: 39 5% (1990) (f)
Human Development Index 1992: 0 863 (36th) (g)[1]

Tasks for the 1990s: social development and democratic consolidation

Chile recently joined the wave of democratization that swept Latin America during the 1980s. In 1973 a military coup took place whose immediate consequence was the overthrow and death of President Salvador Allende, installation of an authoritarian regime, and disrespect for and violation of human rights. This represented a break with a republican tradition of more than a century and a half. The military regime lasted for 16 years and resulted in major changes in the state, the economy, and Chilean society. In 1988, after a period of intense opposition, a plebiscite was held in which the continuation of the regime for eight more years or transition to democracy through near-term free elections was put to the country. The result of the plebiscite, in which more than 95% of registered Chileans voted, favored the second option, and thus, in 1989, a general election was held which was won by the present President, Patricio Aylwin, the representative of a broad coalition of democratic political forces.

From 1973 to the end of the 1980s the military regime carried out a policy of extreme liberalization guided by monetarist and neoliberal principles. This policy rested on abundant external credit, which increased the external debt from USD 4,500 million in 1973 to more than USD 21,000 million in 1986 Economic liberalization and adjustment have had profound effects on Chile's economy and society. On one hand economic growth has recovered and the country

has achieved one of the highest growth rates in Latin America—8.5% in 1989—without bringing about serious imbalances in national accounts, and with controllable inflation rates which averaged 21% annually from 1980 to 1987. During the 1980s the gross domestic product (GDP) rose by 27.5% and the per-capita GDP by 9.6%. This growth process has been based on a sustained increase in and diversification of exports, despite which copper, Chile's traditional export product, continues to represent 32% of the total exported. This has resulted in Chile being considered a "model country" in economic efficiency by international financial agencies.

Adjustment and liberalization had a profoundly negative social impact, however, and that has been one of the heritages of recent Chilean democracy. In the middle of the 1980s, 30% of workers were unemployed, real wages had fallen 22% in only five years, the distance between rich and poor widened, and about 45% of the population lived below the poverty line.

Among the changes promoted by the military regime was the redefinition of the state's role and its "retreat" from the social sphere. The Chilean state had a large role in providing social services to the population. Nevertheless, it was held from the mid-1970s that the state should play a subsidiary role and limit its participation to those areas that did not interest the private sector. In practice this meant awarding a major role to the private sector in providing social services and to market forces in their regulation, especially in health and education. This redefinition and withdrawal also caused municipalization of services and a major reduction in public expenditures, especially in the areas of housing, health, and education.[2]

The state also redefined its priorities in spending by financing the transfer of personnel, infrastructure, and services to municipalities and the private sector, and focusing services on the poorest sectors and most troublesome situations, such as maternal and child health. This led to a paradoxical result: reductions in spending were compatible with an improvement in indicators of mother and child mortality, life expectancy, and malnutrition. This paradox can be explained, however, if we realize that thanks to the concentration of expenditures as a result of focusing, the quality of health and education services and the amount of subsidies and pensions for the entire population fell significantly.

Employment situation and the labor market

In mid-1991 the Chilean work force was reckoned at 4,713,000 persons. The unemployment rate had been declining in recent years until in 1991 it reached a national level of 7.5%. Unemployment mainly affects groups with intermediate and technical education and young people aged 15 to 24 years, a group which has a rate of 16.6%. In other words, young people, who constitute only 20% of the work force, represent almost half of the country's jobless. The unemployment rate among young women is still higher—18%, compared to 14% among men.[3] The latter two phenomena are a change from the situation prevailing in the first half of the 1980s when juvenile unemployment was higher and that of women lower. The Government has begun to conduct training and employment programs for a target population of 100,000 young people in order to lower these rates in coming years.

In addition to the amount of work available, reference must be made to the quality of jobs since one of the characteristic features of the Chilean labor market in the 1980s was a sizable increase in informal work, even though it had existed in earlier decades. Various investigations showed that informal employment represented 33.5% of the economically active population (EAP) in Greater Santiago in 1976, 52.2% in 1982, and 24.5% in 1988.[4] It is estimated that there are 200,000 "microenterprises" employing fewer than 10 persons, many of which are part of the urban informal sector (UIS). Recent estimates are that the proportion of the informal EAP in the total national workforce is about 30%.[5]

With respect to the investigations carried out in Greater Santiago, it may be noted that informal employment is related directly to poverty. Unemployment stands at 35% among indigent families, and 40% of job holders were in informal activities Further, informal employment affects young people to a lesser extent but is more significant among women· 36.9% of employed women worked in the informal sector, compared to 26% of men. Employed women were in the majority only in domestic service, in which half of the women in the informal sector worked, however.

The social dimensions of the crisis: the poverty situation and social policies

One of the manifestations of the economic, social, and political changes Chile has undergone in the last two decades has been the increase in poverty and, in direct consequence, a greater inequality in income distribution. Between 1978 and 1988, 20% of the upper-income population increased their participation in total family spending, from 51% to 54.9% The participation of the remaining 80% fell. The 20% of the population with the lowest income saw its outlays fall from 5.2% to 4.4% of family spending.[6] All this relates directly to the loss of buying power resulting from the 36% fall in real wages between 1980 and 1989.[7]

Studies by the Economic Commission for Latin America and the Caribbean (ECLAC) in 1970 showed that 20% of the population lived in poverty. There was a large increase in the poor population after the mid-1970s, and by 1980, according to data from the Regional Program on Employment for Latin America and the Caribbean (PREALC), poverty affected 40.3% of the population in Greater Santiago. The most recent data on poverty in Chile show its incidence and trends from 1987 to 1990. At the end of 1987, 38.1% of households, or 44 4% of the population, were poor, i.e., they did not have enough income to meet the basic needs of their members. This situation affected 36.6% of urban households and 45% of rural ones. In that year, 13.5% of the households, or 16.8% of the population, lived in absolute poverty or indigence; i.e., their incomes were insufficient to guarantee their nutritional needs. The absolute poverty index of 13.5% of urban households contrasts with the 15.7% in rural areas. In sum, this means that, absolutely speaking, 5,493,000 Chileans lived in poverty and 2,081,000 in indigence in 1987.[8]

The 1990 National Socioeconomic Survey (CASEN) showed some decrease in poverty. Of all households, 11.6% (10.8% in urban areas and 15% in rural ones) consisting of 1,793,000 persons remained indigent. Poverty affected 34.6% of households (34.2% in urban areas and 36.3% in rural ones), or 5,213,000 people—39.5% of the national total. Although the reduction is significant, the large number of Chileans who cannot meet their minimum life needs represents the most important challenge to society and the country in coming years.

The poverty situation is related to unemployment, the employment of heads of household and other family members in informal occupations, and low levels of education. In 1987 the per-capita income of the poor was about 40% below the poverty line, while that of indigents was 34% below the indigence line, which shows the precariousness of their situation

A recent United Nations Children's Fund (UNICEF) study defines the "poverty map" of Chile.[9] Six of the country's 13 regions have worse conditions of social vulnerability, because of their lower income levels and concentration of municipalities in which indicators are worse, especially regarding children. In Region VIII (Bío Bío) there are 24 municipalities with very high social vulnerability. In Region IX (Araucanía) there are 18; in Region X (Los Lagos), 18; in Region VII (Maule), 16, in VI (O'Higgins), 10, and in Region IV (Coquimbo), 6.

The state's present social policy aims at combining the focused policies of the former regime with improvements in universal services for the entire population. Priority groups are preschool children, young people, female heads

of household, and the elderly.[10] The Government believes that the Tax Reform, approved by the Congress in 1990, together with contributions from international cooperation, will provide the resources needed to finance new social programs for these sectors.

In the area of social assistance, which is aimed at the poorest families, the policy is based on readjustment of compensatory policies, specifically direct family subsidies, assistance pensions, the single family subsidy, and specific subsidies for pregnant women and newborns with few means. Such readjustments have to some extent restored the buying power of the subsidies in question, though their compensatory nature persists and they are not lasting solutions to the problem of poverty, which will depend on jobs and income. An important instrument is the Social Investment Fund, or FOSIS, an agency linked to the Ministry of Planning and Cooperation. This agency intends to conduct activities focused on the most vulnerable sectors in collaboration with other state agencies and nongovernmental organizations (NGOs) by mobilizing international cooperation resources and emphasizing community self-help. In this respect, the approval given to the Law on Neighborhood Associations and Grassroots Organizations which seek to promote community participation in development activities is significant.

Health, environmental sanitation, and nutrition

The social security system consists of three areas of insurance: the pension scheme, health services, and work accident insurance. The first two are financed from worker dues without employer contributions, and the third from employer and worker contributions. The three are mixed, consisting of public and private entities.

The public sector health subsystem covers approximately 80% of the population and includes both workers who contribute through the National Health Fund (FONASA) and persons without means. The private subsystem is based on a 1981 decree-law which significantly redirected the Chilean social security system toward privatization. Based on the principle of individual capital formation, it allowed workers to remit their contributions to health insurance institutions (ISAPRES)—private bodies offering health insurance. Between 1980 and 1990 the population using such bodies, which make up most of the private subsystem, increased from 9% to 14%.[11] It is estimated that both subsystems, which in 1987 had 41,827 beds (3.4 beds per thousand population), provide coverage to almost 80% of the EAP.[12] Among self-employed workers and those in domestic service, whose affiliation is voluntary, coverage rates are appreciably lower, however, at between 12% and 17.5%.[13]

Public sector health services have undergone a continuous reduction in public financing. Health expenditures per capita fell by 38% from 1974 to 1989 (from 7.2% to 3.5% of the total budget), and investment declined from 9.5% to 7.7% in the same period. These data are significant in that almost a quarter of the country's health infrastructure—hospitals—was built before 1940 and 48% between 1940 and 1970, so that there is a large amount of deterioration. According to information published in 1991, 75% of the hospitals in the metropolitan region are at risk in emergencies such as earthquakes or fires.[14] There is a sizable deficit in primary care services, which translates into congestion of hospital emergency services.

The physical and human resources of local health services were decentralized through transfer to municipalities between 1981 and 1987. An evaluation of the process and its results was conducted in 1987 using an instrument designed by the Pan American Health Organization (PAHO). The evaluation showed that although municipal primary care clinics largely fulfilled international operating requirements, rural clinics lacked equipment and staff, and did not fulfill standards and procedures. Supervision of the Regional Health Services is the weakest aspect of the system.

Despite financial and infrastructural shortfalls, significant progress has been made in life

expectancy, which increased from 63.4 years in 1975 to 71.8 years in 1988, maternal and child mortality, malnutrition in children under six years of age, and professional coverage of deliveries, which reached 98.4%. Infant mortality fell from 79.3‰ live births in 1970 to 18.9‰ in 1988, although higher rates were recorded in the rural population and the poorest regions and municipalities such as those in the western and southern health services of the metropolitan region, in which the rate was 17.8‰ live births, compared to 11.8‰ live births in the eastern area, which has a higher economic level.[15] Acute respiratory infections had a rate of 3 38‰. Asphyxia due to inhalation and ingestion of food and submersion were the main causes of death from accidents in children less than five years old (54% and 12%, respectively, in 1988).

Childhood malnutrition fell from 15.5% in 1975 to 8.6% in 1988 [16] Malnutrition indices differed by region, however. in the metropolitan region it was 9%, in Region XII—the most southerly—it was only 4%, and Regions III and VI had the highest indices, 9 9% Other causes of death in childhood increased significantly. Examples are measles, which rose from 82 1 per 100,000 population in 1975 to 353.6 in 1988, and acute respiratory infections, due among other causes to pollution in Greater Santiago, which has 40% of the country's population

As we have noted, all these advances have come about despite the decrease in social and health spending as a result of the policies of focusing outlays on the most vulnerable sectors. The successes in the main indicators of health stand in contrast to other realities, however: serious difficulties persist in access to health services by most of the population and the quality of services has experienced widespread deterioration, especially ordinary health care visits, which has caused a strong rise in emergency visits from 21% in 1970 to 44% in 1988, according to Ministry of Health data.[17]

Patterns of morbidity in the population have evolved from one predominantly of communicable and parasitic diseases to those considered "modern" or characteristic of a greater degree of urbanization and development such as cardiovascular ailments, cancer, trauma, and poisonings. Diseases of the circulatory system are today the leading cause of death in Chile (28% of the total), trauma and poisonings occupy second place (12 8%), respiratory conditions are in third (11.1%), and malignant tumors are in fourth (10.1%) In fifth place are diseases of the digestive system (7%), especially hepatic cirrhosis and chronic diseases of the liver [18] Agrochemical intoxications are common among rural workers in the fruit-growing sector as a result of bad working conditions. The prevalences of diabetes, hypertension, and epilepsy have also increased, as have mental health problems—neuroses and depression associated with unemployment—and situations of a psychosocial nature such as drug addiction and alcoholism (approximately 15% of adults drink to excess).[19] These pathologies are more complex and their care is more costly, as a result of which they require readaptation of the orientation of the health services. Five hundred AIDS cases, with 196 deaths, were recorded by the end of 1991. The incidence of the disease has increased considerably since 1990. About half of the deaths are in persons in risk groups—homosexuals and drug addicts.[20]

In 1990 and 1991 the Government increased the state's contribution to public sector health care, though it has not essentially changed the model it inherited from its predecessor regime. The largest increases have been in the area of primary health care (PHC) through a reinforcement program focused on 24 urban and 104 rural municipalities.

In 1988, according to official data. drinking water coverage embraced 98% of urban and 75% of rural areas. Nationally, potable water was provided through public networks to 63% of the population in 1987, the CASEN survey showed Fifteen percent of the population obtained water through public outlets outside the home. Sewerage was available to 58% of the nation's households in 1987; 35% of dwellings had latrines or cesspits, 4.8% had septic tanks, and 2% lacked an excreta disposal system. Deficits were con-

centrated in rural areas and municipalities with large numbers of poor residents. In 1985, for example, 44% of the households in the municipality of Cerro Navia, which is representative of the municipalities surrounding the city of Santiago, used latrines or septic tanks and 36.6% were not connected to the potable water network.[21]

Housing, basic services, and urban marginalization

There is a cumulative major housing deficit which is both quantitative and qualitative. Data from 1990[22] showed that 800,000 families lacked housing, as a result of which the great majority lived as boarders. Another 330,000 families lived in homes which did not meet minimal housing standards because they were too small, were in bad condition, or did not have connections to water, electricity, and sewerage networks. In sum, of every 100 families, 64 had adequate housing, 12 had inadequate quarters, and 24 lacked housing. Boarders are one of the most acute manifestations of the housing crisis. They are families who share land or housing with another family, whether relatives or renters. This causes overcrowding, lack of privacy, saturation of sanitary services, and deterioration of housing. Various estimates have been made of the number of families living in this situation. At mid-decade the number was reckoned at 250,000, of whom more than 135,000 lived in Santiago.[23]

"Poverty belts," which are known as *callampas,* exist around major Chilean cities. Geographic and social segregation of the poor in the population, especially in Greater Santiago, quickened between 1979 and 1985. During that period a governmental policy was developed to solve the problem of ramshackle settlements (*campamentos*) by moving more than 30,000 families to new towns on the periphery of the city. This increased many of the economic and social problems of the low-income population by raising unemployment rates in the municipalities receiving the population and exacerbating problems of health, education, and access to public services by shifting them to areas of difficult access lacking transportation and services.

Housing policy is carried out through the Ministry of Housing and Urban Affairs (MINVU), created in 1965, and takes the form of varied subsidies for different social groups: marginal sectors may be granted a subsidy of up to 75% of the value of a dwelling through the Housing and Urban Affairs Services (SERVIU). Those who buy a dwelling in the market can obtain aid through the "General Housing Subsidy System." There are also a rural subsidy and special programs for building low-cost housing.

The education situation

During the 1970s and 1980s the participation of education in public expenditures fell; in 1970 the proportion of the GDP spent on education was 4.2%, while in 1988 it was only 2.7%.

Since 1974 the educational system has been gradually decentralized. The transfer of educational facilities and staff to municipalities was begun in 1980 and ended in 1986. There is no evaluation of the results of that process, but there are important differences between schools in different municipalities to the detriment of poorer ones.

More than 327,000 children attended preschool centers in 1989. Some 220,000 were cared for by the Ministry of Education and 55,000 by the National Kindergarten Board (JUNJI). Fifty-two thousand others were cared for by private, volunteer-staffed centers and 10,000 by NGOs. It is estimated that these centers care for around 113,000 children from the poorest strata, leaving about 90,000 poor children without care. UNICEF has noted the importance of preschool education in the development of poor children so as to prevent their being left behind educationally and thus avoiding the recurrence of the so-called "poverty cycle."[24]

Basic education is mandatory and runs until 13 or 14 years. In 1989, 62.5% of matriculation was in municipal centers, 31.3% in subsidized ones, and 6.5% in private centers. A decline in

matriculation has been occurring as a result of demographic changes. Of children aged 6 to 13 years, 10.7%, or 200,800, are not included in the system, which is a very high index. Half of them come from the poorest 30% of homes.[25]

Intermediate-level schooling has two branches, one humanistic and enrolling three of every four students and the other technical and occupational, with one out of four The former has little relationship to the requirements of the labor market, which leaves many youths at a disadvantage with respect to the work world. Secondary-level coverage rose from 65% in 1982 to 81.7% in 1988, despite which there is a large number of young people who do not attend such studies. As in primary education, around 50% of the teenagers who are not in such studies belong to the poorest 30% of the population.

The National School Aid and Scholarships Board (JUNAB) provides social assistance to students with few means in order to make available equality of educational opportunities. Its coverage has had ups and downs, from 30% in 1970 to 12.2% in 1979 and 22.1% in 1988.

The literacy rate, which is generally high at 94.6% nationally, has regional inequalities. Region IX (Araucanía) has the lowest level with 89.4%; more urbanized areas have the highest indices.

The situation of Chilean youth

During the 1960s Chile experienced strong demographic growth, which in 1985 resulted in the country having the highest number of youths between 15 and 24 years of age—2.5 million Many of these young people reached the age of entering the labor market when the economic crisis reduced opportunities for entry into the social and work spheres. In consequence, the juvenile unemployment rate reached 36% in 1982. At the end of the decade juvenile unemployment rates were declining, more because of the spread of intermediate education than the dynamism of the work market—between 1986 and 1988 juvenile employment grew by 1.8% annually, while adult employment did so at a rate of 5.5%.

The spread of intermediate schooling went hand in hand with its segmentation, so that students' socioeconomic level and thus access to some or other educational centers determines better or worse access or nonaccess to universities, as a result of which the spread of secondary education has also become a social differentiation mechanism.

One of the most pressing problems facing young people is the high incidence of drug consumption. Studies conducted by the Juvenile Pastoral Vicariate of the Archdiocese of Santiago in 1984 showed that 8.6% of young people consumed marijuana habitually and 19.4% occasionally. This 28% of youthful consumers increases considerably in low-income municipalities in Santiago: 63.6% in La Florida, 40% in Pudahuel, and 36% in La Granja, to name a few of the most important. When these data are extrapolated to the entire juvenile population of Santiago, it is clear that there are almost 340,000 consumers in that province alone. Among the factors associated with drug consumption are layoffs or unemployment and bad working conditions, a lack of channels for social participation and integration, insufficient places for young people to meet and interact, and their absence from the school system or lack of educational accomplishment.

The National Youth Institute (INJ) was created in 1990 to develop plans for this sector in the social and economic, quality of life, comprehensive development, culture and free time, and formal and informal education areas and an information service specializing in youth matters.

The situation of women

The urban female population is slightly larger than the male because of emigration of women to urban centers. The overall fertility rate has fallen significantly; in the 1960s it was 5 children per woman, but in the period 1985-1990 it was estimated at 2.7 children This is due to improvements in the educational level of the popu-

lation, the growing participation of women in work, urban development, and the existence of programs and means to prevent unwanted pregnancies since the 1960s, despite which 15% of births in 1988 were among women less than 20 years old.[26]

Abortion accounted for 35 4% of maternal deaths in the period 1980-1986, which made it the leading cause of maternal mortality. The maternal mortality rate from abortion in 1987 was 1 7 per 10,000 live births.[27]

The educational situation of women has been comparable to that of men during the past 30 years. Their participation in the workforce has also grown, to the point where it is now 31%. Of all employed women, 93.2% work in urban areas and only 6.8% in the countryside. Women predominate in trade and personal, social, and community services; the last field accounts for almost half of employed women. Although the overall unemployment rate is similar for men and women, it is higher, as we noted, among young women, which shows that they face greater difficulties in entering the labor market

Women comprise 21.1% of the heads of household, or 660,000 families, in Chile. Female heads of household are a group of special concern to social policy since there is a higher incidence of poverty in this group and thus their families are more vulnerable.

The National Women's Service (SERNAM), a public and decentralized agency whose aim is to promote the real equality of women, especially in the lowest socioeconomic strata, was created in 1990. Among its priorities are violence against women, legal discrimination against them, adolescent pregnancy, and support of women with limited means to enhance their access to the labor market.

Ethnic reality and problems

The Chilean population has a high degree of ethnic homogeneity since for the most part it is European in origin. There are significant indigenous minorities such as the Mapuches, Atacameños, and in the north the Aymarás, however. There are 600,000 Mapuches, of whom 92% live in Chile and the remaining 8% in Argentina. Chile has 40,000 Aymarás, and there are 2,000 Atacameños. There are other small groups in geographically limited areas such as the Quechua, Qawaskar, Yaganes, and the Rapa Nui on Easter Island [28] It is estimated that together they make up 4% of the population. Their small proportion in the population, the rural character of their lifestyles, and their backwardness and marginality (there is a close correlation between indigenous status and poverty) have led to serious problems of cultural and economic breakdown. Migration to cities in search of better opportunities is common; around 100,000 Mapuches live in cities such as Santiago, Concepción, and Temuco. A few groups such as the Pehuenches also face the risk of expulsion from their traditional lands because of judicial decisions which did not take their historical rights into consideration.

The human rights situation and International Humanitarian Law

During the period of the military dictatorship Chilean society experienced serious human rights violations, which were one of the causes of the regime's international isolation. The reestablishment of democracy guaranteed respect for and enforcement of Chileans' basic rights. In April 1990 the President of the Republic created a Commission of "Truth and Reconciliation" to elucidate violations of human rights during the period from September 11, 1973, to March 11, 1990. The Commission has been forbidden to render decisions on individual responsibilities in the events under investigation. In its report the Commission recognized 2,115 victims of human rights violations such as disappearances, extrajudicial executions, improper use of force, post-curfew deaths, abuses of power, torture, and terrorist acts, and 164 victims of political violence Concentration camps and illegal detention centers were found.

In the context of democratization, Chile has strengthened mechanisms for protecting basic rights and International Humanitarian Law. In April 1991, Chile ratified Additional Protocols I and II of 1977 to the Geneva Conventions, to which it had been a signatory since 1950.

The environment and vulnerability to disasters

There has been widespread deterioration of the environment during the last two decades due to pollution of the air and surface waters, desertification, loss of fertile soils, and deforestation. The reduction of the ozone layer, a global problem, affects the southern parts of Chile where an increase in cases of skin cancer and other pathologies is feared. A recent study identifies and ranks 800 environmental problems in Chile,[29] of which the most important in magnitude and long-range consequences is desertification Fifty percent of the country's land is threatened by this phenomenon, which is caused by massive deforestation, over- and monocropping, the excessive use of agricultural chemicals, and acid rain, especially in areas such as Valparaíso, Aconcagua, and Coquimbo. The country's variety of environmental problems is explained by the extraordinary diversity of climates, terrains, and ecosystems in Chile: dry and desert areas in the north such as the Atacama desert, areas of great rainfall, mountain glaciers in the Andes, frigid steppes in Tierra del Fuego, and areas of temperate climate and intensive agriculture in the central valleys where two thirds of the population lives

Ninety-eight percent of the country's wastewater undergoes no treatment at all, which leads to high surface water concentrations of bacteria, hydrocarbons, heavy metals, pesticides, etc., which wipe out aquatic fauna and flora. The rivers in the central and southern areas and the lake district in Regions IX and X have been particularly affected. Bacterial contamination of produce farms, which are irrigated with fecally polluted water, has caused the number of enteric disease cases to mount: in 1990 there were more than 90 deaths from that type of disease Mining wastes discharges into rivers and the ocean have caused ecological collapses; the best known is that at Chañaral in Region III. Copper ore wastes from the El Salvador and Potrerillos mines have exterminated all aquatic life up to 15 km out to sea after being discharged into the ocean.

During the past 15 years air quality standards for carbon monoxide and suspended particulates have been continuously exceeded in Greater Santiago, which together with Mexico City and São Paulo is one of the most polluted cities in Latin America. During the period 1987-1990 the concentration of sulfur dioxide was 41 μg per cubic meter—twice that of São Paulo.[30] Pollution levels are even higher in winter. The main sources of pollution are motor vehicles, especially diesel-powered ones, and industry Pollution is the cause of the rise in cases of bronchitis, conjunctivitis, emphysema, and asthma, particularly in children. The control measures adopted by the Government—restrictions on vehicular traffic and control of industrial emissions—have had little impact and are also subject to pressures from the industrial sectors involved.

Chile has recurringly been subject to disasters such as floods, earthquakes, and droughts Floods occur especially in the central part of the country, between the metropolitan region and Araucanía, and in the south because of high rainfall and melting snow in the Andes and increasing deforestation in the upper basins. Floods have a strong impact on the riverine population, particularly the poorest social strata, as was the case with the Mapocho River's floods of 1982 and 1984. In those instances the Ministry of the Interior's National Emergency Office (ONEMI), together with regional and municipal authorities and other agents, coordinated the relocation and care of the victims. Property damage caused by flooding has been very extensive. It is estimated that between 1974 and 1984 a half-million people became victims and that property losses amounted to more than USD 2.000 million.

Chile's geography puts almost the entire country at risk of temblors—both earthquakes

and tsunamis, or tidal waves, originating from sea quakes. Earthquakes originate in the confluence of the Nazca and continental plates. The chief earthquakes the country has experienced have been those at Valparaíso in 1904, Chillán in 1939, Valdivia and Puerto Montt in 1960, and Santiago and Valparaíso in 1985. The last, which affected 6.5 million people though it produced only 150 fatalities, caused property losses of more than USD 1,500 million. Seismic threat studies note that the probability that an earthquake of more than 7.5 on the Richter scale will occur south of Valparaíso before the year 2000 is high (61%). Other areas and localities with high seismic probabilities (between 39% and 59%) are southern Colchagua, Curicó, and Tarapacá.[31] Because of the country's coastal configuration, the risk of tsunamis with waves higher than five meters affects a large number of communities, especially in the areas of Tarapacá, Valparaíso, Antofagasta, Santiago, and Concepción.[32]

Droughts occur frequently in the transition zones between the desert and central valleys—Regions II, IV, and V and metropolitan Santiago. Those affected are usually small farmers and goatherds, though at times they affect the entire population by forcing water rationing and causing power shortages, as happened in 1989. ONEMI has a drought commission which coordinates and channels assistance to affected persons and has conducted a few studies of the historical occurrence and effects of drought in Chile. Nevertheless, the decisions and activities needed to prevent such damage have been put off, as a result of which it may recur in the future.

ONEMI is the agency responsible for planning, coordinating, preventing, and providing aid in emergency situations at the national level. Among its responsibilities are training the population in disaster preparedness, coordinating the human and material resources of public and private bodies, instructing regional authorities in disaster preventive and operational measures, and coordinating activities with international organizations. The agency maintains relations with a scientific committee and institutions such as the Chilean Red Cross and firefighting departments.

ONEMI drew up a National Disaster Risk and Prevention Plan in 1979 and has created an emergency operations center with related warehouse in each of the country's 13 regions The experiences of 1985, 1986, and 1987 have served as a basis for developing and implementing an Emergency Information System (SIE) using data-processing equipment to support decision making in disasters. ONEMI has been conducting other activities: in 1988 a multihospital mobilization plan was presented, and work has started on preparing a microzoned national risk map.

Impact of cooperation and development institutions and policies

The new Government considers international cooperation a means to promote the country's development, especially with respect to the "social debt," and facilitate Chile's reentry into the international community. Cooperation channels are multi- and bilateral as well as nongovernmental. The proportions of multilateral and bilateral cooperation resources are 92% and 8%, respectively, which gives an idea of their relative importance. Indeed, multilateral cooperation has been the Government's principal channel for obtaining resources Programs have been approved with the World Bank, which granted credits for USD 365 million in 1986, the International Monetary Fund (IMF), and the Inter-American Development Bank (IDB) for varied projects in fields such as social development, infrastructures, and financing the economy's external sector. There is a program with the European Community (EC) to support redemocratization and state administration, and there are others through NGOs. The United Nations Development Program (UNDP) has a program of like orientation with eight ministries. The UNDP's Fifth Cycle (1992-1996) is being defined, and in it five priority areas have been created: the environment, governmental administration, with emphasis on regional and local governments, management of local programs, technological development, and international economic relations.

These programs will receive USD 10 million in financing. UNICEF has approved a five-year, USD 5 million plan for various social development programs.

Bilateral cooperation was sharply reduced after the 1973 military coup. The European countries have channeled their cooperation through European and Chilean NGOs. Bilateral cooperation agencies have resumed relations with the Government only recently, following the reestablishment of democracy. Their fields of operation are quite varied. France, Germany, Italy, the Netherlands, Spain, and Sweden support programs of the Ministries of Health, Education, and Housing and have financed activities of the Ministry of Planning's Social Solidarity Fund (FOSIS). Canada provides support to academic institutions and NGOs. France has provided technical cooperation, specifically in the field of railways. The U.S. Agency for International Development (USAID) conducts activities to promote private enterprise and redemocratization, and Japan has offered USD 300 million for railways, irrigation, and wastewater treatment. Italy has contributed USD 25 million annually to governmental agencies through multilateral bodies. Germany has provided DEM 978 million up to 1986, especially through German NGOs (DEM 596 million).[33]

NGOs appeared on a large scale starting in 1975 as a result of the country's political and economic situation, in which worsening of the living standards of the poorest in society coincided with the exclusion of many professionals because of the military dictatorship. The democratic opening has required the NGOs to redefine their status in a new scenario by changing their relations with the Government from confrontation to cooperation, complementarity, and joint efforts, without forgetting their autonomy, and with social organizations, donor agencies, and other nongovernmental organizations—the Church, universities, business companies, unions, etc.

Various programs between NGOs and state and municipal bodies as well as FOSIS were carried out in 1991. FOSIS is one of their main links because of the Fund's and the NGOs' commitment to reducing poverty.

In 1991 the Development Cooperation Workshop classified Chilean NGOs according to their presence in the different regions and areas of activity. It found great geographic disparity in their distribution and a great variety of fields of activity:

Region		No. of NGOs	Fields of activity of largest number of NGOs
I	Tarapacá	12	Indigenous minorities (5) Regional development (2) Human rights (2)
II	Antofagasta	4	Human rights (2)
III	Coplapó	3	Human rights (3)
IV	Coquimbo	7	Rural development (5) Human rights (4)
V	Valparaíso	26	General development (4) Rural development (4) Education (4)
VI	O'Higgins	9	Rural development (3) Education (2)
VII	Maule	21	Rural development (8) Education (4) General development (3)
VIII	Bío Bío	41	General development (4) Rural development (6) Regional development (6) Women (4)
IX	Araucanía	33	Rural development (17) General development (5) Health (3) Human Rights (3)
X	Los Lagos	16	Rural development (7) Human rights (5)
XI	Aimén	4	Rural development (3)
XII	Magallanes	3	General development (2)
Metropolitan		181	CAI (31) General development (21) Education (19) Rural development (16) Women (14) Youth (10) Human rights (9) Unions (8) Health (8) Environment (8)