HEALTH SYSTEMS PROFILE
GUATEMALA

MONITORING AND ANALYSIS
HEALTH SYSTEMS CHANGE/REFORM

Third Edition

(February, 2007)

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Pan American Health Organization

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I. Title

1. HEALTH SYSTEMS
2. ESSENTIAL PUBLIC HEALTH FUNCTIONS
3. GUATEMALA

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EXECUTIVE SUMMARY

Guatemala covers a land area of 108,889 square kilometers, with a population of 13 million in 2006. The average population density is 120 inhabitants per square kilometer, and 54% of the population lives in rural areas. Forty percent of the population is under 15 years old and 41% is indigenous. The population structure has a dependency index of 1 to 1. More than half of the population lives in poverty and nearly 16% in extreme poverty. Nearly 67% of workers are not employed by a company or are not on a farm's payroll or officially registered in the Guatemalan Social Security Institute (IGSS). The country's mortality and birth rates have declined in the last 15 years. Life expectancy at birth has increased for men from 59.78 to 63.01 years (from the 5-year periods 1990-1994 to 2000-2005) and for women from 65.54 to 68.70 years.

The country's morbidity profile has generally remained stable during the period 1990-2005, with a pattern of infectious and nutritional diseases mainly in the group of children under 5 years of age. Moderate and severe malnutrition have not varied significantly in the last five years, remaining prevalent in the 3–to-59-month-old group at 49 per 100, or 3% higher than that found in 1998/99. The proportion of mortality attributable to communicable diseases declined in the 1990-2005 period, but it remains a leading cause; however, deaths from cardiovascular diseases and tumors have increased. The maternal mortality rate reported in 2000 was 153 per 100,000 registered live births. The leading causes of maternal death were hemorrhage and sepsis. Infant mortality for the period 2000-2005 was 39 per 1000 live births and 15 for the 1-4-years-old group. Infant and child mortality data show that the most vulnerable group is the rural indigenous population.

Health care in the public sub-sector is under the responsibility of a network of services from the Ministry of Public Health and Social Welfare (MSPAS), the IGSS, the health services of the Ministries of Defense and Government, and the San Carlos University. The MSPAS has a total of 1304 health facilities of diverse complexity. The IGSS has 139 establishments.

The for-profit private sub-sector is made up of hospitals, nursing homes, clinics, pharmacies, and laboratories authorized by the MSPAS. The nonprofit private sub-sector consists of nongovernmental organizations (NGOs), which currently total more than 1000, and also of traditional medicine.

Education and training of health professionals takes place in the universities. Five of the country's 11 universities train physicians and surgeons, with the National University offering degrees in the capital and in the western part of the country. Three private universities provide training in the capital and one in the western region.

As a part of the health reform process, priority-program standards for all three levels of care were set in 1998. They were updated in 2005, and in 2006 disseminated through a directive to all staff responsible for direct patient health care in first- and second-level services.

The Councils of Urban and Rural Development have been instrumental in applying the policy of decentralization along with participation of state and municipal officials and members of civil society. Since 1994, 10% of the national budget has been distributed annually among the municipalities.

The MSPAS embodies the country's steering role in health and takes leadership in all the processes defined in the government's policies on health. The MSPAS is exclusively responsible for regulation and management; and along with other governmental and nongovernmental institutions, it shares responsibilities regarding assurance, delivery of services, financing, and essential public health functions. The system of service provision in the country tends to be fragmented and segmented, since there is no functional integration or separation of functions between subsystems, each serving specic population groups that have access to different services.

Health financing comes mainly from out-of-pocket household payments, the central government, companies and international cooperation. Health expenditure as a percentage of GDP increased by 15% in 2003 over 1999. The country's reform process officially began in 1996 with the "Health Services Improvement Program" financed by the Inter-American Development Bank (IDB) and implemented by the MSPAS.[1] The financial reform has allowed responsibilities to be transferred to the sub-national level, since the Health Areas Authorities are responsible for programming and execution of the allocated budget, as well as overseeing contractual agreements with local providers and administrators for regulated services.

In recent years, health reform has helped to improve access to services for the most under-

1. Análisis de las reformas del Sector Salud en la Sub Región de Centro América y la República Dominicana, July 2002, LACRSS.

served population; access increased by 66% from 1990 to 2004. The Ministry of Health's main strategy for basic service delivery and increased coverage is the Comprehensive Health Care System (SIAS), mainly in primary care, which provides services to the public with emphasis on women, children, and environmental risks. Approximately 50% of departments with larger indigenous populations have at least 30% of their populations covered by SIAS, in an effort to reduce existing inequalities in infrastructure and human resource distribution.[3] Some 3.3 million Guatemalans are covered by basic MSPAS services.

During 2006, the Universities Research Program on Human Development implemented the "*Mapeo de Actores Polítcos en Salud"* ["Political Stakeholder Mapping in the Health Sector"] as part of the project "Social Construction of the Future of Health Care and Social Security in Guatemala." Through the constructive participation of civil society, state agencies and non-governmental institutions, the MSPAS has been recognized as the central axis that allows an understanding of the key stakeholders in public health management. Some 37 stakeholders have been identified, the primary ones being those important in decision-making on health-related issues. In order to reach a consensus on the views of different stakeholders, a committee of experts from different health-related areas (health institutions, municipalities, international agencies, civil servants, and universities) was assembled to contribute to the processes of change being defined by the health sector and financed by reimbursable public funds, and to promote citizenship participation and empowerment in the process of strengthening democracy.

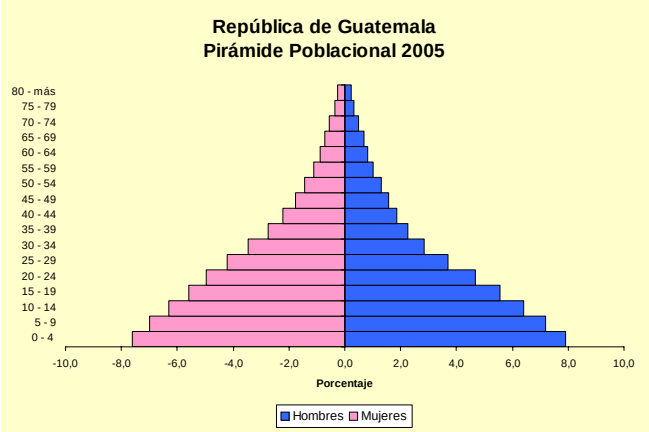
1. CONTEXT OF THE HEALTH SYSTEM

1.1 HEALTH SITUATION ANALYSIS

1.1.1. Demographic Analysis

According to the National Statistics Institute's projections based on the XI Population Census, the country's total population in 2006 was estimated at 13,018,759. The average annual population growth has been 2.65 per 100 inhabitants over the last fifteen years.

The demographic structure shows a predominantly young population with more than 40% under the age of 15, with little variation in the last fifteen years. Life expectancy at birth has increased for males from 59.78 in the 5-year period of 1990-1994 to 63.01 in the 5-year period of 2000-2005, and for females from 65.54 to 68.70 over the same periods.



Source: Population projections 2000-2020 based on the XI Population Census, National Statistics Institute, 2002.

Population density averages 120 inhabitants per square kilometer, and is concentrated in urban areas, where the rate has increased in recent years from 34.97% in 1990 to 46.14% in 2005. The indigenous Mayan group represents 41% of the country's total population.

During the period 1990-2005, mortality rates and birth rates have decreased 24% and 8%, respectively. Infant and child mortality rates have decreased 23% and 22%, respectively, during the same period.

Table 1. Demographic Trends

Guatemala 1990-2005

Indicator/Period	1990-1994	1995-1999	2000-2005
Percentage of economically active population (1)	49.75	50.32	50.27
Annual population growth rate (1)	2.66	2.68	2.61
Urban population (%) (1)	34.97	34.98	46.14
Indigenous population (%) (1)	41.74	41.72	41.03
Total fertility rate (2)	5.40	4.93	4.41
Crude birth rate per 1000 inhabitants (3)	38.90	37.34	35.80
Crude death rate per 1000 inhabitants (3)	8.01	6.89	6.09
Maternal mortality rate per 10000 live births (4)	219	190	153
Neonatal mortality per 1000 live births (5)	26	23	22
Infant mortality rate per 1000 live births (5)	51	45	39
Post-infant mortality rate per 1000 live births (5)	18	14	15
Child mortality per 1000 live births (5)	68	59	53
Life expectancy at birth:			
Males	59.78	59.78	63.01
Females	65.54	67.22	68.70

Sources: (1) 5-year data (1990-1994) from the INE 1994 Census. 1995-1999 five-year average population according to INE population projections and INE 2002 Census. (2) *Guatemala, Estimaciones y Proyecciones de población 1950-2050*, National Statistics Institute INE/Celade. (3) *Guatemala, Estimaciones y Proyecciones de población 1950-2050*, National Statistics Institute INE/Celade (4) Maternal mortality data from the *Informe de Línea Basal de Mortalidad Materna para el año 2000*, Guatemala, MSPAS, *Estudio de Mortalidad Materna*, Medina 1989, ENSMI 1995, and *Línea Basal* 2000. (5) National Survey on Maternal and Child Health 1995-1998-2002.

1.1.2. Epidemiological Analysis

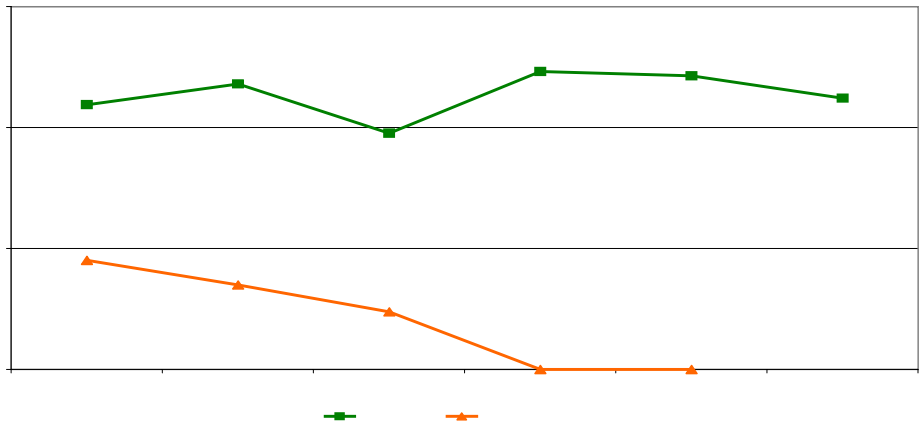
The country's morbidity profile has remained steady during the 1990-2005 period, with patterns of infectious diseases and nutritional deficiencies occurring mainly in children under 5 years of age. According to the 2002 National Survey on Maternal and Child Health, moderate and severe malnutrition has not varied in recent years; it is most prevalent in the group of infants 3-to-59-months-old, at 49 per 100 (3% greater than in 1998/99). Statistics on chronic malnutrition vary according to place of residence; in rural areas the reported prevalence is 55.5%, and in urban areas, 36.5%. Some 22.7% of children under the age of 5 suffer from chronic malnutrition, and 3.7% from severe chronic malnutrition; the figures are higher in rural areas with 25.9% as compared to 16.2% in urban areas.[2]

Progress in immunization programs can be seen in the decrease in the number of cases of diseases preventable by vaccine; no case of measles has been reported since 1999. The last

[2] Chronic malnutrition is a deficiency in the weight-for-age indicator, and is the result of past and recent nutritional deficiencies.

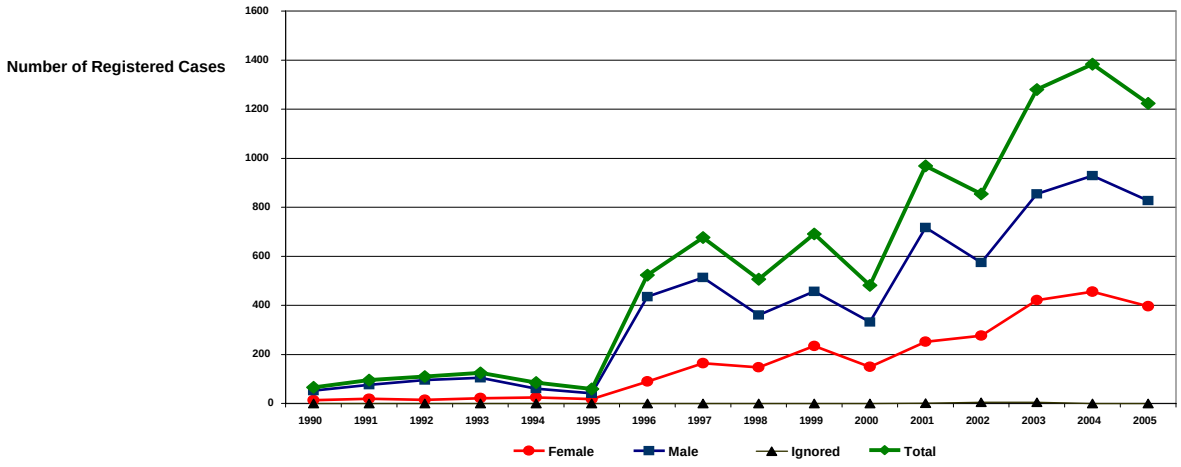
case of diphtheria was reported in 1997, and the eradication of polio was certified in 1993. In 2003, 3 cases of tubercular meningitis were reported.

Vaccine-preventable Diseases: Number of cases per year



According to MSPAS records, the incidence of pulmonary tuberculosis has decreased from 24.66 to 21.54 per 100,000 inhabitants from 1993 to 2002. However, the number of cases of AIDS has been rising. The rate of AIDS in men has risen from 1.7 to 4.2 in the same period.[3]

AIDS Cases by Year, Guatemala, 1990-2005



Source: Epidemiological Bulletins, Epidemiological Surveillance, Department of Epidemiology, MSPAS.
National Program on Tuberculosis and National Program on AIDS/Epidemiological Surveillance, MSPAS.

[3] Epidemiological Bulletins, Epidemiological Surveillance, Department of Epidemiology, MSPAS, National Program on Tuberculosis, National Program on AIDS/Epidemiological Surveillance, MSPAS.

More cases of malaria are reported annually in the country than any other vector-borne disease, with an average of 18,027 in the 5-year period 2000-2005. Although the number of cases decreased in the last five years, it should be noted that the number of local lab tests done during this period also decreased. Cases of dengue were epidemic in 1991, 1996, 2000, and 2001. After 2001, the number of cases has generally remained steady, with a slight decrease.[1]

Table 2. Morbidity and Risk Factors
Guatemala, 1990-2005

Period/Indicator	1990-1994		1995-1999		2000-2005	
	Urban	Rural	Urban	Rural	Urban	Rural
Prevalence of low birth weight (1)	13.4	7.9	11.4	7.9	13.1	11.3
Fertility rate in adolescent women (15-19 years) (1)	99	148	86	139	85	133
Annual prevalence of moderate and serious nutritional deficit in children under 5 (2)	49.7		49.7		48.7	
Percentage of deliveries attended by trained health personnel (2)	34.3		40.4		42.1	
Annual incidence of infection by influenza (4)	N/D	N/D	N/D	N/D	N/D	N/D
Annual number of confirmed cases of dengue (5)	4412		1650		979	
Annual number of confirmed cases of malaria (5)	35649		23506		18027	
Annual incidence of TB (6)	24.66		25.53		21.54	
Annual incidence of TB positive sputum-smear microscopy (6)	21.21		20.9		14.44	
Annual incidence of HIV/AIDS (7)	99		534		1434	
Ratio of cases of HIV/AIDS (male/female) (7)	4.2		2.6		1.7	
Annual incidence of malignant lung neoplasms (8)	N/D		27		24	
Annual incidence of malignant breast neoplasms in woman (8)	N/D		191		245	
Annual incidence of malignant cervix neoplasms (8)	N/D		674		747	

Source: (1) Guatemala. National Survey on Health of Mothers and Children 1995-1998-2002 (2) Guatemala. National Survey on Health of Mothers and Children 2002. (3) Epidemiological Bulletins, Epidemiological Surveillance, MSPAS. (4) There has been no system to monitor Influenza. (5) Epidemiological Bulletins, Epidemiological Surveillance, MSPAS (6) National Program on Tuberculosis, 1993-1998-2002. (7) National Program on AIDS/Epidemiological Surveillance, MSPAS. (8) Registro de Cáncer en Guatemala, INCAN. 1997 and 2002 (occurrence of cases).

According to INE data, the number of deaths due to communicable diseases has decreased from 76 to 62% of total recorded deaths; however, deaths from cardiovascular diseases have increased by 61% and from tumors by 100% during the same period. In 2004, 53% of deaths from tuberculosis occurred primarily in the indigenous group, with a mortality rate of 1.85 per 100,000 inhabitants, unlike the non-indigenous group, which had a rate of 1.36 per 100,000 inhabitants. AIDS is another communicable disease that varies significantly across ethnic groups, with 62% of the cases occurring in the non-indigenous group at a rate of 2.28 per 100,000, compared to 1.64 per 100,000 inhabitants in the indigenous group. Data from 2004 on mortality

from cardiovascular diseases showed a rate of 52 per 100,000 inhabitants; the rate for the non-indigenous population was 42 per 100,000 inhabitants (57% of total deaths), compared to a rate of 37 per 100,000 inhabitants in the indigenous population. Mortality from external causes occurred at an average rate of 37 per 100,000 inhabitants and was greater in the non-indigenous group.

Table 3. Mortality Rates
Guatemala 1990-2005

	General (rate per 1000) (1)	Maternal (2)	TB (Total Deaths) (3)	AIDS (Total Deaths) (3)	Malaria (Total Deaths) (3)	Cardiovascular Diseases (Total Deaths) (3)	Malignant Neoplastic Diseases (Total Deaths) (3)	External Causes (Total Deaths) (3)
Period								
1990-1994	8.01	219	722	29	784	32035	15210	37853
1995-1999	6.89	190	521	1021	472	40330	22502	41877
2000-2005	6.09	153	402	2678	239	46875	28843	45583
Gender								
Males	6.4		218	515	15	4972	2905	8101
Females	4.5		118	169	13	4815	3449	1753
Area								
Urban	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Rural	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Ethnicity group								
Indigenous	4.1	211	106	94	10	2115	1489	2010
Non-indigenous	2.4	70	91	152	11	2803	1753	2578
Total			197	246	21	4918	3242	4588
% Indigenous			53.81	38.21	47.62	43.01	45.93	43.81

Source: (1) Author's calculations based on INE data on mortality and INE population projections; (2) Report on Baseline Maternal Mortality, 2000, Guatemala, MPSAS (3) Own calculations based on INE data; annual average number of mortality cases by gender and ethnic group, same source, 2004, most recent available data.

The maternal mortality rate recorded in the 2000 baseline was 153 per 100,000 live births. The leading causes of maternal death were hemorrhage and sepsis. Infant mortality due to problems in the prenatal period accounted for 38% of the total, and 37% due to respiratory infections and diarrheal diseases, which in the 1-4-year-old group caused 61% of total deaths; 5% of total childhood deaths recorded are due to nutritional deficiencies. Child mortality is greater in rural and indigenous populations (66 and 69 per 1000 live births, respectively).

Table 4. Infant Mortality
Guatemala 1990-2005

	Newborn (0-28 days)	Post-Newborn (28 Days to 1 Year)	Infant (0 to 1 Year)	Post-Infant (1-4 Years)	Total (1 to 5 Years)
Period (rates per 1000 live births) (1)					
1990-1994	26	25	51	18	68
1995-1999	23	22	45	14	59
2000-2005	22	16	39	15	53
Cause of death (number of deaths) (2)					
Prenatal disorders	3796	0	3796	0	0
Infectious intestinal diseases	0	909	909	1044	1071
Respiratory disease (ARI)	10	2824	2834	1537	1599
Birth defects	383	112	495	29	32
Nutritional deficiencies	1	281	282	212	222
Other	98	1624	1722	1386	1519
Area					
Urban	21	14	35	11	45
Rural	25	23	48	18	66
Ethnic group					
Indigenous	26	24	49	21	69
Non-indigenous	22	18	40	13	52
Total deaths	**4288**	**5750**	**10038**	**4208**	**4443**

Source: (1) National Survey on the Health of Mothers and Children 1995-1998-2002; (2) Author's calculations with 2004 INE data, occurrence of cases; (3) National Survey on Health of Mothers and Children 2002.

1.1.3. The Millennium Development Goals

The Vice-Presidency of the Republic coordinates the Social Cabinet, the governmental entity that congregates the Ministries and Secretariats in charge of the actions related to the Millennium Development Goals. In 2004, a series of processes in the areas of information, targeting, coordination, monitoring, and evaluation of actions in support of the MDGs and advances in national social policy began to be implemented.

The Information System for Governance—SIGOB—is the instrument for monitoring the performances of the Ministries and Secretariats involved in the proposed goals. For monitoring purposes, base years and information sources have been established for each goal. Government agencies have been appointed as responsible for each goal, in the case of health, the Ministry of Public Health and Social Welfare, through specific programs. Most strategic plans cover the administration's term (4 years), including priority populations and targeting of interventions.

Establishing the Permanent Forum of Political Parties in 2002 demonstrated the government's efforts to set national priorities. The political parties, through the Shared Domestic Agenda, showed their multilateral political commitment to contribute to the transformation of Guatemala, taking as a base the Peace Accords and the Human Development Reports in order to identify the country's needs and prepare official plans. The Guatemalan Government, through the Presidential Secretariat for Planning and Programming, assumed the responsibility for preparing the Second Progress Report on the Millennium Development Goals in 2005, with participation and support from international organizations. This report is especially important, since Guatemala was selected as a pilot country for preparation of a national report on monitoring the goals.

The United Nations System conducted a review of the progress made toward meeting the MDGs in Latin American and Caribbean countries, which were classified into five groups, four of them according to levels of human development.[4] Guatemala, according to its level of human development at the beginning of the present decade, was classified in the group of countries with low and medium-low human development index, indicating that it is one of the countries that must make greater efforts to reach these goals. Progress since 1990 in reducing poverty in Guatemala, associated with an average annual growth rate of 3.6% since then, shows that the rate required (4.8% annually) is not very different from the current prevailing rate. Annual population growth continues at about 2.0%, which means that by the year 2015, the country's population will be 24-31% greater than it is now. Thus, progress toward the goals, in terms of reduced percentages in the indicators, calls for more concerted efforts.

[4] "The Millennium Development Goals: a Latin American and Caribbean Perspective," published by the United Nations, LC/G.2331-P, ISBN: 92-1-322741-8. United Nations, August 2005.

Table 5. The Millennium Development Goals

MDG	Institution(s) Responsible	Standardized Databases	Updated Information	Identification of Gaps Up To 2005	Identification of Interventions	Strategic Plan 2015	Allocation of Budget
1. Eradicate extreme poverty and hunger.	Vice-Presidency of the Republic, SEGEPLAN, SESAN, SEPAZ, Councils on Urban and Rural Development	National Survey on Living Conditions (ENCOVI)	1989 base year ENCOVI 2000	ENEI 2004, maps of poverty and NBI 2002, indigenous rural population	The strategy *Guate Solidaria Rural* is the main mechanism for reducing extreme poverty. Focused on 41 municipios with poverty and food insecurity. Through social participation and articulation and targeting of existing public supply, to improve human capital and expand the opportunities for the poorer. The administrations after the signing of the Peace Accords have included in their work plans the commitment to reduce poverty.	Guatemalan Rural Collective, Peace Accords Poverty Reduction	In each branch
2. Achieve universal primary education	MINEDUC	MINEDUC statistics, Population Census 2002	1994 base year	2002 population CENSUS and MINEDUC report: indigenous, rural and female populations.	National Strategy of Educational Reform presented by the Ministry of Education. Aimed at achievement of results under these four guidelines: 1) educational quality, 2) teaching career, 3) new management model and 4) improvements in school infrastructure. Participation of private sector and NGOs promoted in order to meet the proposed goals and objectives.	National Education Plan 2004-2007 and Educational Reform National education Action Plan for all Guatemalans	Governmental and private enterprise
3. Promote gender equality and empower women	Presidential Secretariat for Women	ENCOVI System Statistical of the different institutions	nd	nd	Legislation promoting respect for gender and equity. Scholarship program for girls, participation of rural communities, through educational committees known as COEDUCAS.	Strategic Plan for Education of Girls 2004-2007. Promotion and training of working women in the Ministry of Labor.	MINEDUC, Reproductive Health

Table 5. The Millennium Development Goals

MDG	Institution(s) Responsible	Standardized Databases	Updated Information	Identification of Gaps Up To 2005	Identification of Interventions	Strategic Plan 2015	Allocation of Budget
					Bi-Literacy Project, a bilingual literacy project developed in the *mam* and *q'anjob'al* areas. Establishment of social organizations including the Defense of Indigenous Women.		
4. Reduce child mortality	MSPAS	National Survey on Health of Mother and Child	1987 base year	Ethnocultural origin and place of residence (urban/rural)	The MSPAS, through the Reproductive Health and Immunization Program, has implemented actions to meet this goal, including: establishment of maternity clinics, introduction of the pentavalent vaccine, strengthening of the coverage outreach program in the areas with greater maternity needs, to strengthen the second level of care—CAIMI.	National Health program Reproductive and Vaccination	MSPAS
5. Improve maternal health	MSPAS	Medina Study 1989, Baseline 2001 Projections based on these two reports	1989 base year, Study of Medina	Place of residence and ethnocultural origin	The MSPAS established the National Program for Post-Abortion Health Services, which since 2004 operates in 22 hospitals of the country, canton maternity clinics, of CAIMI and strengthening of the program to extend coverage in areas identified as critical.	National Reproductive Health Program, adolescent care, Programs International ALERT (initiative for safe motherhood)	MSPAS, international organizations, Global Fund for the National Surveillance Plan, Action Program against AIDS in Central America (PASCA)
6. Combat HIV/AIDS, malaria, and other diseases	MSPAS	System to report cases of HIV/AIDS Tuberculosis Report, no data on others	Base year HIV/AIDS 1990	By place of residence and ethnic origin	HIV/AIDS is included in the Political Constitution, in the Health Code, and in the Penal Code. HIV/AIDS has also been subject of specific legislation. The Blood Banks Law (National Policy on Population and Development) includes guidelines for action on	National Strategic Plan on STD/HIV/AIDS 2004-2008 Transfusion Medicine Program and Blood Banks	MSPAS, international organizations, Global Fund in support of the National Plan of Surveillance, Action Program against AIDS in Central America (PASCA).

Table 5. The Millennium Development Goals

MDG	Institution(s) Responsible	Standardized Databases	Updated Information	Identification of Gaps Up To 2005	Identification of Interventions	Strategic Plan 2015	Allocation of Budget
					HIV/AIDS. The specific MSPAS program implements comprehensive care activities and retroviral treatment, epidemiological surveillance and preventive actions against mother-child transmission. The Global Fund supports the National Plan of Epidemiological Surveillance of second-generation HIV, as well as the Action Program against AIDS in Central America (PASCA) and UNAIDS.		
7. Ensure environmental sustainability	National Environment Commission, CONAP, INAB, Ministries of Environment, Agriculture, and Health	Escobar & Rodriguez study1990, Protected areas system in Guatemala	Base year 1990	nd	In the last two years important legal instruments have been established, such as the Government Policy on Water Resources (2004), the National Policy on Comprehensive Management of Solid Waste (2004), the National Policy on Environmental Education (2004), the National Policy on Fire Management (2005), and the Policy on Soil Conservation. As an effort to improve and integrate environmental management, the Guate Verde program was developed. Also, establishment of the Gender Equity Policy in the Environmental Management Sector and		From each participating institution, NGO, and San Carlos University

Table 5. The Millennium Development Goals

MDG	Institution(s) Responsible	Standardized Databases	Updated Information	Identification of Gaps Up To 2005	Identification of Interventions	Strategic Plan 2015	Allocation of Budget
					the Action Plan 2003-2008, as well as the Indigenous Populations Unit of the Ministry of the Environment and Natural Resources.		
8. Promote a global partnership for development	Cabinet on International Cooperation coordinated by Vice-Presidency of the Republic, includes Ministry of Finance; SEGEPLAN, Ministry of Foreign Affairs	nd	2000 data from Bank of Guatemala, ENEI 2004, SEGEPLAN 2005, ECLAC 2005	nd	The Guatemalan government formed the International Cooperation Cabinet (GCI) in 2005 as an inter-institutional management tool, through which efforts are coordinated to achieve better quality and timeliness in the management and execution processes of the projects partially financed with external resources.	Cabinet on International Cooperation, Access to markets: Free Trade Agreement, Young People Access to Work. Access to drugs	Participating institutions, NGOs, and private enterprises

Source: Author's own compilation based on database on progress toward achieving MDGs in Guatemala, Second Report on Advancing the Millennium Development Goals, SEGEPLAN Guatemala March 2006.

1.2. HEALTH DETERMINANTS

1.2.1. Political Determinants

Guatemala is established as a free, independent, sovereign, and democratic nation. Each government administration lasts for a period of four years, with elected representatives in the Executive and Legislative Branches, as well as municipal mayors. The signing of the Peace Accords in 1996 constituted a historical event, marking a new course in the consolidation of the Republic of Guatemala.

Guatemala is divided politically and administratively into 22 departments and 332 municipalities. Since 1985 the State has been constitutionally responsible for systematically promoting administrative economic decentralization, in order to achieve satisfactory regional development in the country. The Councils on Urban and Rural Development have been the main instruments for implementing the decentralization policy with participation of staff members of the executive branch, the municipalities, and civil society. Since 1994, 10% of the domestic budget has been allocated to the municipalities for local development projects.

The Social Cabinet is responsible for coordinating and supporting social development activities at the national and regional (Central American) levels. It includes the Ministries of Health; Education; Communications and Public Works; Agriculture, Livestock and Food; Culture and Sports; Work; the Secretariat of Social Works of the First Lady; Food Security; SEGEPLAN; and FONAPAZ.

The Ministry of Health has decentralized budgetary operations to the Health Area Authorities, which prepare annual operational plans that include the budgeting for health activities in their jurisdiction, which are consolidated at the central level by the planning and budget units. In 1996, the institutional organizational reform and the service delivery reform were initiated, which made possible access to basic health programs for the most under-served population groups.

For 2004-2008, health priorities are established in the Guidelines of the National Health Plan and include the following policies:

a) Strengthening MSPAS' steering role;

b) Meeting Guatemala's health needs through available health services with quality, warmth, equity, and an intercultural and gender approach in the different levels of care;

c) Strengthening the process of deconcentration and decentralizing competencies, responsibilities, resources and decision-making power to health areas and hospitals;

d) Procurement and provision of inputs in a timely way for implementing actions of promotion, prevention, recovery and rehabilitation in health;

e) Modernize MSPAS administrative/financial management system and planning system to improve access to health services;

f) Strengthen human resource development and management in the health sector;

g) Promote actions to support environmental cleanliness that improve the population's quality of life, and;

h) Protect the population from the inherent risks in consumption of and exposure to food, drugs and harmful substances.

1.2.2. Economic Determinants

In the last fifteen years, economic growth has averaged 2.4% annually; the greatest increase was reported in 2005 with 3.2% over the previous year. Guatemala's economy is based mainly on trade, which increased by 0.13% between 2000 and 2005, of agriculture, forestry, game, and fishing whose contribution has held steady between 22.5 and 22.9% in the last five years. The manufacturing industry, despite having decreased, remains in third place economically, and transportation, storage, and communications activities hold fourth place in the national economy.[5]

Another activity that generates income for the country is the remittances sent to family members by Guatemalans living in other countries. According to the Bank of Guatemala, income from foreign exchange was equal to 9 to 9.4% of the GDP in the period 2004-2005. In the period studied (1990-2005), although the inflation rate has fluctuated, reaching its peak in 1990 (60.64), on average it has been around 7.5%.

The dependency ratio has remained steady at an average of 1 to 1. According to the National Survey on Conditions of Life (ENCOVI) and Expenses and Income (ENEI), the

economically active population is considered to include those over 10 years old; these statistical sources show that 69.7% of the population is employed.

Table 6. Trends of Several Economic Indicators
Guatemala 1990-2005

Indicator	1990-1994	1995-1999	2000-2005
Real GDP $ (1)	14,122,2	19288.9	27317.1
Per capita GDP in US$ at current prices (Bank of Guatemala) (1)	1411.7	1718.3	2,205
Per capita public spending (2)	nd	186.48	233.37
Economically active population (EAP) (2)	49.75	50.32	50.27
EAP population employed (INE 10 years or more) (3)	nd	nd	69.7
Total public spending as % of GDP (1)	nd	nd	11
Public spending in health services as % of GDP (4)	nd	3.13	5.36
Private spending in health as percentage of total expenditures (4)	nd	55.95	61.75
Out-of-pocket payments (% of total health expenditure) (4) (5)	nd	43	54
Annual inflation rate (5)	21.43	7.8	7.33
Remittances as % of GDP	nd	nd	9.2
Foreign debt as % of GDP	nd	nd	nd
Percentage of female head of household (6)	18.2	nd	22.7
Service of foreign debt as % of GDP	nd	nd	nd

Source: (1) Human Development Report 2005; (2) Calculations based on INE population projections, Bank of Guatemala data, and Public Finances; (3) MECOVI-INE National Surveys of Employment and Income ENEI4, February-March 2003, does not include open underemployment and total unemployment; (4) *La situación de salud y su financiamiento 1999-2003*; (5) INE/Bank of Guatemala; (6) Population Census X and XI, 1994, 2002.

1.2.3. Social Determinants

During the period 1990-2005, the urban-dwelling population has grown by 32%, and 22% of the country's total population lives in the greater metropolitan region. More than 41% of the country's total population is indigenous, and according to data from different sources, this is the most impoverished group. More than half the population in Guatemala (56%, ENCOVI 2000) lives in poverty, and nearly 16% below the line of extreme poverty. Except in the metropolitan region, in all the country's departments, one of every two inhabitants lives in poverty.

[5] Unpublished document, *La situación de salud y su financiamiento 2004-2005*, MSPAS.

Table 7. Levels of Poverty
Guatemala 2004

	Percentage of Population in Poverty	
Area	**Poor (2)**	**Extremely Poor (1)**
Total	56	21.50
Urban	75	9
Rural	27	32
Ethnicity		
Indigenous	76.1	29
Non-indigenous	41.4	15
Gender		
Male	nd	23
Female	nd	13

Source: (1) Second Report on Advancing the Millennium Development Goals, 2006; ENEI 2004; (2) World Bank calculations based on ENCOVI 2000.

Table 8. Incidence of General and Extreme Poverty: Numbers and Percentages of Municipios
Guatemala 2006

General poverty			Extreme poverty		
Percentage of Poverty	**Number of Municipios**	**Percentage of Municipios**	**Percentage of Poverty**	**Number of Municipios**	**Percentage of Municipios**
6.27-30%	33	10%	**0.38-8.04%**	80	24%
30.01-45%	33	10%	**8.04-12.11%**	49	15%
45.01-60%	61	18%	**12.11-22.52%**	77	23%
60.01-75%	80	24%	**22.52-32.35%**	60	18%
75.01-99.99%	124	37%	**32.35-64.88%**	65	20%
Total	331	100%	**Total**	331	100%

Source: Poverty maps, 2006, SEGEPLAN, based on data from SEGEPLAN, INE, and URL.

The labor conditions of population groups vary according to place of residence and gender. According to ENCOVI, in 2000, total unemployment was 14.3% of the population over 15 years of age, and visible underemployment was 16%.[6] These two indicators are higher in the urban metropolitan area with total unemployment at 18.4% and visible underemployment at 16.2%. By gender, total unemployment is 24.7% for women and 6.6% for men; and in rural areas, 27% for women and 5.1% for men. According to the Survey on Child Labor in Guatemala (included in ENCOVI 2000), 20% of the 7-14-year-old children work; in rural areas the percentage is 24%, and 30% for the indigenous population. And for the group of children 7-9-years-old, at least 2.7% have worked. Children who work miss out on the opportunity for formal education, affecting the productivity and economic

competitiveness of the country. Of every 100 children who work, only 67 are enrolled in primary school. The main employers of child labor are agriculture, manufacturing, trade, and domestic work for more than 4 hours per day. The prevalence has been increasing: in 1994, the Population Census reported 7.9%, and eight years later in 2002, ENEI reported 23.5%.

Table 9. Employment Status by Gender and Income
Guatemala 2004

Employment Sector	Sector Total	Urban Metropolitan	Urban	Rural
Total				
Formal employment	**69.7**	**67.7**	**72.7**	**70**
Visible under-employment	16	16.2	13.9	13.8
Total unemployment	14.3	18.4	13.4	16.2
Males				
Formal employment	**77**	**69.7**	**78.8**	**78.4**
Visible under-employment	16.4	20	12.8	16.5
Total unemployment	6.6	10.3	8.4	5.1
Females				
Formal employment	**59.9**	**63.7**	**65.6**	**57.4**
Visible under-employment	15.4	16	14.1	15.6
Total unemployment	24.7	22.9	20.3	27

Source: ECOVI 2000, ENEI, September-October 2004.

The prevalence of family violence reported in the ENCOVI 2000 was 33% in the non-indigenous population and 22% in the indigenous population. INE statistics on family violence show a total of 8,231 cases in 2004; 86% of the victims were female, and 58% non-indigenous; in 85% of the cases, the assailants were spouses or live-in partners.

In terms of education level, the country's illiteracy rate as reported by the Ministry of Education in 2001 was 31.5 per 100 inhabitants over 14 years of age. The net attainment of primary schooling is 92.4% in children from 7 to 12 years, 94.7% for boys and 90.1% for girls; these indicators decrease significantly to 31.1% for completion of high school, and 17.7% for diversified education.[7] Approximately 4.4 million Guatemalans are of Mayan descent, 22 ethnic groups are officially recognized, and 25 ethnic-linguistic groups can be identified. Of all the Mayan, Xinca, or Garifuna peoples, 46.7% are considered to be bilingual in Spanish and their native language.[8]

[6] In Guatemala, the category "visible underemployment" applies to those who work less than 40 hours per week and who would like to work more. "Invisible underemployment" includes those who work 40 hours a week or less and whose income is less than the minimum wages of the branch of economic activity in which they work.
[7] *Anuario Estadístico 2004*, Informatics Unit, the Ministry of Education, Guatemala.

1.2.4. Environmental Determinants

The Ministry of the Environment and Natural Resources is responsible for formulating and implementing policies on conservation, protection, and improvement of the environment and natural resources, to promote the human right to a healthy and ecologically balanced environment; and to prevent pollution and reduce environmental degradation and the loss of the natural heritage. ENCOVI 2000 data show that 69% of households have access to running water and 47% to adequate sewage removal. The Ministry of Public Health and Social Welfare, through the Department of Health and Environmental Programs, conducts regulatory actions and monitoring of health-related environmental risks, including the monitoring of water quality, disposal of liquid and solid wastes, and regulation of the food industry and sales. Under the North American Free Trade Agreement (NAFTA), concerted actions and efforts have been made to develop capabilities in aspects of food safety in order to enter international markets.

No regulatory entity or regulator exists for drinking water services and treatment. Provision of drinking water services and treatment is decentralized and each municipality regulates it in accordance with the Municipal Code. Less than the 40% of the water for human consumption is estimated to receive disinfectant in the urban areas, and less than the 15% in rural areas. Around 4% of the municipalities apply *some* treatment to wastewater, while the remainder is dumped into natural bodies of water, mainly rivers. (EVAS 2000).

In many of the country's populated areas, as well as in communities bordering on farmland, the air quality is poor due to pollution from industrial fumes, exhaust from motor vehicles, and the chemicals used for fumigation. Also, the use of firewood, coal, and other fuels in rural dwellings has an impact on air quality, as do methane emissions from garbage dumps and smoke from forest fires in the dry season. In 2003, the MSPAS approved and published the Regulation of Solid Waste for Hospital Management, which is in effect.

The climatic changes from the dry season to the rainy season, and vice versa, have a direct and significant impact on health, for example, by altering the availability of food and clean water. These conditions along with Guatemala's topography cause the country to be

[8] Human Development Report, Guatemala 2005.

vulnerable to various natural disasters, including floods, droughts, landslides, earthquakes, and volcanic eruptions.[9]

2. FUNCTIONS OF THE HEALTH SYSTEM

2.1. STEERING ROLE

The MSPAS is the seat of the country's steering role in health and takes the leadership in all processes defined in official health policies. The MSPAS also participates actively with the various stakeholders and undergoes social audits.

2.1.1. Mapping of the Health Authority

In Guatemala, the Health Authority is concentrated in the MSPAS. The country's Constitution recognizes the enjoyment of health as a basic non-discriminatory human right and requires the State to safeguard this right by implementing actions of prevention, promotion, recovery, and rehabilitation through its institutions. In the Health Code, Article 4 (Legislative Decree 90-97), the State, in compliance with safeguarding the health of its citizens through principles of equity, solidarity, and subsidies, defines the MSPAS as the country's steering entity in health, responsible for coordinating with various governmental and nongovernmental stakeholders on health-related issues of the population.

Some of the governmental agencies involved in management and specific regulations on health-related issues include:

- Ministry of Agriculture, Livestock, and Food: Nutrition and Food Safety, the Law of National Systems on Food and Nutritional Safety (Decree 32-2005) and the Farming and Sectoral Policy.
- Ministry of the Environment and Natural Resources: Regional Plan for Investment in the Environment and Health, Governmental Agreement 1993.
- National Commission on Nutrition and Food Safety: Law of National Systems on Food and Nutritional Safety (Decree 32-2005) and the Farming and Sectoral Policy.
- Municipalities: Municipal Code, Legislative Decree No. 12, 2002, Municipal Responsibilities.

[9] *Perfil de la situación ambiental de los niños en Guatemala,* 2003. MSPAS and PAHO.

The Ministry of Health is exclusively responsible for regulation and management and it shares with other governmental and nongovernmental institutions responsibility for assurance, service provision, financing, and essential public health functions.

Structurally, the Office of the Minister constitutes the central axis, directly supported by the technical and administrative vice-ministries. Operationally, four general bureaus have been established: the General Directorate of the Comprehensive Health Care System; the General Office of Health Regulation, Surveillance, and Control; the Bureau of Human Resources; and the Financial Administration Management. The technical support units and others such as the Health Management Information System report directly to the Office of the Minister and are in charge of managing, directing, supervising, monitoring and evaluating the programs and specific services.

2.1.2. Steering of the General Health Policy

The National Policies on Health are reviewed every four years by the democratically elected government, taking into account the development processes already established and the definition of priority programs, disseminated by different electronic and print media to which stakeholders and civil society have access. The MSPAS recognizes, within the Guidelines of the National Health Plan 2004-2008, the mission of steering, regulation, promotion, and guarantee of health for the general population, aimed at preventive care and use of resources with equity, quality, efficiency and transparency in the short-, medium- and long-term; exercising leadership within the sector and organized civil society, ensuring participation in the Councils on Urban and Rural Development.

To fulfill this mission, the health information management system has been established to record and monitor the health situation by generating information from intra- and extra-institutional sources. In the case of vital and demographic statistics, the National Statistics Institute (INE), as mandated by the Constitution, is responsible for compiling them. The data — mainly on morbidity, use, and production of health services, disaggregated by geographical area and services, in some cases by gender — are used in preparing annual operating programs for each level of care.

Health policy has taken primary health care into account since the Alma Ata declaration; however, many initiatives have not been sustainable. Since 1997, primary health care has been made operative through the Expansion of Coverage strategy where basic primary care was defined and a model adapted to establish contracts with health service providers and administrators, to diminish inequities that exist in access to services.

Table 10. Access to Health Services
Guatemala 2006

Data: Level of Disaggregation	Access
Period	
1990-1994 (1)	54%
1995-1999	nd
2000-2005 (2)	89.70%
Area	
Urban	14.40%
Rural	8.30%
Ethnicity	
Non-indigenous (3)	12.0%
Indigenous (3)	8.70%
Level of care	
First level (expansion of coverage)	23.7
Second level (institutional services, public and private)	65.9

Source: Human Development Report, Guatemala 2005; (1) PAHO/WHO 1994; (2) MSPAS 2004, (3) ENCOVI 2002.

WHO defines health services as physically accessible when located closer than a 60-minute trip away; in the case of Guatemala, the National Survey on Living Conditions (ENCOVI 2000) reported that only 10.7% of the adult population seeking care travels less than 60 minutes to obtain health services. Gaps exist with respect to place of residence: the rural population has greater problems of physical access, and since this population has significantly more deficiencies in living conditions, the situation is further complicated due to transportation costs.

Participation of international cooperation in health service projects and programs is defined according to the guidelines established by the National Health Plan and coordinated by the Ministry of Health. This aims at achieving the institutionalization of interrelated processes, avoiding duplication and promoting optimal resource use in the different care and management levels. Working toward this end is the International Cooperation Unit, which reports directly to the Office of the Minister, and the Strategic Planning Unit, which ensures

the inclusion of cooperation within the programming plan; constituting the channel of communication with the General Secretariat of Planning of the Presidency (SEGEPLAN) and the Ministry of Foreign Affairs.

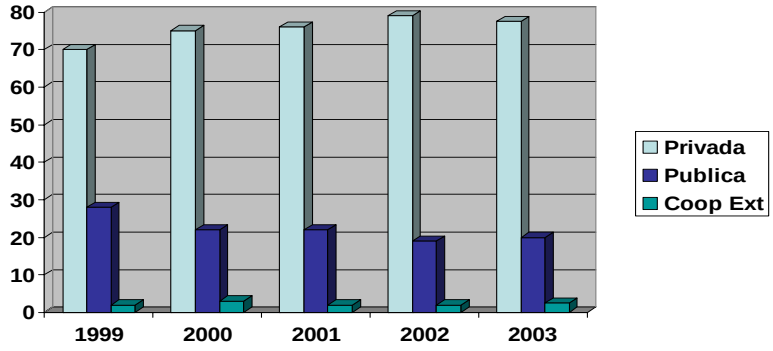
According to records of the MSPAS' Strategic Planning Unit, non-reimbursable international cooperation resources have decreased from $33 million in 2003 to less than $4 million in 2005, all targeting priority programs, with local counterpart funds in cash and/or in kind.

Table 11. Financial Resources from International Cooperation (Millions of $ US)
Guatemala 2006

	2002-2003	2004	2005
Non-reimbursable resources	32.99	10.52	3.96

Source: Strategic Planning Unit, MSPAS 2003, 2004, and 2005.

Percentage of Expenditure by Source of Financing in the Health Sector
Guatemala 1999-2005



Source: Human Development Report; MSPAS data.

2.1.3. Sectoral Regulation

The 1997 Health Code designates the Ministry of Health as the entity responsible for regulating public health-related programs. Within the operational organization of the Ministry, the General Office of Regulation, Surveillance and Control is responsible for setting standards and monitoring effective implementation through monitoring and supervision, relying on a legal framework that permits sanctions according to the magnitude of the event.

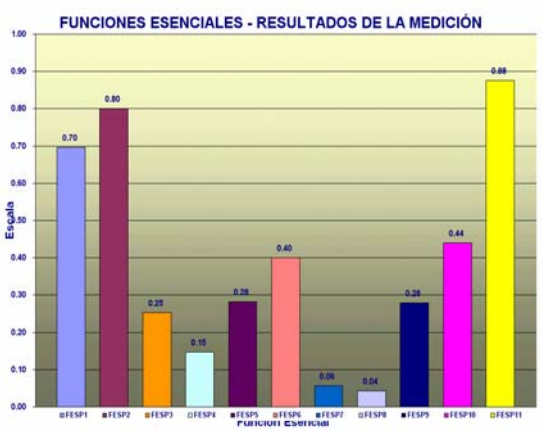
The sphere of activities includes implementation of priority programs, surveillance, and control of pharmaceutical and related products; food safety, publicity issues; environmental

conditions (hospital waste, and liquid and solid wastes), advertising on tobacco and related products; and registry and accreditation of health establishments and other related facilities.

Some of the supervisory actions are decentralized at the district (municipal) level, including monitoring and quality control of water and processed food. The General Bureau of Human Resources (in the MSPAS) is responsible for the accreditation of human resources in health.

2.1.4. Development of the Essential Public Health Functions

In 2002, the Essential Public Health Function's Performance Measurement Exercise in Guatemala's was carried out with the participation of several social actors. Weak performances were seen in functions 4) *Social participation in health;* 7) *Evaluation and promotion of equitable access to necessary health services;* and 8) *Human resource development and training in public health;* with the most glaring weaknesses in advisory services and training at subnational levels.



These shortcomings reflect the need to foment a policy for developing human resources in health that includes a plan to continuously improve workforce quality and a performance evaluation and labor incentive system. During 2005-2006, graduate-level training was offered to MSPAS health workers in management of care standards in the programs underway.

The country performed stronger in those functions related to the information, surveillance, and control systems (1, 2 and 11)—*Monitoring, evaluation, and analysis of the health situation; Public health surveillance, research, and control of risks and threats to public health;* and *Reducing the impact of emergencies and disasters on health.* However, Hurricane Mitch in 1998 and tropical storm Stan in October 2005 revealed the need to strengthen areas such as preparation, mitigation, and response to public health emergencies.

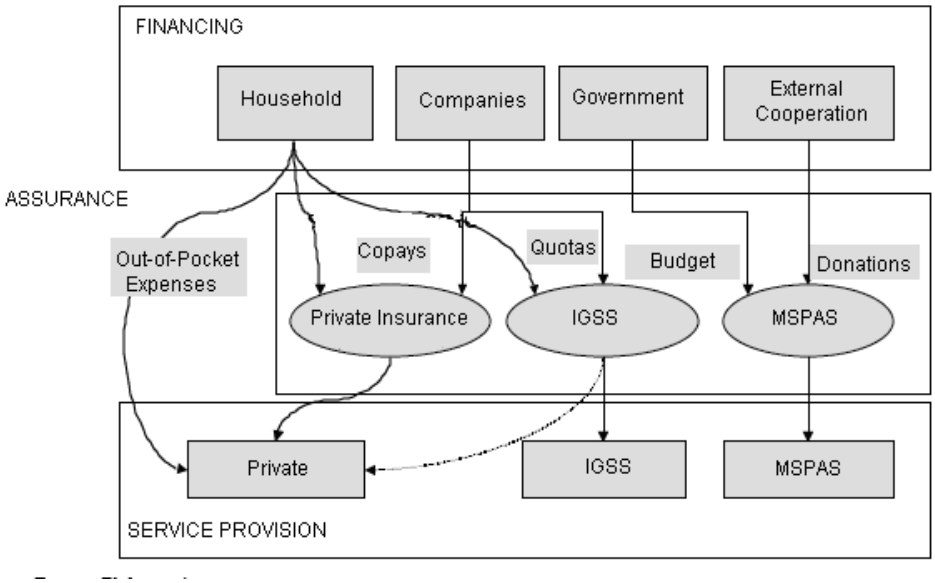
2.1.5. Orientation of Financing

Since 1997, analysis by the National Health Accounts (part of the MSPAS Strategic Planning Unit) has tracked the allocation of health expenditures, but has not systematically monitored or evaluated these expenditures. While the decision was made to allocate equal financing to the different health care levels, the third-level of care still receives more than 50% of total financing. From 1999-2003, financing of the first and second levels of attention, where most preventive actions occur, increased from 36% to 43%.

MSPAS financing is determined annually based on the Annual Operative Programming, which involves an analysis of departmental priorities adjusted to the assigned budgetary ceilings. The final financing decisions for major groups of budgetary actions rests with the central level of the Ministry of Health, which presents it to the Ministry of Finance for review and adjustment; finally, it is approved by the Congress of the Republic.

2.1.6. Guarantee of Insurance

Various insurance and service delivery mechanisms coexist in the country: public, social security, and private insurance, which are linked to a network of private service providers. The insurance function fulfilled by both the private insurers and social security is poorly developed and both schemes cover less than 25% of the population. Officially the Ministry of Health does not serve a specific population; its responsibility encompasses all inhabitants in the country. In the social security system, affiliation occurs through registration by companies and public institutions, followed by employees and beneficiaries (approximately 17% of the population).



Source: *Protección Social en Salud: Guatemala, Informe Final.* 2002. MSPAS.

2.1.7. Harmonization of Service Provision

The country's health service system is typically fragmented and segmented, since there is neither functional integration nor separation of functions between subsystems, and each subsystem serves an assigned or beneficiary population that has access to different services.[10]

Delivery of MSPAS services includes three levels of care according to the complexity of services; the levels are linked by a referral-counter-referral system, which is particularly weak between the second and third levels. The first level is made up of institutional services (health clinics and primary care centers), as well as services made available through contracts with nongovernmental administrators and providers, which allows expansion of coverage to the population identified as extremely under-served. Primary care includes 26 basic services, of which 8 offer services for women, 8 are pediatric, 6 cover emergencies and prevailing diseases, and 4 focus on the environment. The Ministry of Health certifies service providers prior to signing contracts with them. The user cost for each service plan is predefined so that the transfer of resources to the NGOs depends on the size of the population enrolled in the program (US$5.33 per individual per year for assigned

[10] *Protección Social en Salud: Guatemala, Informe Final.* 2002. MSPAS.

populations of 10,000, according to 2000 data).[11] Second-level services are provided institutionally by health centers and comprehensive maternity centers (CAIMI). Third-level care includes services provided by hospital centers – at the district, departmental, regional, and national levels. Social security services have programs for accidents, disease, maternity, disability, old age, and survival for members, and preventive and curative care for members' children who are under 5 years of age. Coverage by specific programs is not equal throughout the country. In Escuintla and Suchitepequez, social security has a primary care program.

2.2. FINANCING AND ASSURANCE

2.2.1. Financing

To establish a source of data on health financing and expenses, the country's health authority has prepared three studies on National Health and Financing Accounts, which include analysis of the years 1995 to 2003. The results show that health financing comes from the following sources: households, central government, companies, and international cooperation. Public financing sources include the MSPAS, the Ministry of National Defense, and the Ministry of Government; and autonomous institutions such as San Carlos University and the IGSS.

In the private sub-sector, contributions come from households (out-of-pocket payments) and private companies. The household functions as a financing source and agent. The private companies, through Social Security contributions of 10% of employer premium, act as agents in the case of insurance payment and as providers through hospitals, nursing homes, clinics, pharmacies, and laboratories, among others. International cooperation participates through donations from bilateral and multilateral agencies.[12] Nongovernmental organizations act as agents and suppliers in the health financing process, as they receive resources from the central government, international cooperation, households, and companies.[13]

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[11] *Guatemala: La Experiencia Exitosa de la Extensión de Cobertura.* MSPAS, Programa Pro Mejoramiento de los Servicios de Salud [Program to Improve Health Services], 2000.
[12] *La situación de salud y su financiamiento 1999-2003*. MSPAS.
[13] National Health Accounts 1998, MSPAS, Guatemala.

Table 12: Health System Financing (in US$)
Guatemala 1995-2003

Source	1995	1996	1997	1998	1999	2000	2001	2002	2003
Government	31.9	31.7	27.3	20	27.1	21.9	22.1	18.6	19.6
Households	43	44.2	42.9	50					
Companies	19.2	18.8	22	26	70.5 *	74.8 *	75.4 *	79.2 *	76.7 *
International Cooperation	5.9	5.3	7.8	3	2.4	3.4	2.5	2.2	3.1

Source: (1) National Health Accounts 1995.1997, MSPAS, Guatemala; (2) National Health Account 1998; (3) *La situación de salud y su financiamiento 1999-2003*, MSPAS.
* After 1999, financial statistics have been recorded as private financing only and have not been disaggregated.

Public financing shows an average annual increase of 4.7%, yet compared with global financing, its proportion has decreased, since private financing has grown significantly.

Table 13: Public Health Expenditure (in $ US)
Guatemala 1999-2003

Expenditure	1999	2000	2001	2002	2003
Public health expenditure per capita	278.5	286.1	294.1	310.8	353.4
MSPAS expenditure MSPAS in per capita	108.6	118	134	138.1	159.3
Public health expenditure as % of total public expenditure	17.21	17.85	16.01	15.44	15.43
Total health expenditure per capita	576.7	727.3	772.9	850.9	925.7
Health expenditure as % of GDP	4.73	5.54	5.44	5.24	5.42
Health expenditure by government in general (% GDP)	2.29	2.18	2.07	1.91	2.07

Source: *La situación de salud y su financiamiento 1999-2003*. MSPAS.

Health expenditure as a % of GDP showed a total increase of 15% in 2003 compared to 1999. The MSPAS budget was less than 1% of GDP in the period 1999-2003. Public health expenditure per capita has increased 27% during the same period; in the MSPAS the increase was 47%. Public health expenditure compared to total public spending declined by 10.34% in the same period. However, the total health expenditure per capita increased by 61%. A comparative analysis of per capita spending in the public sub-sector in 2005 shows that the Ministry of Health spent US$32.22 per inhabitant and the IGSS spent US$298.

Table 14. Health Expenditure by Sub-Sector and Function (in US$)
Guatemala 1995-2003

Financial Source	1995	1996	1997	1999	2000	2001	2002	2003
Public Sector	**59.3**	**57.84**	**60.44**	**48.3**	**39.3**	**38**	**36.5**	**39.5**
Territorial government	31.48	27.62	29.9	21.8	18.5	16.9	17.3	18.3
Social security	27.82	30.22	30.54	26.5	20.8	19.4	19.2	20.8
Private sector	**40.7**	**42.16**	**39.56**	**51.7**	**60.2**	**61.9**	**63**	**60**
Health insurance	3.94	4.15	3.95	2.8	2.5	2.6	2.7	2.6
Out-of-pocket payments	32.78	33.73	31.44	44.3	54	55.7	57.1	54
Nonprofit institutions	3.94	4.29	4.17	4.7	3.7	3.6	3.3	3.4
Other				0	0.5	0.1	0.4	0.6

Source: (1) National Health Accounts 1995.1997; MSPAS; (2) *La situación de salud y su financiamiento 1999-2003*, MSPAS.

The MSPAS budget from 1998 to 2003 in terms of percentage of the central government budget decreased from 8% to 7.3%, with an average of 7.8% in that period.

The percentage of public expenditure in the health sector decreased by almost 50% from 1995 to 2003, mainly in what corresponds to territorial governments. As a result of this situation, out-of-pocket expenses or direct payment from households in the same period increased by 60%. According to the National Survey on Family Income and Expenses (ENIGFAM 1998-1999), household expenses go mainly to Social Security through payroll deductions (39%), mostly in the capital (53%), followed by purchase of medical and pharmaceutical products (32%). Private insurance for maternity and disease represents 0.36% of household expenditure on health, which is also mainly concentrated in the capital (98.4%). Health expenses reflect differences in income level: the population decile with the highest income accounts for 30% of the out-of-pocket expenditures in health, 40% of the social security quotas, and 90% of private insurance.[14]

During 1999-2003, public expenditure in health (by the Ministries of Health, Defense, and Government; San Carlos University; local governments; and Social Security) represented on average 40% of the sector's expenditures; of the total, the State administered 46.4%, and Social Security 53.6%.

MSPAS expenditures in 2004 and 2005 on health programs for women, maternity care, food and water-borne diseases, respiratory infections, and malaria were 40 and 45.1%, respectively. The HIV/AIDS Program saw an increase in its budget during these years of 85.5% (from US$ 1.79 million to US$ 3.0 million).[15]

From 1999 to 2003, most health expenditure has been in the curative hospital category, which on average was 50.82% of total MSPAS spending.

2.2.2. Assurance

Guatemala's Constitution guarantees access to health services free of charge for the entire Guatemalan population. The Health Code and Peace Accords ratify the population's right to

[14] Valladares R., and Barillas E (2001). *Estimación del gasto de hogares en desarrollo humano.* UNDP/Human Development Report 2001.
[15] Unpublished document: *La situación de salud y su financiamiento 2004-2005*, MSPAS.

health, especially for the most excluded groups. The Health Services System includes: the MSPAS, the IGSS, the for-profit private sub-sector, the nonprofit private sub-sector, local governments, and traditional and/or alternative community medicine. The Ministry of Health is constitutionally responsible for the health care of Guatemalans and takes the lead in all health care processes, defined by the government's policies on health.

The IGSS is an autonomous institution financed through mandatory contributions from workers and employers. Health service coverage is directed at formal workers affiliated with the regimen. The top-level authority rests with the Board of Directors, which relies on representatives from the different sectors and which nominates a Senior Manager. The for-profit private sub-sector is made up of MSPAS-authorized hospitals, nursing homes, clinics, pharmacies, and laboratories. The nonprofit private sub-sector is made up of NGOs, which throughout the country now total more than one thousand, working in a wide variety of programs; as well as an important sector of traditional Mayan medicine located at the rural and indigenous level.

2.3. SERVICE PROVISION

2.3.1. Supply of and Demand for Health Services

In the public sector, health care is provided by the Ministry of Health's network of services, the IGSS, the health services of the Ministries of Defense and Government, and the San Carlos University. Health care facilities are organized according to varying degrees of complexity and problem-solving capacity. The Ministry of Health is the institution with the greatest number of permanent care facilities, 1304 in total, distributed throughout the country, followed by the IGSS with 139 facilities.

According to the MSPAS report, *La situación de salud y su financiamiento 2004-2005*, the Ministry of Health has 1244 primary care centers, 926 health posts, and 300 basic units located in rural areas. At the second level of care, there are 3 comprehensive maternal-infant health care centers (CAIMI), 32 type A health centers, 249 type B, 16 canton-level maternity centers, 3 peripheral clinics, and 32 comprehensive care centers. The third level consists of 43 hospitals, of which 2 are national reference hospitals, 7 are specialized, 8 are regional, 16 departmental, 5 district, and 5 are emergency. MSPAS hospitals have a total of 6,030 beds.

The IGSS has 139 medical facilities located in the country's 22 departments, each with varying degrees of decision-making capacity and coverage. Fifty per cent of these units are found in 6 departments and are distributed among the following categories: 23 hospitals, 2 specialized centers, 3 specialty-care clinics, 33 physicians' offices, 15 health posts, and 63 comprehensive health care units. Seventy-four per cent of the affiliated populations are in 3 of the country's departments: Guatemala (61%), Escuintla, and Suchitepequez. There are a total of 2,240 hospital beds.

Table 15. Number and Capacity of Health Care Facilities
Guatemala 2006

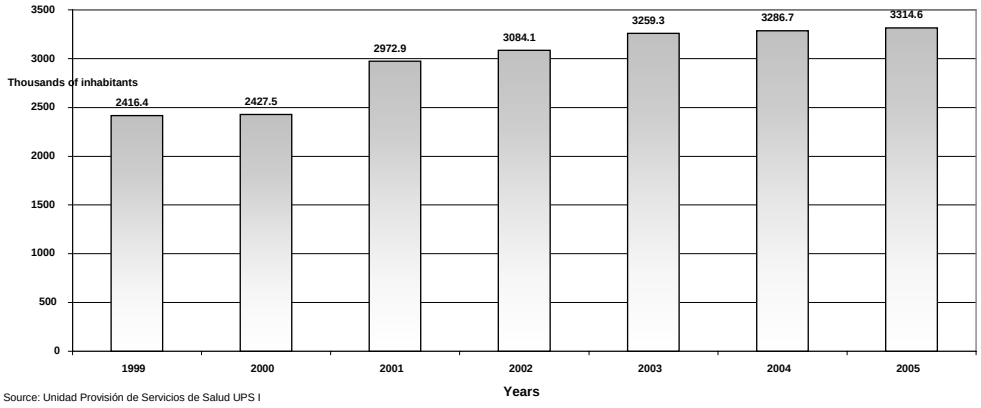
Public Sector	No. of MSPAS Health Care Centers	No. of IGSS Health Centers	No. Centers per 1000 Inhabitants	No. of MSPAS Beds	No. of IGSS Beds	No. of Beds per 1000 Inhabitants
Hospitals						
High complexity	2	1		1844		
Specialized hospitals	7	3				
Medium complexity (basic specialties)	24	1				
Low (general medicine)	10	18 *				
Total hospitals	**43**	**23**	**0.005**	**6030**	**2240**	**0.64**
Ambulatory centers						
With specialties	3	3				
Specialized centers	19	2				
First level with general medicine	313	48				
First level with non-professional resident personnel	926	0				
Assistance units		63				
Total ambulatory centers	**1304**	**139**	**0.1 1**			

Source: *La situación de salud y su financiamiento 2004-2005*, MSPAS, Annual Labor Report, IGSS, 2004.
* Departmental and municipal hospitals.

The Ministry of Health as the principal health care provider for the Guatemalan population has prioritized 20 health programs at various levels of care. The outreach program to cover the primary care was launched in 1996, which by 2005 served approximately 3.3 million Guatemalans with basic health services. Basic first-level services are directed toward maternity and child care, attention as needed (including morbidity), and emergency care. Environmental protection care targets waste disposal, vector control, and water quality.

Expanded services are directed toward the care for women of reproductive age, early detection of cancer, family planning, and folic acid supplementation, as well as schoolchildren care. Since 2002, all children under the age of 5 have received nutritional evaluation.

Population benefitted by the expansion of service coverage
MSPAS, Guatemala, 1999-2005



Source: Unidad Provisión de Servicios de Salud UPS I

In terms of productivity, the first and second levels of the Ministry of Health (health posts and centers) totaled 6,023,871 first consultations in 2005, serving a total of 2,693,046 new patients throughout the country. The hospital network recorded 370,212 patient discharges in 2005, with a total of 1,795,011 consultations and 1,191,308 emergencies. In 2004, Social Security registered 4,073,747 consultations and reported 49,532 hospital admissions for all services.[16]

2.3.2. Human Resources Development

2.3.2.1. Human Resources Training

Universities are responsible for the education of health professionals. Five of the country's 11 universities train physicians and surgeons, with the national university offering accreditation programs in the capital and western part of the country. Three private

[16] Annual Labor Report, Guatemalan Social Security Institute, 2004.

universities train doctors only in the capital, and one private university offers training in the western region.

Nursing personnel graduate at three academic levels: advanced degree, professional nurse or technician, and nursing auxiliary. Advanced-degree education is relatively recent (2002). Professional nurse technicians are trained at three state schools located in Guatemala City, in the north, and in western Guatemala, and at a private university in three departmental headquarters. Six official schools, study programs, and private schools endorsed by the MSPAS and the IGSS offer courses to train nursing auxiliaries.

Since 1996, the National University has offered a master's program in public health and specialties in management, epidemiology, and environmental health. One private university offers similar courses with an emphasis on epidemiology and management. MSPAS schools and several private institutions offer technical education in several areas. Four universities are responsible for training nutritionists. Currently no system exists to review and update the undergraduate and graduate curricula. Every training school performs its own review in accordance with internal regulations.

2.3.2.2. Management of Human Resources and Employment Conditions

Since 1999 the functional structure of the Ministry of Health has included the General Bureau of Human Resources with departments in Training, Education, and Administration. One of the Ministry's 2004-2008 policies includes strengthening human resource development and management. A 2005 survey of the institution's resources showed that the Ministry employed a total of 23,357 workers. Contracting is done through different budgetary lines that include permanent staff and temporary contracts; about 80% of personnel are permanent.

The IGSS has a total of 12,283 workers on its payroll, of which 91% are permanent. In its Policy on Modernization, Systematization, Comprehensive Efficiency, and Quality (2004), IGSS establishes that its manual on job positions be updated to improve the quality of the processes of selection, contracting, orientation, training, and performance evaluation. No information is included on the private sub-sector.

The concentration of human resources in the metropolitan area along with the shortage of specialist doctors in departmental hospitals has led to a large gap in patient-treatment capacity at the ambulatory and hospital levels. The skewed distribution of human resources is a reflection of a centralized health care model geared toward curative medical care.

Table 16. Human Resources in Public Sector Institutions
Guatemala 2005

Institution	2005		
	Physicians	Nurses	Auxiliary Nurses
MSPAS	3175	1274	6611
IGSS	1794	4629 *	
Total	**4969**	**12514**	

Source: MSPAS, Office of Human Resources, 2006.
Guatemalan Social Security Institute, Memoria 2004.
* Includes all paramedical staff.

2.3.2.3. Supply and Distribution of Human Resources

Fifty-three per cent of the Ministry of Health's workforce is in the department of Guatemala. Thirty-one percent work at the first and second levels of care, 62% in hospitals and the rest at the central technical, policy, and administrative levels. At the IGSS, nearly 80% of personnel work in the metropolitan region.

2.3.2.4. Governance and Conflict in the Health Sector

There are processes in place that have established dispute-resolution boards of mixed composition where labor issues are discussed between union representatives and ministry authorities.

2.3.3. Medicines and Other Health Products

The Drug Registration and Control Department has approximately 16,000 registered drugs, of which not all have been comercialized. It is estimated that 40% are generic and the remainder are patented, unlike the market of the 1990s in which generics were less than

8%. The department's purpose is to regulate and control pharmaceuticals and related products as well as the establishments that import, manufacture, and market them. Its aim is to guarantee the availability of quality drugs in this area.

The Drug Access Program (PROAM), created in 1997, works to ensure equal access for all Guatemalans to quality affordable drugs placed in state and municipal pharmacies, hospitals, clinics, and rural infirmaries for the general welfare of all. It is centrally regulated and decentralized operationally within a framework of self-sustainability and organizational transparency. This process has helped to improve access to essential drugs in the most under-served communities.[17]

Table 17. Drugs
Guatemala 1991-1999

INDICATOR	1991	1994	1995	1998	1999
Number of pharmaceutical products marketed	4,364	9,258	10,000	n.a.	9,945
Total spending on drugs at retail prices (millions US$)	100	143.7	159	142.9	147
Per capita spending on drugs at retail prices (US$)	10.57	13.9	15.9	13.23	13

Source: 1991 -1998: 20 and 21. 1999: PAHO. Informe preliminar de Condiciones de Salud en las Américas, 2002.

The IGSS list of basic drugs was used to prepare the open contract, which is currently used by the MSPAS, the IGSS, and the Ministry of Finance. It is based on standardized protocols for the country's priority pathologies, the level of complexity of the facility, and the technical expertise of the professional.

2.3.4. Equipment and Technology

More than 50% of MSPAS hospitals in Guatemala were built more than 30 years ago. MSPAS annual budget has historically been very low for activities such as equipment maintenance and replacement, improvement of infrastructure, and consequently implementation of new technology. In addition to these problems, natural disasters have hastened the deterioration of all structures. There is no inventory-based information system of the entire network of hospitals, which would make it possible to assess the needs for preventive maintenance and repair, in order to plan and schedule these repairs in advance.

[17] Drug Access Program (PROAM) 2005.

Table 18. Equipment Availability in the Health Sector
Guatemala 2006

Type of Sub-Sector / Resource	Countable Beds	Clinical Laboratories	Blood Banks
PUBLIC			
MSPAS	6030	52 *	36
IGSS	2240	19	5
The Red Cross			1
Subtotal	8270	70	42
PRIVATE (nonprofit and for-profit)			
Military hospital	168		
National police hospital	96		
Subtotal	264	105	12
Total	8534	175	54

Source: (1) DRASES 2005-2006 (2) *Memoria de Labores de IGSS 2004,* IGSS.
* Located in hospitals.

2.3.5. Quality Assurance

As part of the reform process, all the standards for health services in the priority programs were set forth in 1998 for the three levels of care, which was the first attempt at program integration. During that year, the budgeted activities of each priority program were identified and included in annual operational planning. The General Office of Health Regulation, Surveillance and Control updated the standards in 2005 and disseminated them through a directive to all staff directly responsible for primary and secondary care during 2006.

The accreditation process for health facilities is the responsibility of the General Office of Regulation, Accreditation and Control of Health Facilities. Its main purpose is to monitor whether standards established for various health and related services are met in order to provide the highest quality care for users. It has a regulatory framework that provides the critical elements and legal safety needed for decision-making in the supervision of facilities.

The General Office of Regulation of Health and Environmental Programs is responsible for regulating and monitoring compliance with health and environmental standards, including management and disposal of hospital solid wastes, agrochemical processing plants, cemeteries, urban development, and other facilities, in addition to regulating the marketing of tobacco products.

2.4. INSTITUTIONAL MAPPING OF THE HEALTH SYSTEM

The institutional mapping of Guatemala's Health System is characterized by the existence of a leading entity in accordance with the national policy, and the remaining agencies that share the functions of financing and service delivery. Social security regulates and oversees its own activities of financing, assurance, and delivery of services.

Table 19. Institutional Mapping of the Health System
Guatemala 2006

Functions / Organizations	Steering Role		Financing	Insurance	Provider
	Management	Regulation and Oversight			
Central government					
MSPAS	x	x	x	x	x
The Ministry of Defense The Ministry of Government				x	x
Others / social works					x
Social security institutions			x	x	x
Regional government (departments)				x	x
Local government (municipio)			x	x	x
Private insurers			x	x	
Private suppliers					
Nonprofit			x	x	x
For-profit			x	x	x

Source: Author's compilation with information from various institutions.

3. MONITORING HEALTH SYSTEMS CHANGE/REFORM

3.1. IMPACT OF REFORMS ON HEALTH SYSTEM FUNCTIONS

Guatemala's reform process began in 1996 with the "Health Services Improvement Program," financed by the IDB and implemented by the MSPAS.[18] Financial reform and expanded coverage are the components that have shown the greatest progress. Financial reform has meant the transfer of responsibilities to sub-national levels, since the Area Authorities are responsible for programming and implementing budget allocations. It has

[18] Análisis de las reformas del Sector Salud en la Sub Región de Centro América y la República Dominicana, July 2002, (available in Spanish only), LACHSR [LACRSS in Spanish].

also led to contractual agreements with local providers and administrators for well defined and regulated care services.

Regarding the expansion of coverage, social security with some modifications has been included in two departments. One notable change has been the expansion of coverage in the more vulnerable population groups, which is institutionalized within the structure of the Comprehensive Health Care System (SIAS). Currently SIAS continues to be maintained, but it lacks the specific budgetary support that would enable it to operate fully and sustainably.

In 1997, the new Health Code was published as Legislative Decree 90-97, which strengthened MSPAS' steering role. Since 1999, the Ministry's structure has been based on Internal Regulations. The important contribution of the General Office of Health Regulation, Surveillance and Control is the internal regulation of this Ministry as well as the regulation of external health-related entities, structurally reinforcing the steering role.

3.2. IMPACT ON THE GUIDING PRINCIPLES OF HEALTH SECTOR REFORMS

3.2.1. Equity

3.2.1.1. Coverage

In recent years, health sector reform has improved access to health services for the marginalized population. Access increased 66% between 1990 and 2004. Fifty per cent of the departments with the greatest numbers of indigenous people have at least 30% of the population covered by SIAS, an attempt to decrease the skewed distribution of infrastructure and human resources. Through expanded coverage, 3.3 million people are covered for basic services, mostly belonging to the segment with the poorest quality of life. At the beginning of the 1990s, only 54% of the population had access to any health service.[19] By 2004, the Health Ministry reported a general level of coverage of 71.1%, of which 47.4% was covered by the Ministry's institutional services, 23.7% by the expanded coverage program, 10.4% by social security and 8.1% by private services. Based on this data, a little

[19] Human Development Report, 2005; PAHO/WHO 1994.

more than 10% of the population, approximately 1.3 million people in 2005, still had no access to any health service. [13]

3.2.1.2. Allocation of Resources

Total per-capita health expenditures increased 61%, primarily due to out-of-pocket expenditures between 1999 and 2003, while public spending increased only 26%. Financial reform included the modification of expenditure levels for curative and preventive health measures. Although curative expenditures remained above 50%, the amount is down from the early 1990s when the figure was above 80%.

3.2.1.3. Delivery of Services

Health care capacity has not varied significantly in the last 15 years, with the exception of increased care by non-institutional primary care. Second- and third-level public infrastructure has not changed substantially. Nevertheless, three CAIMI centers were set up in the prioritized municipios of Huehuetenago (Cuilco), San Marco (Ixchiguan), and Izabal (El Estor).

3.2.2. Effectiveness

3.2.2.1. Infant and Maternal Mortality

The emphasis on health service priorities and programs aimed at vulnerable groups—women and children—could be clearly seen in the reduced mortality of these groups. However, it is impossible to attribute the change in mortality indicators only to the reform process or direct health sector interventions.

Expanded coverage has reduced the number of people with no access to health services from the 46% seen at the beginning of the 1990s to the estimated 10% of 2005. This process has led to a reduction in child mortality due to diarrhea and respiratory infections as a result of access to primary care on a timely basis.

3.2.2.2. Communicable Diseases

In the case of communicable diseases, although the number of recorded cases of malaria has decreased, the data are incomplete, because the diagnostic system at the local level has deteriorated in recent years. HIV/AIDS, however, has been on the rise both in incidence and mortality, from 6 deaths between 1990 and 1994 to 638 deaths in the 2000-2004 period.

3.2.3. Efficiency

In regards to water and sanitation, there are a number of laws and institutions involved. From the standpoint of health promotion and disease prevention, the Ministry of Health is responsible for sanitary regulations and the municipal government for water service and wastewater treatment. According to estimates, there was 63% coverage of improved water sources in 1990, 68% in 1994, and 75% in 2002. Although the national average is high, it is concentrated mostly in urban areas, which have 89.5% coverage, while rural areas have only 59.5%. Even though access to improved water sources and sanitation are closely related, there is a marked difference in the indicators, with greater deficiency in sanitation. According to the 2002 census, 46.9% of the population had improved sanitation service. Coverage in urban areas is 76.7%, and 16.8% in rural areas.

3.2.4. Sustainability

There is no evidence that the reform process has increased the legitimacy of the government institutions that provide health services. There is no information system that makes it possible to obtain data disaggregated by governmental and private administrative unit of expenditure.

The operational plan to expand primary care coverage through the comprehensive care system includes the specific category that ensures medium-term sustainability.

3.2.5. Social Participation

In terms of structure, the Department of Health Promotion and Education was created in 1999 through the Health Ministry's internal regulations and within the Comprehensive Health Care System, whose functions rely on participation of various stakeholders at all levels in the sector. From 2000 to 2005, action with municipal governments was strengthened through the training of Municipal Development Councils (COMUDES) and Community Development Councils (COCODES) by preparing local development plans at the municipal level with the various local stakeholders,[20] including specific components such as nutrition and food safety. Expanded coverage and the reproductive health program have led to the establishment of local health care committees for maternal-neonatal emergencies, whose chief function is to plan and take care of community maternal emergencies under the leadership of trained midwives.[21]

The expanded coverage component of the reform process has led to increased participation of NGOs, through their analysis of the health situation in the area under their responsibility and planning of interventions, keeping in mind the guidelines established in the contractual agreements with the Health Ministry.

Another activity undertaken on a nationwide scale is the National Healthy Schools Plan, which includes joint action plans with school officials.

3.3. IMPACT ON THE HEALTH SYSTEM

In the last 15 years, the health authority has changed its management models, especially through contracts with NGOs for care services, which is a component of the expanded coverage strategy. Significant changes include financial reform and decentralization of action plans and implementation at the Area levels. The inclusion of a payment implementation model through hiring outside providers has allowed other entities to participate in care delivery to the most vulnerable groups.

[20] *Memoria de labores* PROEDUSA 2001-2003.
[21] Reproductive Health Program, 2006.

Efforts to strengthen regulation can be seen in the preparation and implementation of comprehensive standards for the three levels of care in all priority programs. Strengthened legal regulations of all the components of facilities, medications, and related products, as well as environmental regulations, have been key priorities in the steering role and for quality assurance in the country.

Table 21. Chronology of Reform Processes and Impact on the Health System Guatemala 1990-2005

Periods Implications of Changes	1990-1994	1995-1999	2000-2005
Right of citizens to good health	Political Constitution recognizes that good health is a basic non-discriminatory human right, which the State must ensure by implementing actions through its institutions to prevent, promote, heal, and rehabilitate, while recognizing that the health of its citizens is a public good.	Political Constitution of the Republic and Peace Accords: equity, gender, multiculturalism, and the disabled. Includes creation of the Comprehensive National Health System, which promotes participation at all levels of society, expansion of health coverage and social security.	Political Constitution of the Republic, Peace Accords: renegotiation of objectives.
Impact on steering role	Specific role of MSPAS	Health Code Decree 90-97 specifies the steering role in MSPAS.	MSPAS retains steering role.
Separation of health system functions		Reform includes other stakeholders participating in delivery of services.	IGSS retains financing and quality assurance functions, contracts with private providers, but keeps a portion of delivery function.
Deconcentration and/or decentralization	Centralized	Creation and implementation of administrative structure that enables decentralization of planning and budget implementation processes at departmental level.	Strengthening of processes.
Promote participation of civil society	Beginning of local coordination	Creation of Department of Promotion and Health Education, which promotes the process of integrating the stakeholders in society through standards and procedures. Decentralization of activities related to retaining and monitoring service providers at the departmental level.	Making Health Promotion operational with the participation of municipios and organized civil society (COCODES, COMUDES).
Impact on governance			
Changes in the health care model	Traditional model of institutional delivery of health services	Comprehensive Health Care System, change in primary care through contracting service providers and administrators.	Strengthening health care processes through other providers.
Changes in the management model	Based on legal and centralized structure	Establishment of management commitments.	Proposal for new management model for Health Bureaus.

Table 21. Chronology of Reform Processes and Impact on the Health System Guatemala 1990-2005

Periods Implications of Changes	1990-1994	1995-1999	2000-2005
Barriers to access for individual and public health services	Cultural, geographic access, geographic distribution of health services (urbanization), economic.	SIAS reduces previously existing barriers; cultural and economic and other barriers to access still persist.	Introduction of programs with gender and intercultural approach; economic and other barriers to access persist at second and third levels.
Changes in the quality of care	Disparate standards for health care programs and surveillance, Department of Health Establishment, and Division of Environmental Sanitation.	Preparation of integrated health care technical standards for priority programs; Inclusion in the new functional structure of the Department of Regulation, Accreditation, and Control of Health Care Facilities and the Department of Health and Environmental Program Regulation.	Updating and socialization of priority program standards. Basic List of essential drugs.
Changes in the labor market and in human resources in health	Schools with training programs but no coordination with service delivery; training of technical personnel by Ministry of Health	Creation of the General Bureau of Human Resources in the MSPAS. Masters degree in Public Health; initiates accreditation process for schools to train technical personnel.	Survey of human resources.

3.4. ANALYSIS OF ACTORS

During 2006, the University Research Program on Human Development prepared the "*Mapeo de Actores Polítcos en Salud"* ["Political Stakeholder Mapping in the Health Sector"] under the project: "Social construction of the future of health in Guatemala." As a result of civil society's constructive participation, governmental and nongovernmental institutions and an analysis of the consensus reached at workshops, the project obtained an approximation of the current situation vis-à-vis the position of stakeholders in the health sector from both a political perspective and their vision of the future. It was constructed with a view toward their involvement in decision-making.

The Ministry of Health represents the central axis that permits an understanding of the key stakeholders who are involved in the dynamic of public health sector management. In order to position the stakeholders in relation to the central axis, indicators such as autonomy, importance, and orientation were established as parameters to strengthen or weaken the axis. By combining these variables, the position of the stakeholders in the health-sector decision-making universe was obtained.

The following map represents a visual sketch of the health sector, with the MSPAS at the center. Stakeholders are placed according to their degree of autonomy in relation to the central axis, taken up by the left quadrant area. The middle level of autonomy in relation to the axis falls within the right quadrant. An orientation that strengthens the axis occupies the upper quadrant. And an orientation that weakens it occupies the lower quadrant. The map is also divided into three rectangles, which show the distribution of stakeholders according to degree of importance to the health sector -- the inside rectangle: very important; the intermediate rectangle: somewhat important; and the outside rectangle: not important.

The sketch includes 37 stakeholders, of which those that have a key role in decision-making are:

- The Executive Branch of the Republic;
- The Ministry of Finance (MINFIN);
- The Legislative Branch;
- The Health and Social Welfare Commission;
- The Forecasting and Social Security Commission;
- The Public Finance and Currency Commission;
- The Inter-American Development Bank;
- The World Bank.

All the rest are considered secondary because they have no decision-making authority in the health sector.

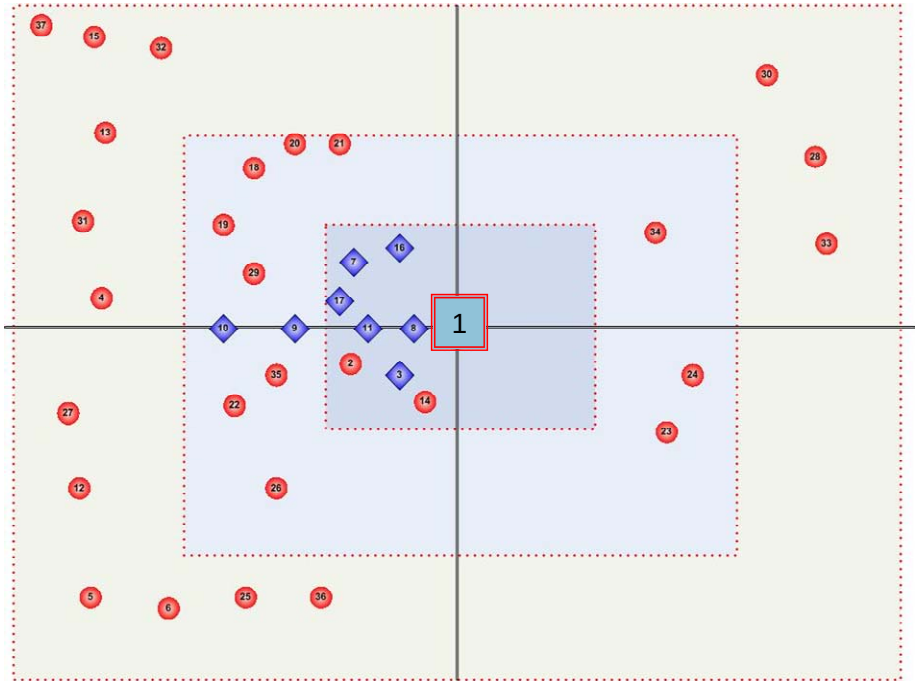
General Nomenclature:

Central axis

Primary stakeholder

Secondary stakeholder

MAP OF STAKEHOLDERS IN RELATION TO THE CENTRAL AXIS



Source: Unpublished document, *Mapeo de Actores Polítcos en Salud*, University Research Program on Human Development, August 2006.

List of stakeholders in the health sector:

1 The Ministry of Public Health and Social Welfare (MSPAS);

2 The Guatemalan Social Security Institute (IGSS);

3 The Executive Branch of the Republic;

4 The Secretary of Planning and Programming (SEGEPLAN);

5 The Presidential Secretariat of Social Works of the First Lady (SOSEP);

6 The Executive Coordination Secretariat of the Executive Branch (SCEP);

7 The Ministry of Finance (MINFIN);

8 The Legislative Branch;

9 The Health and Social Welfare Commission;

10 The Forecasting and Social Security Commission;

11 The Public Finance and Currency Commission;

12 The Municipal Development Institute (INFOM);

13 The National Association of Municipalities of the Republic of Guatemala (ANAM);

14 Municipalities;

15 The Attorney General for Human Rights (PDH);

16 The Inter-American Development Bank (IDB);

17 The World Bank;

18 The U.S. Agency for International Development (USAID);

19 The Pan American Health Organization (PAHO);

20 The United Nations System (UNS);

21 The European Union (EU);

22 Pharmaceutical industry;

23 Nonprofit private health foundations;

24 Hospital associations and private medical services;

25 Private insurance and health plan companies;

26 Medical technology industry;

27 Coordinating Committee of Agricultural, Commercial, Industrial, and Financial Associations;

28 Consulting companies;

29 Universities;

30 Inter-institutional Commission for joint activities in academia and the health sector;

31 Health worker unions;

32 Coalition of women's health organizations;

33 National Health Authority;

34 International nongovernmental organizations;

35 The Catholic Church;

36 Consumer associations;

37 Communications media.

Most of these stakeholders are located outside the sub-sectors formally established as a part of the health sector. This means that the decision-making dynamic is concentrated in the State institutions. The study to determine an overview of stakeholder positions begins with mapping the health sector's political stakeholders, with a theoretical and methodological approximation different from the mapping itself. This indicates an imaginary spectrum of stakeholders, as an approximate expression of what the stakeholders think within the formal framework of what is understood to be the health system.

This imaginary exercise provides a profile of what a future health system could be. It identifies issues that are an indispensable part of the process of constructing the future of health care. Furthermore, it provides a conceptual, political, economic, and technical focus and the potential operation in which stakeholders are placed according to their vision of the future. In addition, through an analysis of their visions, it is possible to identify the information needed to delve more deeply into the consequences and potential of these visions.

In a complex environment such as health care, the many different visions and their comprehensive horizons are extremely diverse, as they are based on a variety of institutional and personal experiences.

In order to reach a consensus on the varying perspectives of different social stakeholders, a committee of 20 experts met from different national health-related areas (health institutions, municipalities, international organizations, civil society, and universities) Based on the Profiles of Health Systems methodology and guidelines, the results indicated:

1. Processes of change in health have arisen from the health sector.
2. The health system is fragmented and segmented.
3. The Executive Branch, Legislative Branch, civil society, and private sector are all stakeholders in the reform process.
4. Only the Executive and Legislative Branches hold veto power.
5. Reform processes that encourage democracy empower and increase participation of social actors.

FOOTNOTES/ENDNOTES

1. Análisis de las reformas del Sector Salud en la Sub Región de Centro América y la República Dominicana, July 2002, LACRSS.
2. Chronic malnutrition is deficiency in the weight-to-age index; it is a result of past and recent nutritional deficiencies.
3. Epidemiological Bulletins, Epidemiological Surveillance, Department of Epidemiology, MSPAS, National Program of Tuberculosis and AIDS/Epidemiological Surveillance, MSPAS.
4. Millennium Development Goals: A Latin American and Caribbean Perspective, published by the United Nations, LC/G.2331-P, ISBN: 92-1-322741-8. United Nations, August 2005.
5. Unpublished document: *La situación de salud y su financiamiento 2004-2005*, MSPAS.
6. In Guatemala, those in the category "open underemployment" work less than 40 hours per week and want to work more. Hidden underemployment includes those who work 40 hours or more per week yet their income is lower than the minimum wage in the commercial sector in which they work.
7. *Anuario Estadístico 2004*, Informatics Unit, Ministry of Education.
8. Human Development Report, Guatemala 2005.
9. Profile of the environmental situation for children in Guatemala 2003.
10. Social Protection in Health: Guatemala 2002.
11. *Guatemala: La Experiencia Exitosa de la Extensión de Cobertura*. MSPAS Program to Improve Health Services, 2000.
12. *La situación de salud y su financiamiento 1999-2003*, MSPAS.
13. National Health Accounts, 1998, MSPAS, Guatemala.
14. Valladares R., and Barillas E (2001). *Estimación del gasto de hogares en desarrollo humano.* Consultancy Report for the United Nations Development Program/Human Development Report, 2001.
15. Unpublished document: *La situación de salud y su financiamiento 2004-2005*, MSPAS.
16. Annual Labor Report, Guatemalan Institute of Social Security 2004.
17. Access to Drugs Program—PROAM—2005.
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19. Human Development Report, 2005, reference of PAHO/WHO, 1994.
20. *Memoria de labores* PROEDUSA, 2001-2003.
21. Reproductive Health Program 2006.