BELIZE

COUNTRY COOPERATION STRATEGY 2008–2011

Pan American Health Organization
Regional Office of the World Health Organization

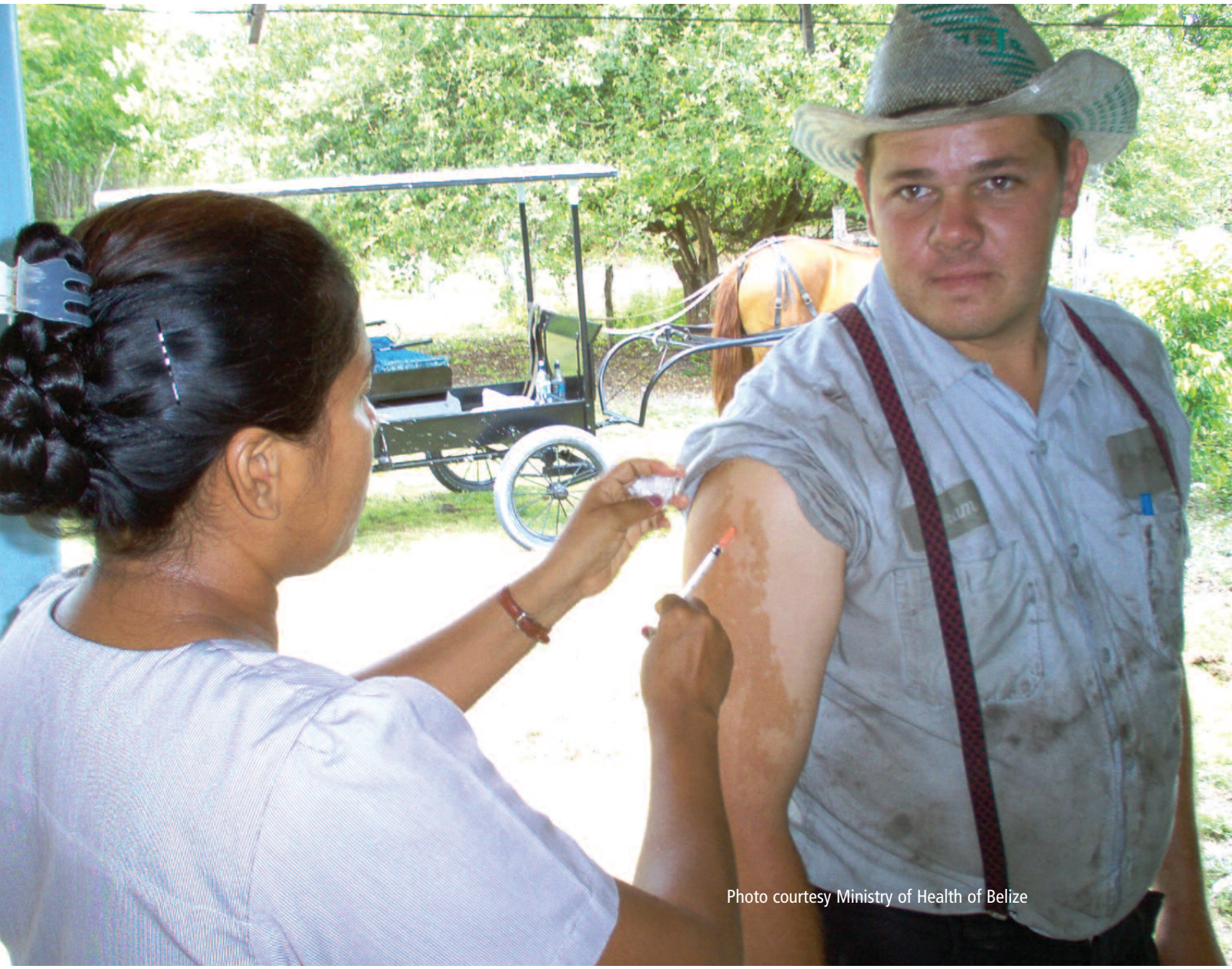
PAN AMERICAN HEALTH ORGANIZATION • WORLD HEALTH ORGANIZATION

BELIZE

COUNTRY COOPERATION STRATEGY 2008–2011

February 2009

Pan American Health Organization
Regional Office of the World Health Organization



A Mennonite farmer receives rubella vaccine, 2004.

TABLE OF CONTENTS

Photo courtesy PAHO/WHO-Belize

Secondary-level students test their nutrition knowledge in an annual competition.

GLOSSARY

AIDS	Acquired Immunodeficiency Syndrome
AMRO	Regional Office of the Americas (for WHO)
BAHA	Belize Agricultural Health Authority
BCG	Bacillus Calmette-Guérin (tuberculosis vaccine)
BCS	Belize Cancer Society
BCVI	Belize Council for the Visually Impaired
BFLA	Belize Family Life Association
BHDR	Belize Human Development Report
BHIS	Belize Health Information System
BIREME	Latin American and Caribbean Center on Health Sciences Information
BRDP	Belize Rural Development Program
BWSL	Belize Water Services Limited
CAMDI	Central American Diabetes Initiative
CAREC	Caribbean Epidemiology Center
CARICOM	Caribbean Community
CBO	Community-based organization
CCCC	CARICOM Climate Change Centre
CCH	Caribbean Cooperation in Health
CDB	Caribbean Development Bank
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CEPIS	Pan American Center for Sanitary Engineering and Environmental Sciences
CFNI	Caribbean Food and Nutrition Institute
CFS	Country Focus Support
CLAP	Latin American Center for Perinatology and Human Development
COMBI	Communication for Behavioral Impact
CPA	Country Poverty Assessment
CSO	Central Statistical Office (now Statistical Institute of Belize)
CSW	Commercial sex worker
DEMO	District Emergency Management Organization
DOE	Department of the Environment
EAR	Epidemic alert and response
EPHF	Essential Public Health Functions
EPI	Expanded Program on Immunization
FAO	Food and Agriculture Organization
FCTC	Framework Convention on Tobacco Control
GBV	Gender-based violence
GDP	Gross domestic product
GENACIS	Gender, Alcohol, and Culture: An International Study
GIS	Geographic Information System
GOB	Government of Belize
GSM	Global Management System (of WHO)

GYTS	Global Youth Tobacco Survey
HECOPAB	Health Education and Community Participation Bureau
HIS	Health information system
HIV	Human Immunodeficiency Virus
HMN	Health Metrics Network
HRH	Human resources for health
HSRP	Health sector reform program
IEC	Information, education, and communication
IDB	Inter-American Development Bank
IHR	International Health Regulations
IICA	Inter-American Institute for Cooperation in Agriculture
IMCI	Integrated Management of Childhood Illness
INCAP	Institute of Nutrition of Central America and Panama
IPCA	Central American Initiative for Chagas' Disease Control
IPP	Influenza pandemic preparedness
KHMH	Karl Heusner Memorial Hospital
MCH	Maternal and child health
MDG	Millennium Development Goal(s)
MED	Ministry of Economic Development, Commerce, Industry, and Consumer Protection
MFA	Ministry of Foreign Affairs and Foreign Trade
MHA	Mental Health Association
MHD	Ministry of Human Development and Social Transformation
MOA	Ministry of Agriculture and Fisheries
MOE	Ministry of Education
MOH	Ministry of Health
MOL	Ministry of Labour, Local Government, and Rural Development
MORSS	Minimum Operating Residential Security Standards
MOSS	Minimum Operating Security Standards
MTSP	Medium-Term Strategic Plan
NAC	National AIDS Commission
NCA	National Council on Ageing
NCCC	National Climate Change Committee
NCD	Noncommunicable disease(s)
NCFC	National Committee for Families and Children
NEMO	National Emergency Management Organization
NGO	Nongovernmental organization
NHDAC	National Human Development Advisory Committee
NHIS	National Health Insurance Scheme
NPEAP	National Poverty Elimination Action Plan
NPES	National Poverty Elimination Strategy
OCPC	Office of Caribbean Program Coordination
OSH	Occupational safety and health
PAF	Program Acceleration Fund (of UNAIDS)
PAHO	Pan American Health Organization
PANAFTOSA	Pan American Foot-and-Mouth Disease Center
PANCAP	Pan Caribbean Partnership against HIV/AIDS
PCB	Pesticide Control Board
PHC	Primary health care
PHCO	PAHO HIV Caribbean Office
PLWHA	Persons living with HIV and AIDS
PUC	Public Utilities Commission
PWR	PAHO/WHO Representative
RTI	Road traffic injuries
SIB	Statistical Institute of Belize
SICA	Central American Integration System
SIF	Social Investment Fund
SIP	Perinatal Information System
SRH	Sexual and reproductive health
SSB	Social Security Board
STI	Sexually transmitted infection
SWMA	Solid Waste Management Authority
SWOT	Strengths, weaknesses, opportunities, threats
TC	Technical cooperation
TCC	Technical cooperation among countries
TDC	Toledo Development Corporation
THE	Total health expenditure
UB	University of Belize
UNAIDS	Joint United Nations Program on HIV/AIDS
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNDSS	United Nations Department of Safety and Security
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
USAID	United States Agency for International Development
UWI	University of the West Indies
VAA	Vitamin Angel Alliance
WHO	World Health Organization
WHO-AIMS	World Health Organization Assessment Instrument for Mental Health Systems

Photo courtesy PAHO/WHO-Belize

Primary-level students and teachers apply their creativity to the 2007 World Food Day celebration.

Photo courtesy PAHO/WHO-Belize

Laboratory technicians receive the opportunity to enhance their on-the-job skills.

EXECUTIVE SUMMARY

Over the period of January to July 2008, the Pan American Health Organization/World Health Organization (PAHO/WHO) undertook a participatory process to formulate a Country Cooperation Strategy (CCS) for its work with, and in, Belize over the medium-term. Led by the PAHO/WHO Representative in Belize, a CCS team comprising members from all levels of the Organization worked to define and implement the process for developing the Belize CCS, based on previous experiences in PAHO and the revised (2008) CCS methodology formulated by WHO. Significant preparatory work was done, including a review of documents, the development and/or revision of tools to gather and process information on health and health-related issues in Belize, and consultations held with key players within and outside of the Organization on national health priorities and needs.

In addition to this qualitative information, the CCS noted national health development priorities as outlined in frameworks such as the Belize Health Agenda 2007–2011, the National Poverty Elimination Strategy and Action Plan 2007–2011, and the United Nations Development Assistance Framework 2007–2011. These priorities were analyzed in the context of global, regional, and subregional agreements that impact health—such as the Millennium Development Goals, the WHO 11th General Program of Work 2006–2015, the Health Agenda for the Americas 2008–2017, and the Caribbean Cooperation in Health initiative—as well as that of PAHO/WHO's comparative advantage as a technical cooperation agency in assisting Belize to address identified national health development priorities. The CCS reflects objectives for technical cooperation set out in the WHO Medium-Term Strategic Plan 2008–2013 and the PAHO Strategic Plan 2008–2012.

The unique position of Belize—an English-speaking country in Central America with membership in both the Caribbean Community (CARICOM) and the Central American Integration System (SICA)—presents an opportunity for the country to play a significant role in strengthening collaboration between these two subregions of the Region of the Americas. In February 2008, a new government took office in Belize, and the CCS was therefore able to take into consideration changes in policy direction for health put forward by the new administration and summarized in the Prime Minister's budget presentation delivered in July 2008.

The analysis for the CCS proved challenging in certain areas, not only because of inadequate data, analysis, and information—in particular, data disaggregated to a degree that would permit more accurate identification of inequities—but also because different sources provided different data for the same variables and time periods. In some instances, the CCS identifies health inequities by association or inference; for example, where there are districts with high levels of poverty and large concentrations of certain ethnic groups.

The analysis of the national health development situation in Belize identified major health priorities and challenges, among them the "old" nemeses of communicable diseases, maternal and child mortality, disasters and emergencies, and the need for continued improvement in water quantity and quality, and in basic sanitation. However, HIV and AIDS, noncommunicable diseases and their risk factors, injuries and violence, emerging epidemic threats to human security, climate change effects, mental health, occupational safety and health, and health inequities were also highlighted, as was the need to look critically at the health system itself and the performance of the Essential Public Health Functions.

The 2004–2005 and 2006–2007 biennia saw PAHO/WHO's technical cooperation focusing on disease prevention and control, health systems and services, family and community health, and environmental management, including disaster preparedness and response. Direct technical cooperation, training, information system strengthening, information-sharing, procurement, research, support for nongovernmental organizations, resource mobilization, and technical cooperation among countries were among the strategies used to achieve agreed-upon objectives.

The Government of Belize (GOB) and the Ministry of Health (MOH), in partnership with local and international development agencies, have mounted a response to the country's numerous health challenges. The CCS identifies several national strengths that may be built upon; among them, the trend of increasing investment in health, ongoing health sector reform, the decentralized health system, the Belize Health Information System, and existing frameworks for action in health. Policies, plans, and protocols to address poverty, gender, employment, education, and other social determinants of health have been, and are being, developed and implemented to varying degrees.

Among the opportunities for action are Belize's active participation in SICA and CARICOM, the implementation of the U.N. Development Assistance Framework 2007–2011, and the increasing interest of many development partners in addressing health and health-related issues in Belize. However, this last poses a challenge, not only in determining the amount and impact of aid flow, but also in facilitating a more balanced distribution of those resources among national health priorities, and in strengthening national ownership and coordination, in line with the principles of the Paris Declaration on Aid Effectiveness (2005).

The PAHO/WHO Belize CCS 2008–2011 has four strategic priorities: improving the health status of the population, addressing health determinants, strengthening health sector policies and organization, and enhancing PAHO/WHO's response. Within each of these strategic priorities, main foci and areas for action have been identified, as well as the core functions and strategies that the Organization will use to address them. The main foci included under "improving health status" are communicable diseases; HIV, AIDS, and sexually transmitted infections (STI); family and community health; and noncommunicable diseases. Under "addressing health determinants," the main foci are health equity, environmental management, the impact of climate change on health, and an effective response to, and mitigation of, the impact of natural hazards. Under "strengthening health sector policies and organization," the main foci are strengthening the MOH's institutional capacity, national health insurance, health systems management, human resources for health, and technical cooperation among countries. Under "enhancing PAHO/WHO's response" there is one main focus: PAHO/WHO's capacity. There is therefore continuity with areas addressed in previous biennia, but with a greater focus on health determinants, equity, factors that threaten health security, and ensuring that the Organization continues efforts to improve its efficiency and effectiveness.

PAHO/WHO is a technical cooperation organization, and direct technical cooperation, aimed at catalyzing change and developing institutional capacity, will continue to be the Organization's main approach in Belize. However, greater emphasis will be placed on other core functions, namely partnerships, research, knowledge dissemination and application, and monitoring. Given the country's ethnic, cultural, and religious diversity, and in keeping with the principles of the right to the highest attainable standard of health, PAHO/WHO will highlight health challenges and inequities facing Belize's more vulnerable groups, and work with them and other stakeholders to identify and implement appropriate corrective strategies, using the crosscutting approaches of health promotion, gender, and human rights.

The CCS has implications for all levels of PAHO and WHO, as it guides actions to strengthen the implementation of the Organization's country focus policy and achievement of its objective of "responding better to country needs." The CCS has resource allocation and mobilization implications—for financial, human, and infrastructural resources—and mandates greater collaboration and cooperation inside the Organization, as well as with a wide range of national counterparts and international development partners.

A villager in rural Belize receives primary health care services.

Photo courtesy PAHO/WHO-Belize

Voluntary blood donors such as this man enable the country's health services to maintain a sufficient supply of safe blood.

FOREWORD

The Country Cooperation Strategy (CCS) is one of the main instruments through which the Pan American Health Organization/World Health Organization (PAHO/WHO) strengthens its technical cooperation programs in countries. In recognition of the axiom that one size does not fit all, this medium-term strategy is tailored to the needs, priorities, and situation in the specific country. The CCS states not only *what* PAHO/WHO will do with, and in, the country to contribute to the achievement of national health development goals, but also *how* the Organization will do it.

Belize is uniquely placed in both the Caribbean and Central American regions, and it has a rich diversity of peoples, languages, and cultures. Like other developing countries, it faces demographic and epidemiological transitions, and challenges in achieving health equity. There are social, economic, and political determinants of health, many of which lie outside the health sector's responsibility and demand effective intersectoral collaboration, policies that support health in all sectors, and enhanced partnerships with local, national, and international partners. The plight of the most vulnerable and disadvantaged groups demands priority attention, as highlighted in the Millennium Development Goals (MDGs) that form an overarching global framework for national development.

Effective planning at the country level, based on quality, disaggregated data, is critical to the achievement of the MDGs. Belize has made advances in certain areas, and there are many national frameworks for action in health and development. These range from poverty elimination strategies to health plans and policies, and strategic plans addressing specific health challenges. The gaps are evident, yes, but we must also celebrate the successes and note the lessons to share, just as we note the experiences of other countries from which Belize can learn.

The PAHO/WHO Belize Country Cooperation Strategy 2008–2011 was developed with the involvement of all levels of the Organization, and the Organization as a whole commits to supporting Belize in addressing the priority challenges to its national health development. We will all be involved in the implementation, monitoring, and evaluation of the Country Cooperation Strategy and look forward to working with both national counterparts and international partners in advancing the cause of health in Belize.

Mirta Roses Periago
Director
Pan American Health Organization

1. INTRODUCTION

The World Health Organization (WHO) introduced the Country Cooperation Strategy (CCS) in 1999 as part of its Country Focus Policy, which aimed to strengthen WHO's performance at the country level. The other components of this policy are core competencies and capacities of country teams, coherent programmatic and technical support from Regional Offices and Headquarters, effective functioning of Country Offices, information and knowledge management to and from countries, and working with agencies of the United Nations (U.N.) system and other development partners.

The Pan American Health Organization (PAHO), the Regional Office for the Americas of WHO, had long had a country focus, as evidenced by its offices in 28 of its 35 Member States, but in an effort to enhance this focus and respond better to country needs, it adopted the CCS as an integral part of its own policy. The PAHO/WHO CCS describes the Organization's medium-term (4–6 years) vision and strategic framework for its cooperation with a particular country.

CCS development is a participatory process involving all levels of PAHO and WHO, and a wide range of stakeholders at the national level. It focuses on PAHO/WHO's comparative advantage in helping the country to address national priorities that are selected in the context of subregional, regional, and global priorities and agreements for action in health, taking into consideration the work of other stakeholders in health. Thus, the CCS in Belize takes into consideration not only national frameworks such as the Belize Health Agenda 2007–2011 and the National Poverty Elimination Strategy and Action Plan 2007–2011, but also the Millennium Development Goals; the WHO 11th General Program of Work 2006–2015 and the Health Agenda for the Americas 2008–2017; the WHO Medium-Term Strategic Plan 2008–2013 and the PAHO Strategic Plan 2008–2012; the Regional Program Areas identified in the draft Caribbean Cooperation in Health Initiative, Phase III; the Central American Integration System's Health Agenda 2008–2017, now under development; and critical elements of U.N. reform, such as the U.N. Development Assistance Framework 2007–2011 for Belize and the cluster approach to humanitarian assistance, which facilitate achievement of the U.N. goal of "Delivering As One" at the country level.

These frameworks, explicitly or implicitly, are based on values. The PAHO Strategic Plan identifies the Organization's values of equity, excellence, solidarity, respect, and integrity as themes that must inform all its policies, programs, and plans; the commitment to fulfillment of the right to the highest attainable standard of health is enshrined in the WHO Constitution; and human rights are a fundamental tenet of the U.N. Charter—the CCS embraces all these values. It not only aligns PAHO/WHO's work with national strategies, priorities, and plans, and facilitates the harmonization of development partner work for greater aid effectiveness as expressed in the Rome Declaration on Harmonization (2003) and Paris Declaration on Aid Effectiveness (2005), but it also address-

es the objectives of U.N. reform and promotes synergy and integration of support to the country across all levels of PAHO/WHO. The CCS is therefore an important instrument to guide planning, collaboration, budgeting, and resource allocation and mobilization within and outside the Organization.

An important aspect of development assistance is to ensure that the country is not just a passive recipient of aid, but that capacity is built for the sustainability of improvements in national systems and institutions, in order to maintain achievements. The Director of PAHO, Dr. Mirta Roses Periago, has said that each country, regardless of size and level of development, must be able to have its voice heard and contribute to international debates and decisions that affect its development, directly or indirectly. Belize is a Member State of PAHO, WHO, the Caribbean Community (CARICOM), and the Central American Integration System (SICA), among many other international political and technical groupings, and it has the distinction of being the only country in Central America whose official language is English. The country therefore has the potential to serve as a bridge between Central America and the Caribbean, and to share its experiences in both subregions with other regions, especially in health.

Given the global decisions and mandates in non-health sectors that affect health, as well as increasing international travel and transborder communication and advances in technology that make the world truly a "global village," international cooperation in health is of increasing importance in ensuring human security. Interaction, collaboration, and cooperation between health and other sectors—public and private, national, and international—are crucial, and the CCS can facilitate these actions.

In early February 2008, the people of Belize elected a new government, making the timing of the CCS development auspicious for the reflection of any changes in policy desired by the new administration. In preparation for CCS development, the PAHO/WHO-Belize Country Office disseminated a questionnaire to a wide range of stakeholders, including PAHO and WHO technical and administrative entities and national and international development partners. In addition to initiating participation and information-gathering for the CCS process, this activity began to raise awareness of the CCS and facilitate preparation for the next steps in its development. There was a 53% response to the questionnaire, and the wealth of information provided set the stage for a mission to Belize involving representatives from all levels of PAHO/WHO to continue the process of interaction with stakeholders, discussion, analysis, and drafting of the strategic agenda and its implications. The perspectives of PAHO/WHO-Belize Country Office personnel were also obtained, based on a strengths, weaknesses, opportunities, and threats (SWOT) analysis.

The CCS is essential to ensure efficient and effective use of the resources available through PAHO/WHO, to facilitate mobilization of additional resources, and to develop strategic partnerships and alliances in support of Belize's national health development goals. PAHO/WHO's actions in implementing the CCS will be shaped by its core functions, namely providing *leadership* on matters critical to health and engaging in *partnerships* where joint action is needed; shaping the *research* agenda, and stimulating the generation, dissemination, and application of valuable *knowledge*; setting *norms and standards*, and promoting and monitoring their implementation; articulating ethical and evidence-based *policy options*; establishing *technical cooperation*, catalyzing *change*, and building sustainable *institutional capacity*; and *monitoring* the health situation and assessing health trends.

The following sections of the CCS summarize the country's main health and development challenges and the national response; existing development assistance and partnerships; past and current PAHO/WHO cooperation; the strategic agenda for PAHO/WHO's cooperation with Belize over the period 2008–2011; and, finally, implications of the implementation of that agenda for the PAHO and WHO Secretariats. Many official reference documents provided information in addition to the information obtained from stakeholders. However, several gave different figures for the same variables and time period, creating a dilemma for the CCS team to decide which to use in the CCS, so as to properly analyze, summarize, and synthesize the information to inform a clear strategy. The CCS development process (***Annex 1***) thus pointed to a major challenge—the need for consolidated, consistent, quality health information—but it also identified solid efforts to meet the challenge.

The CCS aims not only to define PAHO/WHO's efforts to support national health development, but also to build on and promote national and local successes and good practices. The success of the CCS will depend on its participatory implementation, its contribution to harmonized development cooperation, its effective monitoring and evaluation, and its flexibility to respond to changes in the external and internal environments.

2. COUNTRY HEALTH AND DEVELOPMENT CHALLENGES AND NATIONAL RESPONSE

2.1 General context

2.1.1 General information

Belize is a small, independent country on the Caribbean coast of Central America. The 2007 mid-year population was estimated at 311,500 persons (*1*). It shares borders with Mexico to the north, Guatemala to the west and south, and with the Caribbean Sea to the east. It is 274 km long and 109 km wide, with a total land area of 22,700 km^2, made up of the mainland (95%) and 1,060 islands or cays (5%). The 2005 population density was approximately 12 inhabitants per km^2, the lowest in Central America. Total national territory (including territorial sea) is 46,620 km^2. Belize is well known as the home of the longest healthy barrier reef in the Western Hemisphere, which stretches for 220 km along the entire coastline, and certain sections have been declared a World Heritage Site by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The Government of Belize (GOB) has declared several land and sea sites as protected areas in order to conserve and preserve biological diversity or because of their unique geophysical features.

Belize lies in the subtropical geographic belt and has a climate governed by strongly seasonal variations in rainfall; mean monthly temperatures range from 16–28°C in the winter months to 24–33°C during the summer, and humidity ranges between 40% and 99% throughout the year. Distinct wet (June–December) and dry (January–May) seasons exist; more than 80% of annual precipitation in southern Belize occurs during the wet season, and annual precipitation averages 1,100 mm in northern Belize and 4,000 mm in the south.

Belize obtained its independence from Britain in 1981 and is the only English-speaking country in Central America. Its culture, politics, and economy are more like those of other English-speaking Caribbean countries, but due to its location and constant migration from neighboring Spanish-speaking countries, its demographic profile and the language have been heavily influenced. In 1970, the government moved the capital from Belize City to Belmopan, which is located inland, given the vulnerability of Belize City to hurricane-related damages and its location on the coast and at sea level. Belize has a long history of devastating encounters with tropical storms and hurricanes.

The Government is structured as a parliamentary democracy based on the British Westminster system. The British monarch is the head of state and is represented in the country by the Governor-General. A Prime Minister and Cabinet constitute the executive branch of the government, while a 31-member elected House of Representatives and a 13-member appointed Senate form a bicameral legislature, the National Assembly. The Cabinet consists of Ministers and Ministers of State who are appointed by the Governor-General on the advice of the Prime Minister (***Annex 2***).

The country has six administrative Districts: Belize, Cayo, Corozal, Orange Walk, Stann Creek, and Toledo. A locally elected town board of seven members administers each urban area. Belize City and Belmopan (Cayo District) have their own nine-member City Council. Village Councils carry out village-level administration, with the traditional "alcalde," or mayoral, system incorporated into the structure in the southern part of the country.

Despite a long-standing dispute with Guatemala over that country's claim to Belize's territory and occasional border incidents, there are ongoing confidence-building measures between the two countries. They maintain diplomatic relations, cooperate with each other to address health issues of common interest, and are both members of SICA.

2.1.2 Economy

Belize has an open economy based primarily on agriculture and services. Agricultural exports, which include sugarcane, citrus, bananas, and marine products, have historically dominated Belize's economy. The country also relies heavily on forestry, fishing, and mining as primary resources. One of the main attractions for foreign investment is the stability of the currency; since 1976, the exchange rate has been pegged to the U.S. dollar (US$ 1.00 = BZ$ 2.00). In 2000, Belize had an unprecedented gross domestic product (GDP) real growth of 12.3%, which was associated with growth in revenues from the tourist industry and shrimp exports. Following several natural disasters, a slowing world economy, higher fuel prices, and a programmed reduction in the central government's expenditure, the GDP fell to 4.3% in 2002 and to 3.1% in 2005. However, increases in banana and in farmed shrimp production and exports, coupled with a surge in tourism activity, contributed to the 2003 GDP growth of 9.3%. GDP per capita in 2007 was estimated at US$ 4,067 (*2*), which is one of the highest GDP levels in Central America and defines Belize as a middle-income country. Per capita income at constant prices averaged approximately US$ 3,500 over the 2001–2005 period (***Annex 3***). One of the great expectations for the economy comes from the discovery of oil in 2006.

In 2007, Belize experienced an economic slowdown, with real GDP growth falling to 1.6% as compared to 6.3% in 2006; however, a 34.1% increase in the production of petroleum helped to offset decreases in output of services and agricultural products. In 2008, GDP growth is already being affected by lower output of crops that were severely affected by Hurricane Dean in 2007, and the Statistical Institute of Belize (SIB) estimates that GDP grew only 0.6% in the first quarter. There was a 2.1% decline in the number of stay-over visitors and a 19.0% decline in cruise ship arrivals during the January–April 2008 period as compared to the same period in 2007; this is attributed, in part, to the economic slowdown in the United States and competition from other destinations. Additional revenues estimated at US$ 12.5 million are expected to come from a tax on the domestic oil industry (*3*).

A World Bank report on migration and remittances shows a 300% increase in inward remittance flow from US$ 22 million in 2000 to US$ 66 million in 2006, the latter representing 5.4% of the GDP for 2006. The outward remittance flow doubled from US$ 11 million in 2000 to US$ 22 million in 2006, the latter being 1.8% of GDP for 2006 (*4*).

2.2 Health status of the population

2.2.1 Overview

Belize's health profile is a reflection of the trends seen in most countries of Central America and the Caribbean. It is undergoing the epidemiological transition from communicable diseases (CDs) to noncommunicable diseases (NCDs) as the main causes of death and illness, and continues to address emerging and reemerging CDs while grappling with increasing levels of NCDs (***Annexes 4, 5A, and 5B***). In general, health indicators show improved life expectancy and survival, but improvements in quality of life and decreases in some preventable causes of death and illness remain major health challenges.

Life expectancy at birth is estimated at 71.7 years for the 2005–2010 period (males 69.5 and females 74.1) (*5*); this represents a slight decrease from 71.9 for the 2000–2005 period and continues the downward trend noted from a high of 72.6 recorded for the 1995–2000 period (*6*). While the increases may reflect changes in fertility trends and overall improvements in water and sanitation, among other factors, the impact of HIV and AIDS on the population may be a contributing factor to the decreases noted.

Between 2002 and 2006, the crude birth rate average was 27.3 per 1,000 population (*1*). Disaggregated birth rates show a trend of slightly higher male births (averaging 50.7%) than female births (averaging 49.2%). The crude death rate averaged 5.0 deaths per 1,000 population over the 1999–2005 period; this average belied a leveling trend over the years 2002 to 2006 as rates ranged between 4.6 and 4.8, compared to rates as high as 6.1 per 1,000 between 1997 and 2001. The average annual crude death rate for males was significantly higher (5.9) than that for females (4.0).

2.2.2 Population and demographic profile

The population is growing at a rate of approximately 3.3% per year, mainly due to a high fertility rate and immigration. This rate, if sustained, would result in Belize doubling its population in approximately 20 years. While the male-female distribution remains unchanged since 2002 (49.7% males, 50.3% females), there has been a slight change in the urban-rural distribution, which went from 48.6% urban and 51.4% rural[1] in 2000 to 50.2%

[1] The Statistical Institute of Belize defines "rural" as being any area outside of a major city or town. Major cities and towns are Belize City, Belmopan City, Orange Walk Town, Corozal Town, San Ignacio, Santa Elena, Punta Gorda Town, and Dangriga Town (Marvin Moody, SIB, personal communication, 28 May 2008).

urban and 49.8% rural in 2005 (*1*), reflecting the rural-urban shift seen in many developing countries. The Belize District continues to have the largest portion of the population (29.8%), while Toledo District maintained the lowest proportion (9.5%) (***Annexes 6 and 7***).

Belize has a young population. In 2005, 41% of the population was under 15 years of age, while 52% was 20 years of age or older. The elderly (60 years of age or older) accounted for 5.9% of the total population. Women of childbearing age (15–49 years) accounted for 49% of the total female population, and the dependency ratio was 69.6% in 2005. The average total fertility rate for the period 2002–2006 was 3.3 children per woman of childbearing age. The inter-censal growth rate for 1991–2000 was 2.7%, which represents a 1% growth rate over the previous period (1980–1991) (***Annex 8***).

The population of Belize is ethnically diverse and multicultural. The 2000 census showed the majority to be Mestizo[2] (48.7%), followed by Creole[3] (24.9%), Maya (10.6%), Garinagu[4] (6.1%), Mennonite[5] (3.6%), East Indian (3.0%), Chinese (0.7%), and other 2.4%, with this last category including Caucasian/White and Arab. The population of the Cayo, Corozal, and Orange Walk Districts is predominantly Mestizo, while the Belize District is heavily Creole; the Garinagu are most numerous in the Stann Creek District, and the Maya and East Indians are concentrated in the Toledo District (*7*). The Toledo District has the highest level of the population living in poverty (79%), followed by Orange Walk (34.9%), Stann Creek (34.8%), Cayo (27.4%), Corozal (26.1%), and Belize District (24.8%).

Christianity dominates religious practices in Belize; 49.6% of the population is Roman Catholic and 27% is Protestant, including 7.4% Pentecostal, 5.3% Anglican, 5.2% Seventh Day Adventist, 3.5% Methodist, and 1.5% Jehovah's Witnesses (*8*). There are smaller numbers of adherents to Islam, Hinduism, Judaism, and other religions, and 9.4% do not adhere to any religion.

Many individuals cross the border from Belize to take advantage of services and supplies in the neighboring countries of Guatemala and Mexico, and there are reports of trade in both licit and illicit goods, driven by increases in the cost of living (***Annex 9***). The SIB reported that the domestic price level, as measured by the average annual increase in the Consumer Price Index (CPI), was up by 2.3% during 2007, with food prices increasing by 5.3%. Price hikes in imported food staples and fuel raised the CPI to 4.7% over the 12 months to February 2008, an upward trend that is likely to continue (*3*).

2.3 Major health problems

2.3.1 Communicable diseases

Acute respiratory infection: Acute respiratory infection is one of the predominant disorders in the mortality and morbidity listing, and has been over the past 20 years. For the period 2001–2005, the age groups primarily affected ranged between 1 and 19 years of age (1–4 years, 12.9% of deaths; 5–9 years, 12.7%; 10–19 years, 12.5%).

Diarrhea: Cases of diarrhea have decreased significantly, especially among children under 5 years old, from 1,645 in 1998 to 227 in 2003. Improvement and expansion of water supply and basic sanitation, especially in the rural areas, coupled with public education on hygiene, have contributed to a reduction in water- and foodborne diseases. However, a 2005 study on soil-transmitted helminths among school-age children in the southern region of the country revealed that 61.2% of children aged 5–12 years old were infected by these organisms. Contributing factors include poverty, unsatisfactory sanitation and hygiene practices, inadequate supporting infrastructure, and limited awareness of the problem and its complications.

Malaria: There has been a significant reduction in malaria cases over the period 1995–2004, from 10,441 to 1,065. There was an increase in 2005 to 1,549 reported cases, but the number fell to 844 in 2006. The majority (825, or 98.1%) occurred in the western and southern parts of the country and in rural areas where unsatisfactory socioeconomic and sanitation conditions limit effective control of the disease. The number of cases in 2007 remained similar to 2006, with a total of 845 cases reported; again, most cases occurred in the Districts of Cayo, Stann Creek, and Toledo, with 104, 263, and 436 reported cases, respectively.

Dengue: Belize has all four serotypes of the dengue virus, and the country's geographic location, with coastal areas below sea level and prone to flooding, facilitates vector reproduction and spread, and increases vulnerability to an outbreak of dengue hemorrhagic fever. In 2005, there was a dengue outbreak with 652 cases, including the first confirmed case of the hemorrhagic type, and in 2007 there was an outbreak of dengue in the Corozal District, with one case of dengue hemorrhagic fever in Caledonia Village (V. Cobb, personal communication, 2008)[6].

Chagas' disease: Only sporadic cases are reported, but the vector is present in the western and southern districts (R. Polonio, unpublished observation)[7], and surveillance and public awareness are critical. Belize is part of the Central American Initiative for Chagas' Disease Control (IPCA), which has an Intergovernmental Technical Commission; PAHO/WHO is its Technical Secretariat.

2 Of mixed European and Mayan ancestry.

3 Of mixed European and African ancestry.

4 Of mixed Amerindian and Carib ancestry; "Garifuna" refers to an individual, the culture, and the language.

5 A religious group descended from the Anabaptist movement.

6 Ms. Venus Cobb is the Corozal Hospital malaria microscopist.

7 Presentation by Mr. Roy Polonio on the study "Entomological assessment of Chagas' vector in southern Belize" conducted in 2006–2007.

Rabies: There have been no rabies cases in humans since 1989, and the last canine case was reported in 2000. However, in May and August 2008, cases in 1 dog and 2 horses, respectively, were confirmed. The occurrence of rabies in bovine animals and wildlife, such as vampire bats and foxes, represents an ongoing public health threat.

Emerging diseases: No outbreaks of emerging diseases, such as Severe Acute Respiratory Syndrome (SARS) and avian/human influenza, have been reported. However, in line with global human security strategies and the implementation of the International Health Regulations (IHR) (2005), surveillance at national and local levels, epidemic alert and response (EAR), and influenza pandemic preparedness (IPP) are critical.

2.3.2 HIV, AIDS, STI, and tuberculosis

HIV and AIDS: HIV and AIDS pose major challenges to national development, as do other chronic diseases. There is a generalized epidemic, with an adult prevalence of HIV of 2.1% (*9*), which is the highest in Central America and the third highest in the Caribbean. The previous estimated adult prevalence of HIV was 2.4%; it is thought that improved data collection and analysis, and the national response to HIV, have contributed to the decrease noted. Over the period 2001–2004, the incidence of HIV increased by 15.6%; the main mode of transmission is through heterosexual contact. This has implications for mother-to-child transmission, and 10% of babies were born HIV-positive in 2007.

As in many other countries, the age group predominantly affected is the young and productive population aged 15–49 years. However, no age group is exempt from this infection; AIDS is responsible for 2.5% of deaths in the 5–9-year-old age group. In 2006, it was the fourth leading cause of death overall, and in 2007 it was the leading cause of death in the 30–39-year-old age group. The male-to-female ratio is reported at 1.3:1; of the 450 reported new HIV infections in 2007, 254 were in males, 196 in females. The HIV prevalence among 15–24-year-olds is estimated at 1.5% for females and 0.5% for males (*9*), highlighting the influence of gender.

Sexually transmitted infections (STIs): Though the perception is that STIs are increasing, in recent years emphasis has been placed on HIV, with less attention being given to other STIs. This has resulted in inadequate data on STIs and the inability to determine trends. Data from the STI Comprehensive Clinic in 2007 revealed that yeast and trichomonas infections in women, and nonspecific genital infections in both sexes, were the most common STIs reported. The reported coverage of syphilis tests among pregnant women attending antenatal clinics was 84.5% in 2005 and 84% in 2006, and the prevalence of syphilis in this population group fell from 4.7% in 2005 to 0.7% in 2006. This falling prevalence is consistent with the fact that no cases of congenital syphilis have been identified for the past two years. The country has implemented the Syndromic Approach for STI detection, control, and prevention, but reporting from the districts remains a challenge to be addressed.

While significant strides have been made in addressing risky sexual behavior through education, especially among youth and adolescents, there is much left to be done in terms of addressing this and other sexual and reproductive health issues. There is early initiation of sexual contact, and transactional sex is a reality for many young girls; it is linked to poverty and characterized by multiple partners and inadequate condom use (*10*).

Tuberculosis (TB): Because of HIV and AIDS, TB control has again become a challenge; the prevalence of TB/HIV coinfection was 12.4% in 2001. In 2005, the total TB incidence rate was 37 per 100,000 population, down from 53.2 per 100,000 in 2002, but up from 32.2 per 100,000 in 2003 and 2004 (*11*). The number of TB cases decreased from 127 in 2000 to 96 in 2006, but in early 2006, 2 cases of resistant disease were identified, requiring second-line treatment. The TB incidence rate fell to 30.2 in 2006 and 20.2 in 2007 (*12*), but TB remains a major health threat for persons living with HIV and AIDS; although prevention and treatment of the infection in these persons is an urgent priority for both HIV and TB prevention programs, there has been limited implementation of relevant activities.

2.3.3 Noncommunicable diseases and risk factors

Diabetes and hypertension: Of the NCDs, diabetes and hypertension continue to rank high on the list of causes of morbidity and mortality. In 2003, diabetes ranked sixth as a cause of death, but it was second in 2004, and first in 2005, 2006, and 2007 (*12*). Hypertensive disease ranked first from 2003 to 2005 (it tied with diabetes in 2005), second in 2006, and seventh in 2007, having been displaced by diseases of the pulmonary circulation and other forms of heart disease, HIV/AIDS, ischemic heart disease, injuries, and cerebrovascular disease (*12*). In 2006, diabetes caused 3.4% of hospitalizations; cancers 2.0%; and hypertension 1.5%. The results of a 2006 study on diabetes, hypertension, and associated risk factors (*13*) highlighted several concerns: 13.1% of the population over the age of 20 had diabetes, 28.7% had hypertension, and 70% was considered overweight or obese; women were more obese than men in all age groups and 77.5% of respondents engaged in less than 60 minutes of physical activity per week. Persons of Garinagu, Creole, and East Indian ethnicity were more likely to have diabetes and hypertension, and Garinagu, East Indians, and Mennonites were more likely to have high cholesterol.

Tobacco: Belize ratified the Framework Convention on Tobacco Control (FCTC) in December 2005. The country is moving to fulfill its obligations under the Convention through the development and implementation of a National Tobacco Control Plan. However,

a feature of the 2008–2009 budget presentation was a reduction of the excise tax on cigarettes (*3*), which is cause for concern.

The Global Youth Tobacco Survey (GYTS) conducted in Belize in 2003 found that 39.1% of high school students aged 13–15 years had smoked cigarettes on one or more occasions, 20% were using some type of tobacco product, and 16% smoked cigarettes. Nearly one-quarter (23.5%) purchased their own cigarettes, and 15.5% reported that they usually smoked at home (*14*). In 2008, the GYTS showed that 26.2% had smoked cigarettes on one or more occasions, 18.3% were using some type of tobacco product, and 7.7% smoked cigarettes. Ten percent had been offered a free cigarette by a tobacco company representative, and one-third of the students had at least one parent who smoked (*15*). In both studies, smoking rates were higher among boys than girls.

Cancers: Cancers were not highlighted among the top 10 causes of mortality overall during the period 2003–2007, but appear in the top 10 when the data are analyzed according to sex. In accordance with the trend seen in other countries, prostate cancer was the primary cause of cancer deaths among men in Belize during that period, followed by cancers of the digestive organs and peritoneum (excluding stomach and colon), other cancers, and cancers of the trachea, bronchus, and lung. Among women, cancers of the cervix and uterus (mainly cervix) were the main cause of cancer deaths, followed by cancers of the digestive organs and peritoneum (excluding stomach and colon), other cancers, and cancer of the breast (*12*).

2.3.4 Maternal and child health

Vaccine-preventable diseases: The risk of these diseases has been reduced through a steady increase in vaccination coverage with diphtheria, BCG, tetanus, pertussis, polio, *Haemophilus influenzae* type b (Hib), hepatitis B, and measles-mumps-rubella (MMR) antigens during the 2001–2005 period; each had a coverage level above 90%. In 2002, two new vaccines, hepatitis B and Hib, were introduced into the national infant immunization schedule.

The MMR vaccine was introduced in 1996 and rubella elimination activities started in 1997 with vaccination of children and women. MMR vaccination of males was carried out in 2004, when a mass campaign targeted 66,800 males aged 5–35 years and resulted in 96% coverage.

There have been no reported cases of measles since 1991 or poliomyelitis since 1987. The last case of neonatal tetanus was reported from Stann Creek District in 1997, and the last case of non-neonatal tetanus was in a 3-year-old from Orange Walk District in 1998. The last case of congenital rubella syndrome was reported in 1997. No cases of diphtheria or pertussis were reported for 2001–2005.

Maternal mortality: The maternal mortality ratio averaged 77.3 per 100,000 live births over the 2001–2005 period (*11*) and exhibited wide fluctuations, which underline challenges in the quality of maternal care, as well as the small population size and inconsistent reporting; maternal mortality in 2005 was 134.1, 41.8 in 2006, and 85.3 in 2007 (*12*). The ratio is higher in the Toledo and Stann Creek Districts. According to the MOH, maternal deaths registered between 2001 and 2005 ranged between 3 and 10 per year, and in 2005 the main cause was eclampsia (6 of 10 deaths), while in 2006 the main cause was complications associated with HIV and AIDS (3 of 6 deaths). Other causes included ectopic pregnancy and cardiovascular disease. Of note, for the January–July 2008 period, no maternal deaths were reported, but in August 2008, 2 deaths occurred, both in the private sector, underscoring the need for quality of care and other preventive programs and protocols to target both public and private caregivers.

In 2003, 14% of pregnant women accessed prenatal care during their first trimester; 85% obtained prenatal care during some stage of their pregnancy; an estimated 20% were found to be anemic; and only 62% took folic acid, iron, and vitamin A supplements before or during pregnancy. The percentage of all births taking place in hospitals increased from 76.4% in 2003 to 86.9% in 2007 (*12*).

The number of women who seek admission due to unsafe abortion is unknown, but this is a concern. The only available data from the Karl Heusner Memorial Hospital (KHMH) show that 70% of admissions to the gynecology/obstetrics ward in 2001 were for pregnancies with abortive outcomes. There are approximately 360–370 admissions per year for incomplete abortions; 172 occurred in Orange Walk District in 2007 (Belize Family Life Association, personal communication, June 2008). While it is difficult to differentiate spontaneous from induced abortions, anecdotal evidence indicates that most admissions result from complications of induced abortion (*16*).

Adolescent health: Data for the period 2001–2005 showed a mortality rate for adolescents 10–14 years old ranging from 36 per 100,000 population in 2001 to 40 in 2005; for those 15–19 years old, the rate was 86 per 100,000 population in both 2002 and 2003 (*17*). In both groups, external causes of injury were the leading causes of death; land transport accidents accounted for 14.1% and 21.0% of deaths, respectively, and among the older cohort, males were disproportionately affected. Among 10–14-year-olds, communicable diseases accounted for 12.5% of all deaths, mostly due to respiratory infections, while homicide and accidents caused by firearm missiles were among the leading causes of death in 2004 among 15–19-year-olds.

There was an average of 24 live births per year to mothers under age 15 during the 2001–2005 period, and 18.1% of total live births occurred among mothers in the 15–19-year-old age group, with complications of pregnancy being the leading cause of hospitalizations in that group (*17*). Over the same time period, there were 145 new HIV infections in adolescents aged 10–19 years (41 males, 104 females),

which comprised 6.9% of the total new HIV infections; 16 of these were in the 10–14-year-old age group. Ninety-five cases of domestic violence were reported in the age group under age 1 to 14 years of age, and 76.7% were committed against females.

There is a National Plan of Action for Children and Adolescents (2003) that clearly outlines actions for the establishment of adolescent health services with emphasis on mental health, reproductive health, teen pregnancy, and HIV prevention, care, and treatment. The Sexual and Reproductive Health (SRH) Policy and Strategic Plan call for the provision of SRH services throughout the life cycle, with emphasis on family planning for males and females. However, given the predominance of the Church-State educational system and religious dogma in Belize, some sexual and reproductive health issues are not addressed using a public health approach to the degree desired. Some schools expel girls because of pregnancy, and only a few allow them to continue their education afterwards (*18*).

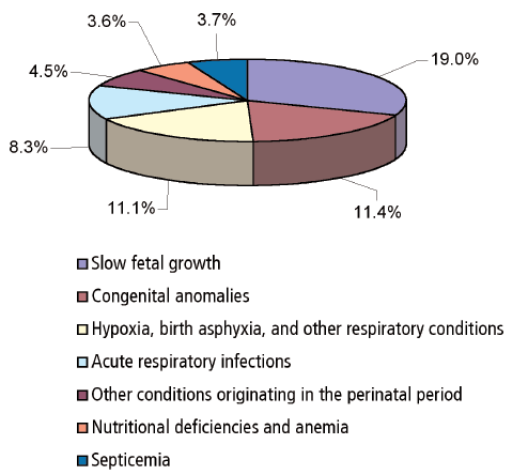
Infant mortality: The infant mortality rate (IMR) ranged from as high as 21.2 per 1,000 live births in 2000 to as low as 14.3 in 2004; it stood at 18.4 in 2005 (*17*), 19.6 in 2006, and 17.2 in 2007 (*12*). For the 2001–2005 period, the leading causes of infant mortality were conditions originating in the perinatal period. Of all deaths among neonates due to these conditions (62.0%), slow fetal growth, fetal malnutrition, and immaturity accounted for 149 deaths; congenital anomalies for 89; hypoxia, birth asphyxia, and other respiratory conditions for 87; acute respiratory infections for 65; other conditions originating in the perinatal period for 35; septicemia for 29; and nutritional deficiencies and anemia for 28 deaths (*17*). A cause-by-cause breakdown is presented in Figure 1. Newborns with low birthweight numbered 1,015 in 2006, representing 14% of the total births for that year. These problems relate to antenatal care, nutrition, and immunization, among other factors. In 2006, the highest IMR was found in Stann Creek District, followed by Toledo, at 30.2 and 27.4 per 1,000 live births, respectively (*19*); in 2007, the rate in Toledo was 25.2, followed by Corozal District with 22.8, and Stann Creek at 22.1 (*2*).

Under-5 mortality: The estimated rate in 2004 was 40.2 per 1,000 live births; in 2005, it was 39.7; and in 2006, it was 20.6. In 2006, the highest rates were in the Toledo and Stann Creek Districts, with, respectively, 38.1 and 36.5 per 1,000 live births. In 2007, the rates were 33.6 and 27.3, respectively, the highest among the districts (*2*). Diarrheal diseases and acute respiratory infections are among the leading causes of mortality among the under-5 age group; however, during the 2001–2005 period, deaths due to diarrhea in this population group reduced from 164 per 100,000 to 23, likely due to the use of oral rehydration salts and improvements in water, sanitation, and other environmental conditions. Between 2001 and 2004, the prevalence of low birthweight (less than 2,500 g) fluctuated from 3.6% to 4.4%; it peaked at 6.9% in 2005 (*17*).

2.3.5 Mental health and substance abuse

Mental health: The principal conditions leading to mental health consultations are clinical depression, psychotic disorders, anxiety disorders, substance abuse, and stress-related disorders. In 2005, 12,318 patients were seen at various psychiatric units throughout the country. Psychotic disorders accounted for the highest number of cases seen, affecting 1,904 men and 1,257 women. Instances of childhood disorders and child abuse were 303 and 141, respectively, in 2005. Disaggregated data on mental disorders are not currently available, but efforts are being made through the Belize Health Information System to address this gap.

FIGURE 1. Causes of neonatal mortality, Belize, 2001–2005.



Source: Pan American Health Organization. Health in the Americas 2007. Washington, DC: PAHO; 2007. (Scientific and technical publication 622).

Substance abuse: Resource constraints have hampered the work of the National Drug Abuse Council; there are few data regarding illicit drug use. However, the Council's National Secondary School Drug Prevalence Survey (2002) (*20*) indicated that substance abuse is a significant problem among young persons throughout Belize. The most popular substances used were legal—alcohol and tobacco—and approximately three of every four students had consumed an alcoholic drink at least once in their lifetime; 55.9% had done so within the past year; and 35.0% within the past 30 days. The most prevalent illicit substance used was marijuana; 13.0% had used the drug in the past year and 6.7% in the past 30 days.

A PAHO/WHO-supported household study on gender, alcohol, and culture (GENACIS) was conducted in Belize in 2005 (*21*); 34% of respondents over 18 years of age reported that they were drinkers [8], with 61% reporting binge drinking[9]. Forty-four percent of drinkers showed hazardous or harmful drinking behavior; such behavior was three times more common among men than among women. About 50% of male respondents, but less than 20% of female respondents, reported drinking alcohol during the past 12 months, with male drinkers consuming alcohol on about five days a month on average and females about three days. Among drinkers, 68% of men and 43% of women reported consuming five or more drinks on at least one occasion in the past year. Among past year drinkers, the average number of drinks on drinking occasions was 7.4 for males and 3.5 for females. Partner aggression against women was reported to be more prevalent among drinkers, and the severity of the aggression was related to heavier alcohol consumption and more frequent drinking by the aggressor. Only 8.4% of drinkers stated that when they had sex after drinking they always used a condom, compared to 80% who stated that they never used a condom, which has implications for the observance of safe sex practices.

Although persons from Toledo District were least likely to be drinkers, that District had the highest proportion of binge drinkers, and this type of drinking was more common among lower income groups. Persons of Garinagu and Creole ethnicity were more likely to be drinkers.

2.3.6 Occupational safety and health

According to data from the Social Security Board (SSB) (*22*), there was an increase in productivity lost from 35,430 days lost in 1995 to more than 70,000 days lost in 2003, and the construction and agricultural sectors were the most affected. Allowed claims for work-related injuries increased from 1,522 in 1995 to 2,383 in 2003 and 2,471 in 2007. However, as shown in Table 1, between 2003 and 2005 the number of allowed claims decreased, only to increase again in 2006 and 2007. Although assessments are conducted in the agricultural sector that indicate a high incidence of exposure to hazards and therefore explain the high incidence of injuries and/or diseases being reported from this sector, there is no effective surveillance system for occupational health. In addition, the National Occupational Safety and Health Act awaits completion.

TABLE 1. Employment injury claims allowed and benefit days paid, Belize, 2003–2007.

Year	Allowed claims	Benefit days paid
2003	2,383	62,906
2004	2,323	47,405
2005	2,020	42,644
2006	2,529	45,717
2007	2,471	57,088

Source: Social Security Board.

2.3.7 Environmental hazards

The importation of pesticides in the country increased significantly, from 1.7 million kg in 2001 to about 7 million kg in 2005. Collaboration among the MOH, the Pesticides Control Board (PCB), PAHO/WHO, and other partners resulted in a 2001 study that documented 59 severe acute pesticide intoxication cases, including 3 deaths. It was also estimated that approximately 4,000 acute pesticide intoxication cases occur annually in the country, with the majority involving agricultural workers and pesticide handlers and/or applicators.

A diagnostic study conducted in 2001 showed that in Belize, DDT was used solely for mosquito control, in contrast to other Central American countries where it was also used for agricultural purposes. As part of the study, environmental and biological samples from selected communities in the Cayo District were tested, and DDT was present in all samples tested. However, when compared to the rest of Central America, the DDT residue levels were generally low, with the exception of sediment samples, which showed values approximately 16 times higher than in other samples. Soil samples showed a value of 0.26 ppm, while sediment samples showed an average of 4.16 ppm, with values ranging from 5.38 ppm at the mouth of the Haulover Creek in Belize City to 3.35 ppm at the upper Macal River near Chaa Creek, Cayo. For those populations whose diet may include significant amounts of shellfish and other seafood that live or feed on sediment detritus, this could pose a health risk. Future testing may take into account these high levels as a reason to target fishing communities for sampling (*23*).

Another collaborative study of the Macal River (Cayo District) in 2005 (*24*) revealed the presence of mercury in several fish species. The average concentrations found were 0.11 µg Hg/g and 0.56 µg Hg/g in non-predatory and predatory fish, respectively. While these levels are lower than the limits set jointly by the Food

[8] i.e., had consumed alcohol during the 12 months prior to the survey.
[9] i.e., the consumption of five or more alcoholic drinks on a single day during the past 12 months.

and Agriculture Organization (FAO) and WHO (0.5 µg Hg/g in non-predatory and 1.0µg Hg/g in predatory fish), there are concerns of exposure to mercury due to consumption of fish by residents of rural communities along the river. The MOH has warned against consumption of these fish, which has implications for the food security of the affected communities.

2.3.8 Injuries and violence

Injuries and violence continue to be major factors in Belize's mortality profile. Road traffic injuries affect all age groups over 1 year of age (11.5% of deaths in the 1–4-year-old age group for the period 2001–2005), but in particular, the 20–59-year-old age group (35.5% of deaths from external causes for the 2001–2005 period). Drunk driving may be a factor in the high incidence of road traffic injuries, but supporting data are lacking. Other external causes include homicide, poisoning, and drowning.

Crime: Of particular interest is the high number of deaths due to homicide that occur in the young, productive population group. Males tend to be affected more by violence-related deaths. Although the overall crime rate decreased by 5.6% over the 2000–2003 period, crime is a major problem in Belize. According to the Belize Police Department, there were 6,893 reported crimes during 2007; burglary (18.2%) and theft (17.8%) were the most frequently reported, and 50% of the crimes were in the category of "other crimes." Reports of rape totaled 38 (0.6%), a decrease from 56 in 2001 and 53 in 2004, and carnal knowledge[10] accounted for 66 (0.95%) of the reported crimes (Belize Police Department, Joint Intelligence Coordinating Centre, personal communication, May 2008).

These statistics demonstrate a decrease in crime compared to 2006, when there was a total of 9,103 reported crimes. The same report gives a total of 4,348 persons arrested in 2007, 25% of them for major crimes and 32% in relation to illegal drugs. There was a decrease in persons arrested compared to 2006 (total 6,166 persons with similar percentages for major crimes and drug-related offenses). According to an April 2008 Belize Police Department quarterly report, serious crimes decreased 18.8% over the past year and there were 738 crimes during the period January–March 2008, compared with 909 during the same period in 2007. However, the perception is that since then, there has been an increase in media reports of crimes, especially homicides and gang- and drug-related incidents. Police data show that murders increased from 64 in 2001 to 79 in 2004 and 97 in 2007 and reported burglary fell from 1,942 to 1,662 to 1,256, respectively, during those same years. Of all crimes committed in 1999, 23% were committed by persons aged 21–25 years, 90% of whom were males, and this trend has continued.

Gender-based violence (GBV) and child abuse: These issues remain public health challenges, as both GBV and its intensity continue to increase. In 2003, 1,240 cases of domestic violence were registered; it is believed that there is a high degree of underreporting, so this likely represents only a fraction of the actual number of cases. Women aged 25–29 years accounted for the highest number of cases (269), followed by those aged 20–24 (243), 30–34 (237), 15–19 (100), and 40–44 (81). In 2006, there were more than 1,472 registered cases of GBV, of which 4 resulted in death. Also of concern is the high incidence of sexual violence, especially targeting young women, and media reports of sexual assault and incest involving girls are not uncommon. As earlier noted, the GENACIS study (*21*) found a link between the occurrence and severity of violence against women and the frequency and amount of drinking.

In positive steps to address the issues, the national response to GBV has integrated HIV prevention, and a revised National Domestic Violence Act took effect in 2007. However, in its August 2007 Concluding Comments in response to the combined third and fourth periodic report of Belize on the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the U.N. Committee on the Elimination of Discrimination against Women called on the GOB to effectively enforce and monitor the Act, including the provision of training to the judiciary, law enforcement officials, legal professionals, social workers, and health care providers (*25*).

According to a United Nations and GOB 2001 publication, *From Boys to Men* (*26*), young men in Belize are vulnerable to crime and violence. They often live in poverty, and even for those who seek to be good providers, their education and/or skills often do not afford them jobs that pay sufficiently to meet their basic needs. Many young men in similar situations come together to form groups; in a number of cases, this leads to gang membership and a life of violence, crime, drug abuse, and extreme risk-taking behavior. The breakdown of the family unit and family problems are a major force in the difficulties faced by young men; the loss of contact with a parent may cause extreme emotional damage to children. The 1998 PAHO Caribbean Adolescent Survey showed that these young men are up to twice as likely to attempt suicide and more likely to be poor. The lack of safe and supportive environments leads young men to seek respect and a sense of "belonging" elsewhere.

2.3.9 Others

Neglected diseases: A 2005 study on soil-transmitted helminths among school-age children in the southern region of Belize (*27*) revealed that 61.2% of children aged 5–12 years were infected by these organisms. Contributing factors include poverty, inadequate sanitation, hygiene, and infrastructure, as well as limited awareness of the problem and its complications. A multisectoral, multi-disease project was developed through collaboration among the MOH, Social Investment Fund (SIF), the United Nations Children's Fund (UNICEF), PAHO/WHO, nongovernmental organizations (NGOs), and other partners, and has been submitted for

[10] Carnal knowledge implies sexual intercourse below the age of consent, which is 16 years.

funding. Meanwhile, partnerships with UNICEF and the NGO Vitamin Angel Alliance have allowed some project outputs to be addressed, pending full implementation of the project.

Oral health: For the year 2005, a total of 4,945 teeth were extracted in adults and 2,832 in children. Data on the decayed, missing, and filled teeth (DMFT) index at age 12 years over the period 1995–2004 indicate a value of 0.6 (*28*), a significant reduction from 6.0 in 1989. This reduction satisfies the WHO global goal for 2000 of DMFT 3 of less, but may not reflect the skewed distribution of caries prevalence found in many countries and the fact that being free of caries at age 12 does not imply being caries-free for life. The burden of oral diseases and other chronic diseases can be decreased simultaneously by addressing common risk factors such as tobacco use and unhealthy diet.

Eye health: For the year 2007, glaucoma (576 cases), cataracts (164 cases), and aphakia[11] (245 cases) were the conditions most frequently seen at Belize Council for the Visually Impaired (BCVI) clinics countrywide. A total of 105 cases of diabetic retinopathy were also seen during this year. There is need for a system which will amalgamate BCVI statistics with those of the MOH and private hospitals in order to get a complete picture of the status of eye health in the country.

2.4 Health determinants

Adequate disaggregated data and analyses are not available to easily document the inequities that lead to health inequalities, including detailed information on the social determinants of health. Some of the inferences below are therefore through indirect, rather than direct, linkages among the determinants listed.

2.4.1 Poverty

On a national basis, 33.5% of the population is poor and 10.8% is extremely poor or indigent (*29*), representing little change from 1995. Poverty affects both sexes almost equally: 33.9% of men and 33.2% of women are poor (*7*). The occurrence of poverty among young males and females (ages 14–24) is very similar, with the rates being 32.7% and 35.0%, respectively. Poverty in rural areas (44.2%) is much higher than urban poverty (23.7%), and the mostly rural Toledo District has the highest poverty level (79.0%), while the mostly urban Belize District has the lowest (24.8%). In 2006, 28.8% of households were headed by females (*30*); the National Poverty Elimination Strategy reports that in 2002 21.8% of female-headed households were poor, while 25.5% of male-headed households were poor. However, the 2002 Country Poverty Assessment (CPA) showed that more female-headed households were experiencing financial difficulty in meeting basic expenses, such as utility bills and school fees.

Among ethnic groups, 76% of Maya, 30% of Mestizos, 26.5% of Creoles, and 24.3% of Garifuna are poor. In its August 2007 Concluding Comments, the U.N. Committee on the Elimination of Discrimination against Women noted its concern that "widespread poverty among women . . . is among the causes of the violation of women's rights and discrimination against them, particularly in the rural areas and among Mayan women." It also encouraged the provision of targeted support to female heads of household in all poverty eradication efforts, especially among rural and Mayan women (*25*).

Overall, 30% of the labor force can be categorized as "working poor;" that is, in full-time occupations that produce an income falling below the poverty line (*7*). Poverty is closely linked to violence, crime, inadequate education, unemployment, limited social participation, and increased vulnerability to various other social ills. Poor families are most likely to have the lowest educational levels and the least access to health care services.

The GOB, with the support of the Inter-American Development Bank (IDB), is planning to initiate a country poverty assessment in 2008. The Prime Minister's budget presentation for 2008–2009 outlines several initiatives to address poverty reduction, including promotion of microenterprises, targeting rural communities, and a special allocation of funds for poor communities (*3*).

2.4.2 Employment

According to the Belize 2007 Labour Force Survey conducted in April and September of that year (*31*), the labor force stood at 122,516 workers, representing 39.0% of the population; 63.7% of the workers are male. The total unemployment rate was 12.9% in 2003; it declined to 11.0% in 2005 and 9.4% in 2006, but increased to 12.1% in 2007. The male and female unemployment rates, respectively, were 8.4% and 18.6%; with a rate of 24%, unemployment among youth was twice that of the overall rate. The unemployment rate for young males was 18.7% and for young females, 32.8%. An estimated 1.8% (2,212 persons) of the labor force was underemployed. Unemployment in the Toledo, Corozal, and Belize Districts exceeded the national rate, with the highest rate being recorded in Toledo District (16.4%) and the lowest in the Orange Walk and Stann Creek Districts (10.1%). Male unemployment was highest in Corozal and lowest in Stann Creek (10.3% versus 3.4%), while female unemployment was highest in Toledo, where one-third (33.8%) of the females in the labor force were unemployed. Unemployment in the Stann Creek District was approximately seven times higher for females than for males. The U.N. Committee on the Elimination of Discrimination against Women expressed concern in 2007 about the situation of women in the labor market, noting that there were high levels of female unemployment; inadequate employment opportunities for women, since most were employed in low-paying jobs; and consistent wage gaps between men and women (*25*).

[11] Absence of the lens of the eye due to a congenital abnormality, surgical removal, or perforating wound or ulcer.

2.4.3 Education

The total adult literacy rate in 2005 was 94.7% (94.8% for females and 94.6% for males) (*17*). Primary school education is mandatory in Belize, and most public schools operate under a Church-State system. UNICEF estimated that the net enrollment rate for primary school-aged students[12] was 89.9% for the 2002 school year (91.7% females and 88.2% males). The primary school gross enrollment rate[13] was 104.5%[14] in 2002 and 157.5% in 2006. Between 2000 and 2001, overall enrollment in secondary schools increased by 5%, with a further increase of 6% between 2001 and 2002. Males comprised 49% of overall enrollment and females 51%.

At the primary level, Belize District had the highest net (100%) and gross enrollment (112.7%) rates; it also had the highest net enrollment rate at the secondary level. The total dropout rate in the 2004–2005 period at the primary school level was 0.9%; for the same period in secondary schools, the dropout rate was 10.4% overall (*32*).

In previous years, Belizeans travelled abroad for tertiary education, and many are still trained in Cuba, Guatemala, Jamaica, and Mexico, among other countries. However, the University of Belize (UB), formerly the University College of Belize, was established in 2000 and offers training in the allied health sciences. A total of 293 persons have graduated from the UB for 2008 in the following health-related fields: medical laboratory (24), midwifery (38), nursing (26), pharmacy (42), practical nursing (29), professional nursing (54), psychiatric nursing (12), and social work (68) (H. Anderson, personal communication, June 2008)[15].

The University of the West Indies (UWI) maintains an Open Campus in Belize, which offers a Bachelor of Science degree in Nursing (post-Registered Nurse) via distance learning, but no other health training. Galen University, established in 2003, is in partnership with the University of Indianapolis, United States, and offers a degree program in the environmental sciences. There are several offshore medical schools in Belize listed on the Internet, but some are transient and only one—the Central America Health Sciences University—is listed in the WHO *World Directory of Medical Schools* (*33*). The extent to which Belizeans enroll in these schools is unknown.

The GOB has expressed its commitment to the provision of resources at all levels of the education system, from preschool to university, to improve both the quality of and access to education; US$4 million in grants has been provided to the education sector, including an increase of US$ 750,000 to the UB (*3*).

2.4.4 Gender

Unequal power relations between men and women, and expectations of their roles and responsibilities contribute to the increasing incidence of GBV described earlier; to high HIV prevalence; to lower educational achievements of boys and higher prevalence of risk behaviors among them; and to higher unemployment rates among women, especially in rural areas. Belize has ratified the CEDAW, and the Women's Department of the Ministry of Human Development and Social Transformation was instrumental in the development of a National Gender Policy (2002). However, efforts to fully implement the policy and mainstream gender into national policies and programs need strengthening.

Although the Government in 1999 made a commitment, through the Women's Agenda, to appoint women to at least 30% of positions in the public service and other statutory bodies, women continue to be severely underrepresented at the highest levels of political decision-making. In the current Administration, there are no women in the Cabinet and there are only two women Senators in the National Assembly at the time of this writing. The CEDAW Committee's Concluding Comments in 2007 recommended that the country take concrete measures to correct this situation, including temporary special measures, quotas, and timetables (*25*).

2.4.5 Social inequities

Regardless of the progress made during the last few years, important challenges remain in terms of addressing vulnerable groups that have greater needs than the rest of the population. Rural and indigenous groups remain at greater risk of poverty and poor health indicators than urban and non-indigenous groups. Violence in general tends to affect more males than females; however, domestic violence afflicts more women and children. Indigenous groups in Toledo have less access to economic activities, potable water, and social services, which correlates with the higher levels of poverty noted in that District, and with poorer health indicators such as infant mortality rate and maternal mortality ratio. According to the 2002 CPA (29), the national Gini index was 0.4[16]. As Table 2 demonstrates, the Toledo and Orange Walk Districts had the lowest index of 0.2 and thus the lowest levels of inequality, while the Belize District index was the highest at 0.6, demonstrating that the Belize District has more unequal distribution of wealth, despite having the lowest levels of poverty.

2.4.6 Water

Access to safe drinking water has improved over the years. In urban areas, the coverage increased from 95% in 1990 to 99.5% in 2004 and has remained steady since; in rural areas coverage

[12] Number of children aged 5–12 enrolled in primary school, expressed as a percentage of all children aged 5–12 years.

[13] Number of children enrolled in primary school, expressed as a percentage of all children aged 5–12 years.

[14] The 104.5% figure is explained because some children attending primary school are 12 years of age and older.

[15] Mr. Henry Anderson is a human resources consultant in Belize.

[16] The **Gini index** is the Gini coefficient expressed as a percentage and is equal to the Gini coefficient multiplied by 100. The **Gini coefficient** is a measure of statistical dispersion most prominently used as a measure of inequality of income distribution or inequality of wealth distribution. It is defined as a ratio with values between 0 and 1: a low Gini coefficient indicates more equal income or wealth distribution, while a high Gini coefficient indicates more unequal distribution. 0 corresponds to perfect equality (everyone having exactly the same income), and 1 corresponds to perfect inequality (where one person has all the income, while everyone else has zero income).

increased from 51% in 1990 to 90% in 2008. Figure 2 shows rural access and shows rural areas of the Belize and Toledo Districts as those with the highest percentage of persons without access to potable water. National average coverage for the country in 2008 is 95% (SIF, personal communication, June 2008).

In tandem with Belize's commitment to the Multilateral Environmental Agreements and Millennium Development Goals (MDGs), the GOB has recognized the need to safeguard Belize's water resources so that the country can meet its present and future socioeconomic development objectives in a sustainable and equitable manner. However, legislation in Belize related to water resources management and protection is fragmented and often not effectively implemented. Integrated water resources policies, plans, and legislation are long overdue, especially given the current and future free market economy, the increased demand for freshwater as the population increases, the unregulated abstraction of surface and groundwater, extreme hydrometeorological events, and the increasing threats to Belize's water resources. Draft policies, plans, and legislation to address these issues exist, but currently await high-level approval.

2.4.7 Sanitation

Limited progress has been made in sanitation, especially in the country's rural areas. According to the 2002 CPA (*29*), in 2001 54.8% of all households had access to improved sanitation (sewer or septic tanks) while 39.7% used pit latrines, 10% of households shared toilet facilities, and 3.5% did not have any toilet facility. In that year, adequate sanitation coverage was 68.1% in urban areas and 25.8% in rural communities; slightly more than 65% of all rural households used pit latrines, compared to approximately 35% of urban households (except for Belize City). Nationwide, in 2007, the SIB reported that 64.5% of households had adequate sanitation connected to a sewer system or to septic tanks; approximately 32.5% were still using pit latrines (*1*).

Increased waste generation and inadequate waste management represent major national challenges. A PAHO evaluation of solid waste management services in Belize in 2002, which drew on data from the National Solid Waste Management Project, related reports from the Canadian firm Stantec, and data from the then-Central Statistical Office, estimated that Belize produced approximately 112,000 tons of municipal solid waste annually, with a per capita generation of approximately 1.32 kg/day (*34*). Municipal waste includes domestic waste and waste generated by the commercial sector located within or near municipalities; it also includes small amounts of industrial waste. There are no data on municipal versus domestic waste, as there is no separation at source, but the composition of municipal waste in Belize was estimated as follows: organics 60%; metals 5%; glass 5%; plastic 5%; paper 5%; and other waste 5%. Waste generated by the major industries (citrus, banana, sugar, and shrimp) for the period 1995–2000 ranged between 400,000 and 650,000 metric tons. There has been a progressive increase since 1995, when approximately 425,000 metric tons were produced.

The challenge for Belize is to ensure improved sanitation coverage, particularly in rural areas, as proper facilities to dispose of solid waste do not exist countrywide. A national solid waste man-

TABLE 2. Poverty measures, by District, Belize, 2002.

Districts	Poverty head count	Poverty gap	Poverty severity	Gini Index	Percentage of total population
Corozal	26.1	7.0	3.3	0.4	11.9
Orange Walk	34.9	9.3	3.8	0.2	14.9
Belize	24.8	6.2	2.8	0.6	33.2
Cayo	27.4	6.6	2.8	0.3	21.5
Stann Creek	34.8	8.6	3.3	0.3	7.9
Toledo	79.0	44.4	31.5	0.2	10.6

Source: 2002 Country Poverty Assessment Report.

agement plan, developed some years ago, currently awaits implementation. However, the GOB has committed to strengthen the framework and processes for environmental management, including enforcement of environmental compliance, and give priority to solid waste management (*3*); collaboration with the IDB to develop a Water and Sanitation Strategic Sector Plan has started.

2.4.8 Climate change

Climate change has the potential to impact the health of the Belizean population and the development of the country directly, through heat waves, droughts, floods, storms, and other extreme weather events, and indirectly, through effects on communicable diseases such as malaria, dengue, and diarrheal diseases; water availability; and agricultural production. The coastal areas of the country are at—or below—sea level, and Belize City is prone to flooding; when faced with a severe hurricane threat, the city is required to be evacuated.

The poultry industry was significantly affected by heat waves in 2003 and 2007 with 100,000 and 20,000 chickens, respectively, reported as having died as a result of the increased temperatures. In 2003, one person was reported to have died from heat stroke. Models have projected that increased temperatures, dry periods, and extremes in rainfall (impacts of 2° and +/- 20% change in rainfall) can result in a 14%–19% reduction in yield of beans, 10%–14% reduction for rice, and 17%–22% reduction for corn (*35*). These phenomena can exacerbate malnutrition and food insecurity among the most vulnerable population groups.

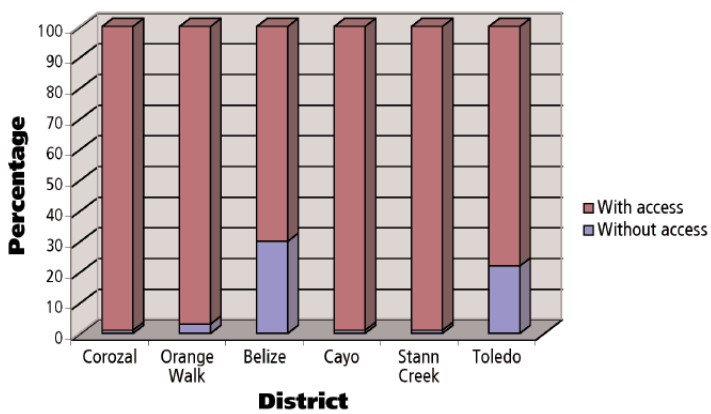
The Belize Audubon Society, a nonprofit NGO dedicated to promotion of the sustainable use and preservation of natural resources, recently launched the Environmental Health Agenda 2008–2013, which places emphasis on climate change and covers such areas as minimizing Belize's contribution to climate change and efforts for adaptation and mitigation. There is an intersectoral National Climate Change Committee (NCCC) comprising State and non-State stakeholders that is chaired by the Belize National Meteorological Service, the national focal point for the United Nations Framework Convention on Climate Change. The NCCC is responsible for leading the country's response to climate change.

2.4.9 Natural hazards

These events can be considered environmental adverse events that can only be mitigated, not controlled. However, the impact on the economy and on the health of the population is indisputable. Around 75% of the population in Belize is vulnerable to natural disasters, which particularly impact the poor, with devastation exacerbated by land degradation.

Over the period 2000–2007, Belize was affected by five major hurricanes (R. Frutos, personal communication, June 2008)[17]. The last hurricanes to affect Belize were Dean and Felix in 2007, and the total impact of Hurricane Dean on the economy was estimated at US$ 89.5 million (*36*). Felix did not have much impact, but in early June 2008, tropical storm Arthur caused significant flooding throughout the country, especially in the south, where 5 deaths were confirmed.

FIGURE 2. Rural access to potable water, by District, Belize, 2008.



Source: Social Investment Fund.

[17] Mr. Ramón Frutos is the Acting Chief Meteorological Officer in Belize.

2.4.10 Food and nutrition safety and security

Food availability is not considered a problem in Belize, since there has been an increase in domestic production and a steady increase in food exports; at the same time, food imports have declined in recent years. Food availability as measured in calories per capita per day was estimated at 2,921 in 2005, but food accessibility is a problem for some population groups, especially in the Toledo District, due to poverty and income inequality. The recent global trend of rising food prices is also being experienced in Belize; this will exacerbate the situation, especially for the most vulnerable groups. Reports from the Ministry of Agriculture indicate that from January 2005 to the current period, the price of food has increased by as much as 80%. There is concern that this growing trend may lead to increases in malnutrition. More than 40% of the labor force works in the agriculture sector, and the GOB has expressed its commitment to assist the agriculture sector to reduce the cost of operational inputs and capital investment (*3*).

In the area of child nutrition, recent information is almost nonexistent. The only reliable information on the nutritional status of children comes from the 1996 National Height Census of children aged 6–9 years, which showed that 15% of children suffer from growth retardation or low height for age. Most of the stunting was found in the Toledo District (39%), where there were higher levels of growth retardation among boys (18.2%) than girls (12.5%). Information on iron deficiency anemia among children is nonexistent, but 52% of women attending antenatal clinics were found to be anemic in 1995. Exclusive breast-feeding occurs only among 40% of children under 1 year old. In rural areas, the severity of malnutrition is higher for females than for males, while in the urban areas, it is approximately the same.

Food safety issues are addressed in the Food and Nutrition Security Policy, which addresses the training of food handlers, inspection of food establishments, and meat inspection, among other areas (*17*). The policy was put into effect in 2001, and in 2002 a consumer survey identified specific areas of concern relating to food safety awareness, food handling, and environmental health practices, as well as misperceptions regarding the causes and risks of foodborne illness. Also in 2002, a Commission to coordinate and provide oversight to the implementation of the policy was established. This Commission completed a National Plan of Action for the 2005–2010 period and is in the process of developing its Strategic Plan.

2.4.11 Health promotion

While there is no national health promotion policy, there is a wide range of complementary health policies to address health issues. The Health Education and Community Participation Bureau (HECOPAB) of the Ministry of Health implements and supports health promotion activities in urban and rural communities. There are Health Educators at the district level and Community Nurses' Aides who promote health at the community level. A draft National Strategy for Health Promotion and Prevention was developed to establish a broad policy framework in which specific actions could be implemented.

Over the years, various multisectoral committees have been organized to address health promotion activities and have contributed, to varying degrees, to the overall health of the nation, either through policy formulation or health promotion activities in communities throughout the country. Issue-oriented NGOs and community-based organizations (CBOs) carry out health education in their respective areas of interest; the print and electronic media also provide periodic health messages and cover health-related events when requested. There are four weekly newspapers in Belize City, one of which publishes a mid-week edition, and several newspapers in other districts. Four national and two local television stations serve the country, and there are three national and several local radio stations. Several of these media have an Internet presence, and one newspaper in Caye Caulker publishes solely online.

2.4.12 Public safety, social stability, and governance

This is a high priority for the GOB, which recognizes that strengthening citizen security will require a multisectoral approach. The government has committed to strengthen the Police Department by providing more human, financial, and technical resources to fight crime. The GOB will also seek to strengthen the Belizean social fabric in order to combat the causes of crime. Key strategies include working with youth at risk to counter gang violence by providing viable alternatives, promoting and enabling family life, and building a strong economy that creates jobs. The GOB has also expressed its commitment to a new order in public affairs to encourage proper economic management and effective, honest, accountable governance by promoting laws and administrative procedures that strengthen public financial management, encouraging and facilitating public participation in policy discussions, and creating a framework in which persons feel free to contribute to these discussions (*3*).

2.5 Health sector policies and organization

The MOH vision statement, developed in 1995, describes "a national health care system which is based upon equity, affordability, accessibility, quality, and sustainability in effective partnership

with all levels of government and the rest of society in order to develop and maintain an environment conducive to good health."

2.5.1 Health sector reform

In order to make the MOH's vision a reality, a health sector reform program (HSRP) was developed and implemented, based on a situational diagnosis conducted between May 1996 and December 1998 as part of a Health Policy Reform Project. The diagnosis focused on five major policy areas: health sector financing, health sector resources allocation, public and private sector roles, improving quality, and health services equity. The IDB, the Caribbean Development Bank (CDB), the European Union (EU), and the GOB pooled resources to finance the HSRP for a total budget of US$ 18.1 million: the IDB financed US$ 9.8 million, CDB US$ 4.7 million, GOB US$ 2.0 million, and EU US$ 1.6 million.

The overall goal of the HSRP is to improve the health status of the population by improving the efficiency, equity, and quality of health care services, and by promoting healthier lifestyles. The specific components of the HSRP are:

(1) *Sector restructuring*—strengthening the organizational capacity of the public sector to deliver and procure value for money services;
(2) *Services rationalization and improvement*—rationalizing and improving the coverage and quality of services provided by the public and private sectors; and
(3) *Support for the National Health Insurance Fund (NHIF)*—achieving an equitable and sustainable system of sector financing.

In the 1990s, the MOH reorganized its structure to create a Director of Health Services (DHS), two Deputy Directors of Health Services (DDHS), and a Policy, Analysis, and Planning Unit (PAPU). The DHS reported to the Permanent Secretary (PS), who reported to the Minister of Health. Subsequently the PS position was replaced by that of Chief Executive Officer (CEO). During the 2000–2004 period, the MOH began to reorient its focus from services delivery to overall stewardship of the health system, reorganizing its Headquarters in Belmopan to accommodate the Office of the DHS; all technical program managers/advisors report to the DHS. Four administrative health regions were created (Northern, Central, Western, and Southern), regional managers appointed, and their working relationship with the Office of the CEO and the Office of the DHS defined. Each regional manager, with the support of a management team, is responsible for coordinating the delivery of personal and population-based health services to the communities in the geographical areas under his/her jurisdiction. The KHMH, the only tertiary care hospital in the country, was piloted as an autonomous body with a board of directors.

During the 2004–2008 period, the major HSRP aim was to consolidate the publicly owned network of health facilities and to construct three new polyclinics. The civil works are nearing completion, although the scope was decreased due to an increase in the cost of building materials. The government is committed to the completion of the HSRP and has allocated US$ 3.25 million in the 2008–2009 budget for this purpose (*3*).

2.5.2 Essential Public Health Functions

The response of the Belize health authorities to the challenges of health and health sector reform can be assessed in terms of the achievements and progress made to address the Essential Public Health Functions (EPHF). The EPHF are a fundamental set of actions that the national health authority should perform in order to achieve public health's central objective: improving the health of populations. PAHO/WHO, through the Public Health in the Americas initiative, defined 11 EPHF necessary to strengthen public health practice, and developed a methodology that allows countries to self-evaluate their public health capacity (*37*)[18].

In 2002, the MOH conducted a self-assessment of the performance of the EPHF; the four weakest were #s 9, 6, 4, and 8; two were deemed to be optimal (#s 7 and 11); and the remaining EPHF (#s 10, 5, 3, 1, and 2) had scores above average.

The EPHF correlate with the 2007 WHO framework for action: "Everybody's Business: Strengthening Health Systems to Improve Health Outcomes" (*38*), which defines a health system as consisting of "all organizations, people, and actions whose *primary intent* is to promote, restore, or maintain health." This includes efforts to influence determinants of health as well as more direct health-improving activities. The framework identifies six "building blocks" for health systems strengthening—leadership and governance; services delivery; health workforce; information; financing; and medical products, vaccines, and technologies. The building blocks also correlate with the three HSRP components—*sector restructuring* covers leadership and governance; *services rationalization and improvement* covers services delivery, health workforce, information, and medical products, vaccines, and technologies; and *support for the NHIF* covers financing.

The following analysis of health system policies and organization in Belize demonstrates the links between the PAHO EPHF and the WHO building blocks for health systems strengthening.

2.5.3 Leadership and governance

EPHF 5: Development of policies and institutional capacity for public health planning and management

The role of the MOH Headquarters is to provide policy advice to

[18] The 11 EPHF (http://www.paho.org/english/dpm/shd/hp/EPHF.htm, accessed 6 October 2008) are:
(1) Monitoring, evaluation, and analysis of health status;
(2) Surveillance, research, and control of risks and threats to public health;
(3) Health promotion;
(4) Social participation in health;
(5) Development of policies and institutional capacity for public health planning and management;
(6) Strengthening of public health regulation and enforcement capacity;
(7) Evaluation and promotion of equitable access to necessary health services;
(8) Human resources development and training in public health;
(9) Quality assurance in personal and population-based health services;
(10) Research in public health; and
(11) Reduction of the impact of emergencies and disasters on health.

the Minister of Health as well as to address national health planning, public health protection, regulation, research, quality and standards, international and regional collaboration, and monitoring of the overall performance of the national health system. There are two key divisions in the MOH: the administrative arm, headed by the CEO, and the technical arm, headed by the DHS, who is constitutionally accountable for the health of the nation.

Successive governments have made efforts to address health challenges and their underlying causes, and there are numerous national frameworks to guide action in health. However, many are in draft, others have not been ratified at the highest level, and still others are only partially implemented; most are not optimally used to guide sectoral and intersectoral action, and international cooperation in health (***Annex 10***). The GOB has committed to the formulation of a long-term national development plan—a vision for the country as a whole, including the social sectors—and in April 2008 began a participatory process and consultations for the development of "Horizon 2030."

National policies that are sensitive to vulnerable groups such as the indigenous population, poor families, the elderly, single parents, and immigrants (often uneducated, unskilled, and illegal), and which promote equity, are important instruments in halting the spiraling problems seen in the social sectors, including health.

In Belize, the major focus is on secondary and tertiary health care, though efforts are increasing to revitalize and strengthen primary health care, health promotion, and disease prevention. With technical cooperation from PAHO/WHO, IDB, and the U.N. Population Fund (UNFPA), the MOH has embarked on the training of its managerial and technical personnel in strategic planning, results-based management, and program budgeting.

The Belize Health Agenda 2007–2011 (*39*), the most recent framework aimed at addressing weak performance of the EPHF, health inequities, and advancing toward achievement of the MDGs and the MOH vision statement, identifies the following national health goals, problems, and priorities:

Health goals

(1) Ensure universal access to an agreed-upon set of health services of acceptable quality, utilizing the primary health care strategy
(2) Ensure the healthy growth and development of children and adolescents
(3) Improve the health, well-being, and development of all men and women in such a way that health disparities between social groups are reduced
(4) Enable all people to adopt and maintain healthy lifestyles and behaviors
(5) Enable universal access to safe and healthy environments and living conditions
(6) Eradicate, eliminate, or control major diseases that constitute national health problems
(7) Reduce avoidable disabilities through appropriate preventive and rehabilitative measures
(8) Strengthen policy, planning, information systems, organization, and management in the public sector, in partnership with the private sector
(9) Improve efficiency, effectiveness, and accountability
(10) Ensure the ongoing viability and sustainability of both the public and private sectors

Health problems

(1) High prevalence of communicable diseases, such as malaria, respiratory diseases, and intestinal illnesses
(2) High mortality rate from noncommunicable diseases
(3) Human behavior and lifestyles resulting in injury, road traffic accidents, violence, adolescent pregnancy, abortions, STI, HIV/AIDS, and suicide
(4) Anemia, malnutrition, growth retardation, and diabetes
(5) Limited equity in terms of access to health care and distribution of resources
(6) Inefficient health care delivery system
(7) Limited capacity for policy formulation, and regulation of the health sector
(8) Absence of a human development policy and plan
(9) Limited quality assurance
(10) Outdated legislation and inadequate regulation of various areas of health care delivery
(11) Limited clinical protocols for patient management
(12) Limited technical operational manuals for program implementation

Health priorities

(1) EPHF regulation and enforcement, human resources development, quality assurance, and strengthening research capacity
(2) Noncommunicable diseases and lifestyle-related problems
(3) HIV/AIDS
(4) Prevention and management of violence (domestic violence and child abuse)
(5) Health promotion
(6) Sexual and reproductive health
(7) Maternal and child health (maternal and infant mortality, Expanded Program on Immunization [EPI])
(8) Epidemiology
(9) Health information systems
(10) Health sector reform
(11) Environmental health
(12) Disaster preparedness and management

EPHF 6: Strengthening of public health regulation and enforcement capacity

The intention of the MOH was to create a unit to address this function, but there have been delays due to inadequate human

and financial resources. Nevertheless, the MOH carries out regulation and enforcement in public health with its limited resources.

EPHF 3: Health promotion

Health promotion is one of the priorities in the Health Agenda 2007–2011 and underpins the Agenda. Though the MOH has the HECOPAB, there is need to strengthen the MOH capacity for coordination of stakeholders and for leadership of intersectoral action for health.

EPHF 4: Social participation

The health system is not specifically designed to accommodate this function, but under the National Health Insurance Scheme (NHIS) more emphasis is being placed on patient satisfaction as an indicator of the health system's response to the needs of communities. In addition, there is considerable sharing of information and involvement of NGOs and civil society through intersectoral committees, such as the National Human Development Advisory Committee, National AIDS Commission, Road Safety Committee, National Committee for Families and Children, National Council on Ageing, and the National Food and Nutrition Security Commission. However, some committees, such as the National Drug Abuse Council, need to be strengthened and revitalized.

2.5.4 Services delivery

EPHF 7: Evaluation and promotion of equitable access to necessary health services

Government

The GOB has a policy of universal access to primary health care, and a network of clinics and permanently staffed health centers and health posts is available to address the primary health care needs of the population. Despite health sector reform efforts, the Government continues to be the principal provider of health services, although recently there have been greater efforts to achieve a public-private mix, through the NHIS, which seeks to promote equitable access for disadvantaged population groups.

The MOH operates a nationwide network of facilities that includes a total of six hospitals and two polyclinics. There is one hospital in each district; the Cayo and Belize Districts have one hospital and one polyclinic each. Three of the six hospitals are designated as regional hospitals and provide a wide range of secondary care in addition to routine primary care; the other three hospitals are community hospitals or primary level facilities, which provide a minimum amount of secondary care at the district level. The KHMH functions as the national referral hospital; it is also the general hospital for Belize District and provides neurology; ear, nose, and throat; and orthopedics services. No radiotherapy or oncology services are available in Belize, but the government has an arrangement with Mexico to provide such services for those who need them.

With the creation of the four health regions and the decentralization of administrative authority over health services, the MOH has brought decision-making functions closer to the stakeholders. A comprehensive package of health services is now delivered through the regions, and the provision of hospital-based care includes both inpatient and outpatient services. Services offered include accident and emergency care, pediatrics, obstetrics and gynecology, internal medicine, and surgery. Clinical and nonclinical support services and some specialized tertiary care services are also provided at the regional level.

A system of rural health centers with permanent staff is supplemented by mobile health services, community nurses' aides, voluntary collaborators, and traditional birth attendants working in rural communities. Outreach community services include dental health and maternal and child health.

Mental health services are provided through Rockview Hospital, an inpatient psychiatric facility; an acute psychiatric unit in Belmopan Hospital (Cayo District); and psychiatric units staffed with psychiatric nurse practitioners (PNPs) in each of the regional and community hospitals. The PNPs, as part of a community-based psychiatric program, provide ongoing counseling to survivors of gender-based violence and child abuse, as well as pre- and post-test counseling for HIV. Mental health reform is in progress and the decommissioning of Rockview Hospital, with the establishment of Palmview, a new psychiatric inpatient facility in a different location, is planned for the future.

A national dental health program is being carried out in all six districts of the country, with special emphasis on the prevention of dental caries in schoolchildren; it involves 19 professionals, of which 9 are dental surgeons and 10 are dental nurses or dental assistants. All services are provided through government health facilities and include fissure sealants for children, prophylaxis, checkups, and some restorative dentistry. Prevention strategies have included fluoride supplement programs for preschool children and fluoride prophylaxis applications.

Private sector

The private sector has been expanding over the past few years, both in size and the type of services offered. There are two private hospitals in Belize City and a small private hospital in the Cayo District. Those in Belize City provide the four basic specialties (internal medicine, obstetrics and gynecology, pediatrics, and general surgery) along with supporting services that include pharmacy, laboratory, and imaging, including computed tomography (CT) and magnetic resonance imaging (MRI). They also provide tertiary care services including neurosurgery, cardiology, urology, otorhinolaryngology, nephrology (renal dialysis), and intensive care.

Nongovernmental organizations[19]

There are several NGOs that provide specialized services. The Belize Family Life Association (BFLA) provides sexual and reproductive health services, including education and screening for cervical and breast cancers, and is supported mainly by the International Planned Parenthood Federation. The BFLA is currently working on a package of services targeting men.

Outside of hospitals, the Belize Council for the Visually Impaired (BCVI) provides eye health services. This NGO initially focused on providing services to the population with visual impairments and blindness, using government-provided resources, but with technical cooperation and resources from international NGOs and PAHO/WHO, the BCVI evolved into a provider of comprehensive eye care, including case-finding, diagnosis, and treatment of simple conditions. The BCVI has strengthened optometric services and opened a National Eye Clinic. It provides secondary eye care, including eye surgery, at affordable prices and continues to provide rehabilitation training and support to persons with very low vision and blindness, as well as educational activities for blind children. There are BCVI clinics in five districts.

The Mental Health Association (MHA) advocates for those with mental illnesses and their families and supports the MOH's mental health programs and services. The Mental Health Consumer Association also has been very active, and in 2005 advocated successfully for new psychotropic drugs to be added to the national drug formulary.

The Alliance against AIDS, Hand-in-Hand Ministries, and Cornerstone Foundation are among several NGOs working as part of the national response to HIV, providing counseling and care to children and adults affected by HIV and AIDS. The United Belize Advocacy Movement advocates on behalf of the gay, lesbian, bisexual, and transgender community in Belize, with a focus on HIV prevention, care, treatment, and support. Various other NGOs, such as the Belize Cancer Society (BCS), the Belize Diabetes Association, and VOICE, an association for older persons, are primarily advocates for their constituents and provide public education, while the BCS offers selected cancer prevention and treatment services.

Other

There are medical missions from charitable, faith-based, academic, and nonprofit organizations that regularly visit Belize to provide services to underserved populations and to offer specialized care. However, mechanisms for regulation of such missions by national and regional health authorities need significant strengthening.

EPHF 9: Quality assurance in personal and population-based health services

A Quality Improvement program was initiated at the KHMH, and the MOH has signed Service Level Agreements with the health regions that define performance standards and allow relevant monitoring and evaluation. The Belize Medical and Dental Association and the Belize Medical Council play roles in monitoring the performance of medical practitioners, although their reach and influence need further strengthening.

EPHF 11: Reduction of the impact of emergencies and disasters on health

The MOH response and the National Emergency Management Organization (NEMO) intersectoral structures have proven relatively efficient and effective in preparation and mitigation efforts for natural disasters. Though practical experience has served to strengthen this area, as has PAHO/WHO- and other U.N. agency-supported training, there is need for greater coordination within the national system and between the national and international response systems.

2.5.5 Health workforce

EPHF 8: Human resources development and training in public health

Human resources for health in the formal sector in Belize are limited and relatively concentrated in urban areas, while distant rural and indigenous communities are in need of improved availability of health professionals (***Annex 11***). Technical program managers usually oversee several programmatic areas, and the MOH has difficulty maintaining a complete human resources inventory of qualified staff due to several factors, including active recruitment of health professionals by foreign countries.

As in other Caribbean countries, there has been significant out-migration of nurses. The Registrar of the Nurses and Midwives Council of Belize reports that 187 foreign nurses were issued licenses to work in Belize during the period 1997–2007; the majority were Nigerians, with more than 110 nurses registered with the Council (Situation Analysis of Nursing Migration in Belize, unpublished data, PAHO, 2008).

The GOB is the main provider of education and training for nurses and allied health professionals, and courses are available in-country and through distance learning. However, Belizeans access medical training in Cuba, Guatemala, Jamaica, and the United States, among other countries. Of particular concern is the long-term training of public health personnel—such as public health nurses and inspectors, and physicians trained in public health—to meet the challenges facing Belize. However, with PAHO/WHO's support, a three-step training program for Environmental Health Officers has been institutionalized at the UB.

There is presently no organized and structured projection on human resources needs, measures to be taken to meet identified gaps, and mechanisms to strengthen the involvement of informal caregivers, most of whom are women. With PAHO/WHO's collaboration and support, the MOH has undertaken several initiatives in

[19] The NGOs mentioned here provide only a sample of the many working in Belize in various health and health-related areas.

support of the Toronto Call to Action for a Decade of Human Resources in Health in the Americas (2006–2015) (*40*), including the design of a national policy for the development of human resources for health (HRH), development of an HRH database, creation of a human resources unit within the MOH, and establishment of an intersectoral commission for the development of human resources in Belize. In addition, the country is participating in the first cohort of the PAHO/WHO Leaders in International Health Program[20].

2.5.6 Information

EPHF 1: Monitoring, evaluation, and analysis of health status

For the past four years, Belize has been working on the introduction of a new health information system (HIS), the Belize Health Information System (BHIS). The system became functional in late 2007, and, to date, four modules of the BHIS have been installed and are functioning in 15 facilities throughout the country, including one private facility. The modules are administration and discharge, clinical order entry, supply chain management and pharmacy, and laboratory. Discussions are under way for implementation of the HIV/AIDS module, and the public health and human resources modules are in the pipeline for implementation in the near future. Belize is a member of the Health Metrics Network (HMN), and in 2008 conducted an assessment of the HIS and developed a roadmap for the formulation of a national strategic plan for HIS. The establishment of the BHIS is seen as a major achievement and has the potential to be a global best practice in HIS strengthening. In June 2008, the HMN Secretariat, based in Geneva, Switzerland, at WHO Headquarters, invited Belize to be a "Wave One" country, in recognition of its efforts to strengthen its national HIS; in this regard, HMN and the MOH signed a Memorandum of Understanding in September 2008.

Other areas of the HIS such as vital statistics, health services management information system, and national health accounts, are functioning, but need strengthening. The NHIS has contractual modules that enforce reporting and also allow for information to be captured from the private sector. In 2007, a national cancer registry was launched through a strategic partnership involving the MOH, BCS, BFLA, Social Security Board, and PAHO/WHO, among others.

A challenge is the integration of quality data from various segments of the HIS, analysis of the data, and their use for decision-making and knowledge management and communication, including with the public.

EPHF 2: Surveillance, research, and control of risks and threats to public health

National personnel have been trained in surveillance, and the MOH has an Epidemiology Unit and a National Epidemiologist. However, human and financial resource constraints do not allow realization of the Unit's full potential. Timely identification of public health threats and risks is also limited by the need to strengthen laboratory infrastructure and capability. Some of these laboratory functions are currently performed by the Caribbean Epidemiology Center (CAREC) and neighboring countries such as Mexico, when necessary. However, national core capacity in this function, always important in public health, becomes more so with the implementation of the IHR (2005); a national IPP Plan and operational plans for decentralized levels are being developed with technical cooperation from PAHO/WHO, the U.S. Centers for Disease Prevention and Control, and the U.S. Agency for International Development (USAID).

EPHF 10: Research in public health

Research is conducted in a nonstructured manner, and the MOH is not usually the initiator of research studies, though it collaborates strongly with those conducting them. NGOs and international organizations are the main instigators of research to satisfy their various information needs. Greater involvement and research capacity development of academic institutions are needed; although there is an ad hoc Ethics Committee in the MOH, a formal committee to ensure ethical, properly conducted research would be beneficial.

2.5.7 Health financing

EPHF 7: Evaluation and promotion of equitable access to necessary health services

According to the WHO's *World Health Statistics 2008*, there was a decrease in Belize's total health expenditure (THE) as a percentage of GDP from 5.0% in 2000 to 4.9% in 2005. Globally, in 2005, THE as a percentage of GDP was 8.6%; it was 12.7% in the Region of the Americas (*41*). In 2006, Belize's THE represented 4.7% of the GDP, around US$ 203 per capita (PAHO Health Economics and Financing program, personal communication, June 2008). Among Central American countries this was the lowest percentage of GDP, but the per capita spending was in the mid-range, with only Costa Rica and Panama having higher amounts. Public expenditure on health, which includes expenditures by the MOH and other public sector institutions from central and local governments, is the main source of health expenditure in Belize, and the main financing source for the public health sector is the Consolidated Fund of the central government. There have been progressive increases in the MOH budget, as well as in the percentage of the overall government budget and the percentage of GDP spent on health over the 2001–2005 period, as shown in Table 3. For 2005, social security expenditure on health was 8.1% of the government's general expenditure on health; in 2006, public expenditure in health in Belize represented 2.3% of the GDP, approximately US$ 137 per capita, and the MOH accounted for more than 95% of this expenditure.

[20] May–November 2008.

Private expenditure on health as a percentage of THE decreased from 52.0% in 2000 to 43.6% in 2005, while out-of-pocket expenditure as a percentage of private expenditure on health was 100.0%. In 2006, private expenditure represented only one-third of overall national health expenditure, around 1.51% of GDP (US$ 56 per capita), continuing the trend of declining private expenditure in health as a percentage of GDP over the 2000–2005 period. Possible reasons for this trend include persons accessing public instead of private services; persons accessing care outside of Belize, rather than private in-country care; and a genuine decline in access to private care because of inability to pay. This last possibility, unless compensated for by increased access to public health services, would represent a failure of the health system to ensure access to quality health services as an obligation under the right to health. Supporting data are not available to substantiate one or another possibility, but strengthening of the National Health Accounts will be helpful in providing such data.

The introduction of the NHIS was based on the MOH's objective of ensuring greater access by the population to primary care services through better population-to-health provider ratios, extended operating hours, and the elimination of economic barriers to quality health care. The NHIS was established by legislation and is responsible for financing and purchasing health services from both public and private facilities. The establishment of formal contracts with both public and private entities is part of the plan to increase the productivity of existing public and private facilities, improve access to care, and introduce improvements in quality, user satisfaction, and effectiveness of health services. The countrywide implementation of the NHIS over the next several years will further enhance the achievement of its objectives and address some of the observed inequities of access in both urban and rural populations.

In July 2008, the government committed to cover the full cost of NHIS to the extent that it has been rolled out so far and allocated an additional US$1.5 million to cover the full cost of basic primary health care under NHIS in areas where it has been rolled out; the SSB will no longer be meeting those costs. The government will delay the full rollout of the NHIS pending the results of ongoing analysis of the costs and possible sources of revenue to meet those costs (*3*); the rollout, with its focus on primary health care services, will further increase public expenditure on health.

2.5.8 Medical products, vaccines, and technologies

EPHF 7: Evaluation and promotion of equitable access to necessary health services

Procurement of pharmaceuticals and effective supplies management, including provision of medicines free at the point of delivery, are part of the GOB policy, but efficiency and reliability of the system have been challenging. The MOH has declared this a priority area, and following several assessments supported by PAHO/WHO and other agencies, efforts are under way to strengthen the national procurement and supplies management system. These include development of a supplies management module incorporated into the BHIS; a national plan for the procurement, management, and distribution processes; and implementation of policies that have already been developed.

The total spent in 2007 on pharmaceuticals and medical supplies (excluding antiretroviral drugs [ARVs] and medications for opportunistic infections) was US$ 5,056,314. The government provides free ARVs to people living with HIV who satisfy medical criteria, and in 2006 the MOH signed an agreement to procure ARVs and other medications for opportunistic infections through the PAHO Strategic Fund. To date, a total of US$ 392,700 has been spent on ARVs, comprising both MOH and Global Fund to Fight AIDS, Tuberculosis, and Malaria resources. Reproductive health com-

TABLE 3. Ministry of Health budget, Belize, 2001–2005.

Year	Budget (BZ$)[21]	Recurrent budget (BZ$)	% of GOB budget	% of GDP
2001	34,833,911	30,384,874	6.50	2.0
2002	36,799,698	31,227,276	6.70	2.0
2003	45,568,066	38,781,095	7.90	2.3
2004	52,332,826	44,287,326	9.57	2.5
2005	64,560,620	54,279,465	9.12	3.0

Source: Health Agenda 2007–2011, Ministry of Health.

[21] US$ 1 = BZ$ 2.

modities are supplied mainly through BFLA and UNFPA; PAHO/WHO collaborates as necessary. Family planning methods are provided mainly through BFLA for a small fee, which forms a barrier to access for some persons; the MOH prioritizes women who are HIV-positive. However, the NHIS plans to provide these services.

The GOB has assumed full responsibility for the purchase of vaccines and related supplies for immunization, which are purchased through the PAHO Revolving Fund for Vaccine Procurement for an average of US$ 260,000 annually. In an effort to improve access to essential medicines and products, the GOB has taken the decision to remove the general sales tax from a range of medicines, medical supplies, and medical and paramedical services (*3*).

2.6 The Millennium Development Goals

In July 2005, Belize presented its first status report (*42*) on the Millennium Development Goals (***Annex 12***) and the country's progress to date, identifying critical challenges that needed to be addressed if the goals and targets were to be accomplished by 2015. There have been efforts to eliminate poverty (MDG 1) through the development of plans for areas with high poverty levels, such as the Toledo District and the Southside of Belize City, and the creation of agencies such as the SIF. The multisectoral National Human Development Advisory Committee (NHDAC), chaired by the Ministry of Economic Development, Commerce, Industry, and Consumer Protection, provides policy advice to the GOB in poverty elimination strategies; PAHO/WHO and other U.N. agencies are members of the NHDAC.

Much progress has been made regarding MDG 2, and the country is well-poised to achieve universal primary education, although efforts must be maintained and dropout rates monitored regarding possible remedial action. It is recognized that the achievement of MDG 3, gender equality and empowerment of women, is necessary for the achievement of the other MDGs. Though there is a National Gender Policy (2002), the CEDAW Committee's Concluding Comments on Belize's third and fourth combined report expressed concern about, among other issues, the social barriers that impede women's education. One of the CEDAW recommendations was that priority be placed on implementing a comprehensive approach to addressing all forms of violence against women (*25*).

Belize, along with many other Caribbean countries, had implemented some of the strategies and principles of primary health care even before the Declaration of Alma-Ata in 1978. As a result, there have been advances in relation to several of the health-related MDGs and associated targets, including child health, maternal health, water, and sanitation; the country stands poised to achieve MDGs 4 and 5 and the clean water provision target of MDG 7. With regard to MDG 6, despite the country's efforts to stem the HIV/AIDS pandemic, HIV prevalence remains high. While recent statistics have indicated a slowing of the HIV infection rate, the goal of stopping and beginning to reverse the spread of the disease by 2015 is unlikely to be achieved. Malaria remains endemic in southern areas of the country, and tuberculosis has not yet been vanquished. Other diseases, NCDs, and the threat of pandemic influenza pose new challenges. The country's membership and participation in many international groupings in Central America, the Caribbean, and the wider "global village" facilitate the achievement of MDG 8.

The MOH has incorporated national strategies for attaining the health-related MDGs in the Health Agenda 2007–2011.

2.7 Key health priorities and challenges

2.7.1 Health status

- Communicable diseases—including vaccine-preventable diseases (the introduction of new vaccines, maintenance of high coverage, vaccine procurement); implementation of the IHR (2005), including EAR and IPP; vector-borne diseases (malaria, dengue, Chagas'); neglected diseases (soil-transmitted helminths); and TB
- HIV, AIDS, and STI—including TB/HIV; integrating HIV services into primary health care; scaling up prevention, care, treatment, and support; reduction of stigma and discrimination; and monitoring of drug resistance
- Family and community health—indigenous people's health, border health, sexual and reproductive health, maternal and child health, adolescent health, violence and injuries, mental health and substance abuse, occupational safety and health, and oral health
- NCDs—diabetes, hypertension, selected cancers, obesity and risk factors (tobacco use, physical inactivity, unhealthy nutrition, harmful alcohol use)

2.7.2 Health determinants

- Poverty alleviation—increased social participation, reduction of inequities, and focus on vulnerable groups
- Implications of rapid increase in population, including migrant health
- Environmental health and management, including adapting and mitigating the health effects of climate change

- Disaster risk reduction, preparedness, and response
- Food and nutrition security

2.7.3 Health sector policies and organization

- Reorientation of the health system towards prevention, with a focus on primary health care
- HRH—numbers, distribution, categories, availability, recruitment, and retention
- Development of capacity for greater impact—strengthening institutional systems and capacity for strategic planning, monitoring, evaluation, program budgeting, intersectoral action, resource mobilization, and partnerships
- Strengthening HIS and effective use of information
- Improving performance of the EPHF and MOH capacity to manage international cooperation in health
- Updating, finalization, implementation, monitoring, and evaluation of health and health-related policies and plans
- Strengthening the use of a program, rather than a project approach, and incorporation of project outputs into national and local systems
- Coping with limited absorptive capacity at national and local levels
- Gender, health promotion, and the right to health as crosscutting issues

2.8 Opportunities and strengths

- New government and new national health administration, as of March 2008
- Health sector reform and regionalization/decentralization of health services
- Trend of increasing investment in health
- Existing and planned frameworks for health
- BHIS
- NHIS
- Belize's participation in CARICOM, SICA, and Plan Puebla Panama
- Existing national tertiary academic institutions
- CARICOM Regional Health Institutions and planned establishment of the Caribbean Public Health Agency (CARPHA)
- Potential for economic advancement with the discovery of oil and growth of the tourism industry

3. DEVELOPMENT COOPERATION AND PARTNERSHIPS: TECHNICAL COOPERATION, AID EFFECTIVENESS, AND COORDINATION

3.1 Key international aid and partners in health

3.1.1 Bilateral and multilateral partners

During the early 1990s, Belize's status as a middle income country, coupled with improving national health indicators, negatively affected the number of international donors providing development assistance to the country, resulting in a reduction in aid flow. Despite this situation, over the past several years the country has benefited from a number of projects, including regional projects funded by international donors through multilateral and bilateral agreements, which provide financial and technical support on a regular basis for addressing specific diseases and strengthening the health system (Table 4).

It is difficult to determine the amount of aid received in-country for health, as no mechanism exists to track and monitor aid delivery and management in a systematic manner, especially aid flow that occurs outside the national government structure. The Ministry of Economic Development collects information on public sector investment on an annual basis, and this provides information on projects that are supported by international donors. However, most of the information collected is not specific to health. While the Ministry of Foreign Affairs and Foreign Trade does collect some information, it is difficult to track the information by source, especially if the funds are for the health sector.

The country has also received support from various universities and institutions in the United States in a wide range of health areas, among them HIV, reproductive health, mental health, and health promotion. These types of projects frequently are implemented through various NGOs, and, as a result, there is a tendency for duplication of projects.

Some 46 countries have embassies or consulates in Belize. The United States Embassy provides funding for various HIV-related activities on an annual basis. It is estimated that the Embassy has contributed US$ 2,494,085 for special HIV projects for the period 2005–2007. Through binational agreements with the Governments of Cuba and Nigeria, doctors and nurses from these countries provide comprehensive general medical services to rural areas, while specialists provide services to the regional hospitals. Cuba and China (Province of Taiwan) provide scholarships for health personnel, and bi- and tri-national agreements with Guatemala and Mexico have contributed significantly to improvements in the population's health, particularly among the border communities. Bilateral agreements with Mexico focus on addressing health issues such as dengue, malaria, and immunization of children under 5 years of age, while the agreements with Guatemala focus on the reduction of vector- and waterborne diseases. Agreements with Cuba and Mexico also include the referral of patients for

advanced treatment services that are not available in the country. The United Kingdom supports climate change adaptation and mitigation, and is a partner in seeking a solution to the Belize-Guatemala territorial dispute.

3.1.2 U.N. system

There are four U.N. agencies that maintain offices in Belize: UNICEF, UNFPA, PAHO/WHO, and the United Nations Development Program (UNDP). UNICEF provides support to the country in child health, maternal mortality, and water and sanitation; the UNDP office, headed by an Assistant Resident Representative[25] provides technical support to the country in the area of environmental protection and conservation, climate change, and democratic governance. UNDP provides resources for a U.N. Coordinator to assist in coordinating U.N. country team (UNCT) activities and plans to support an HIV officer to assist the U.N. Theme Group on HIV/AIDS. In 2005, UNFPA established a Liaison Office in Belize; the country representative is stationed in Jamaica. The office provides support to the MOH and NGOs in sexual and reproductive health issues, including reproductive health commodities security. The Joint United Nations Program on HIV/AIDS (UNAIDS) Country Coordinator, who is based in Jamaica, assumed responsibility for that agency's activities in Belize in mid-2008 and indicated that a UNAIDS Program Officer might be located in Belize before the end of 2008.

The United Nations Development Fund for Women (UNIFEM), through its regional office in Trinidad and Tobago, has provided financial and technical support to regional projects, particularly in the area of gender mainstreaming and HIV. UNESCO has a focal point in the Ministry of Economic Development and in 2007 designated the late Belizean cultural icon and musician, Mr. Andy Palacio, as an Artist for Peace after Palacio successfully advocated in 2000 for formal acknowledgement of the need to preserve the Garifuna language, music, and dance. The World Meteorological Organization has a focal point in the CARICOM Climate Change Centre (CCCC), which is located in Belize, and FAO maintains a correspondent in the Ministry of Agriculture to address food security issues.

TABLE 4. Development partners providing resources in health, Belize, 2005–2007[22].

Development partners	Areas of support	Approximate amount funded (in US$)
Inter-American Development Bank	Health sector reform	771,650 (Grant) 9,800,000 (Loan)
U.S. Agency for International Development	HIV/AIDS	50,000
Canadian International Development Agency	Gender issues	100,000
Global Fund to Fight AIDS, Malaria, and Tuberculosis	HIV	2,403,677
Caribbean Development Bank	HIV Health sector reform	150,000 4,710,000
European Union	Health sector reform	1,600,000
China (Province of Taiwan)	Health care services	25,000
International Planned Parenthood Federation	Reproductive health	651,994
Drew University (Madison, New Jersey, United States)	Cervical cancer	250,000
Humanist Institute for Cooperation with Developing Countries[23]	Gender issues, HIV	1,100,000
Summit Foundation	Sexual and reproductive health services for youth	122,800
Caribbean Federation for Planned Parenthood	Sexual and reproductive health	82,246
United Nations Children's Fund	Health-related issues	659,251[24]

22 This list does not intend to be exhaustive and is based on information collected directly from partners.

23 Known as Hivos, this Dutch NGO works with local organizations in developing countries. For more information, go to http://www.hivos.nl/english/english/about_hivos/short_introduction.

24 This amount does not include the costs of technical expertise and staff time, regional staff expertise and their travel costs, or other administrative costs associated with the planning and implementation of programs.

25 The UNDP Resident Representative/Resident Coordinator for Belize is stationed in El Salvador.

The United Nations Development Assistance Framework (UNDAF) 2007–2011 (*43*), which outlines the collective response of U.N. agencies in Belize to national development priorities, has created the space for collaboration and coordination among U.N. agencies in addressing the country's health needs. The UNDAF has three program areas: poverty elimination by investing in people, reversal of the spread of HIV and AIDS, and improvement of sustainable development practices. The UNDAF outcomes address improvement in democratic governance practices; safe, protective, and healthy environments; and improved prevention of communicable and noncommunicable diseases, among others.

Within this framework, the UNCT has established Theme Groups on HIV/AIDS, Disaster Management, and Security, as well as joint technical teams that address policy, monitoring, and evaluation; HIV and sexual and reproductive health; disaster preparedness and emergency response; and other health issues. These technical teams are lead by, respectively, UNDP, UNFPA, UNICEF, and PAHO/WHO. Functioning as the U.N. Disaster Management Team, the UNCT has adapted the U.N. global cluster approach to humanitarian aid to the Belizean reality and is working to strengthen coordination with NEMO and other stakeholders in emergency response. The agencies are undertaking joint programming on priority health issues such as HIV, reproductive health, safe motherhood, primary health care, child health, disaster preparedness and response, and certain aspects of environmental health. Not only has this mechanism fostered greater cohesion among the agencies, but it has also prevented duplication of effort with national counterparts.

Other aspects of U.N. reform, including enhanced teamwork while respecting individual agency mandates and systems, coordinated monitoring and evaluation, and the development of common frameworks such as the U.N. Security Plan and the Interagency Contingency Plan, are proceeding, adapted to the situation of the country and the agencies, with the aim of "Delivering as One."

3.1.3 Inter-American system

In 1990, Belize became a member of the Organization of American States (OAS), and the OAS established a country office in 2003. The OAS supports the Confidence-Building Measures Agreement between Guatemala and Belize, to which both countries and the OAS are signatories. Besides supporting the resettlement of Guatemalan nationals living on the Belizean side of the border, the OAS has served as facilitator for interinstitutional meetings and coordination, and has offered various types of support to central government agencies of both countries, as well as NGOs and churches, in areas such as forestry and reserves conservation, and to binational commissions for health in the Belize-Guatemala Adjacency Zone.

Belize benefits from activities and initiatives for both the Central American and Caribbean subregions under the Inter-American system. It is an active member of the respective subregional integration entities, SICA and CARICOM. SICA includes RESSCAD[26] and COMISCA[27]; the former includes Ministers of Health, Environment, and Social Security in Central America and the Dominican Republic, while the latter includes Ministers of Health only. Meetings of these bodies are organized annually to review common health priorities with a view to developing and implementing joint strategies to address them in the spirit of Central American integration. Similarly, Belize, as a member of CARICOM, benefits from Caribbean regional organizations that provide direct technical support to the country in the areas of nutrition, epidemiology, HIV/AIDS, and strengthening of laboratory capacity. Belize served as Pro Tempore President of SICA for the January–June 2007 period, during which time a major focus was the development of a CARICOM-SICA Plan of Action. The country assumed the Chair of the CARICOM Council for Human and Social Development in September 2007 and is currently Chair of the CARICOM Pan Caribbean Partnership against HIV/AIDS (PANCAP) Regional Coordinating Mechanism.

The Inter-American Institute for Cooperation on Agriculture (IICA) country office fosters agricultural development, while strengthening the food safety system. Emphasis is placed on the promotion of trade and competitiveness, agribusinesses, and the introduction of technology and innovation for the modernization of agriculture and rural life. There are ongoing efforts to finalize a PAHO/WHO-IICA agreement at the country level to address issues related to food and nutrition security and influenza pandemic preparedness.

The IDB is an active development partner. Since 2001, it has provided technical and financial support to health and public sector reform in Belize, as well as to the development of sectoral plans related to health. In addition, the IDB supports initiatives through public and private counterparts to prevent childhood malnutrition and the spread of HIV.

3.1.4 Others

Since 2005, the Caribbean Development Bank (CDB) has provided financial support to the private sector to facilitate electrical power generation and to the public sector for the upgrading of roads. The CDB has also provided economic support to the GOB to close financing gaps and has a 2007–2009 country strategy for Belize that aims to enhance economic growth, promote good governance, and foster inclusive social development (*44*).

The Belize Red Cross, as part of the International Federation of the Red Cross, is very active in disaster response and humanitari-

[26] Spanish acronym for Meeting of the Health Sector of Central America and the Dominican Republic.

[27] Spanish acronym for the Council of Ministers of Health of Central America.

an aid, and also works at the community level to render aid in non-emergency situations, including HIV prevention and control.

3.2. National ownership

While the MOH has identified national health priorities, aid flow into the country for health is not optimally aligned to these priorities, but is often driven by donor interests, which are skewed to prevention and control of HIV infection. This situation has, at times, negatively affected national ownership of project outputs and has resulted in funding gaps to improve services in other priority areas, such as NCDs. However, the HIV epidemic has forced closer collaboration and strengthened national and international partnerships. These partnerships have been reinforced through the National AIDS Commission, which constitutes the Country Coordinating Mechanism that is responsible for the implementation of the current Global Fund to Fight AIDS, Malaria, and Tuberculosis project on HIV, now in its final phase. Belize will submit a proposal to Round 9 of the Global Fund to further support the national response to HIV.

3.3. Alignment and harmonization

Belize does not have a national development plan that includes a road map for health, allowing prospective donors and development partners to align their program to national priorities, and an operational plan for the Health Agenda 2007–2011 is still pending. This situation makes the development of an effective aid agenda that fits the specific health needs of the country and fosters coherence and collaboration more challenging.

PAHO/WHO has served as a strategic partner between the country and some external partners. The Organization is in a position to collaborate with national health authorities in developing mechanisms for the management and monitoring of aid flow in support of national health priorities. These mechanisms will allow the MOH to direct funds to areas where they are urgently needed and ensure that it is actively involved in all decisions regarding the flow of aid for health in the country.

A major concern is the perceived excessive dependency on short-term external funding and development aid for the advancement of health, which militates against sustainable outcomes and capacity development.

3.4. Challenges

- Inadequate mechanisms to track and manage the flow of aid for health, especially aid flow that occurs outside the national government systems
- Difficulty in determining the amount of funds coming into the country to support national health priorities
- Inadequate use of the substantial amount of funds for HIV that flow into the country to strengthen national and local health systems
- Lack of a national development plan to guide and facilitate observance of the Paris Declaration on Aid Effectiveness (2005)
- Limited human resources to respond to initiatives in both subregions, sometimes resulting in a duplication of efforts and the possibility that Belize will "slip through the cracks" in subregional initiatives, in situations in which one subregion omits the country in the belief that it will be included in similar initiatives in the other subregion
- Need for stronger partnerships among the MOH, NGOs, CBOs, and private health institutions, in order to maximize the use of resources and avoid duplication
- Limited access to development aid, given the status of country as a "middle income country" in the World Bank classification system
- Focus on project, rather than program, approaches for national health development

3.5. Opportunities

- Existence of a cadre of partners interested in collaborating and investing in health
- Acknowledgement by national stakeholders of the technical strength of PAHO/WHO, their willingness to work with the Organization in addressing priority health issues and developing mechanisms for the management and monitoring of aid flow in support of the national health priorities, and the strong relationship between the Organization and the MOH
- Planned formulation of a national development plan: "Horizon 2030"
- Existence of the UNDAF 2007–2011, which is a possible framework around which development partners can harmonize their work
- Belize's participation in the PAHO/WHO Leaders in International Health Program

4. PAST AND CURRENT PAHO/WHO COOPERATION

4.1 Cooperation overview

4.1.1 Historical perspective

PAHO/WHO began its relationship with Belize during the 1950s. The terms for its technical cooperation are covered under the Basic Agreement, which was signed on 21 August 1984. Since it began operations in the country, PAHO/WHO has worked closely with the MOH, other ministries, and various agencies to strengthen health sector capacity and advance priority programs to improve the health of the people of Belize.

The PAHO Strategic Plan 2008–2012 identifies technical cooperation as the modus operandi for interaction with Member States and emphasizes the engagement of the Organization with national partners to jointly address agreed health priorities. The involvement in, and contribution of, PAHO/WHO technical and administrative staff to this process is more critical than the relatively limited financial resources in the Organization's Regular Budget.

4.1.2 Main areas of focus and functions

The Organization's technical cooperation with Belize has, for the most part, reflected the main programmatic areas addressed by the MOH, consistent with the organizational structure of the PAHO Headquarters. It has involved:

- Significant direct *"hands-on" technical support*, working side-by-side with national counterparts;
- *Training*, through in-country workshops and other fora, as well as support for national participation in international meetings;
- *Procurement* of vaccines and other supplies through PAHO's Revolving Fund for Vaccine Procurement and Strategic Fund;
- *Information-sharing*, *awareness-raising*, *and advocacy*, through the Knowledge Centre functions, observance of "World Days," and briefing of delegations to WHO and PAHO Governing Body meetings;
- *Research*, to build knowledge and inform policy and programs, facilitated by the strong working relationship that PAHO/WHO has built with the local media;
- *Information system strengthening* to facilitate surveillance, monitoring, and evaluation;
- *NGO support* to enhance civil society participation in matters related to health;
- *Resource mobilization*; and
- *Technical cooperation among countries*, to foster international cooperation and sharing of experiences and lessons learned.

In addition to work at the national level, a well-established modality has been direct support to the regional and community levels of the health system.

The main foci, or key areas of work, are agreed with the MOH through an analysis of the health situation and trends, as well as national priorities in health. Main foci over the past two biennia (2004–2005 and 2006–2007) have been:

(1) **Disease prevention and control**, which aims to strengthen the national capacity to reduce the burden of communicable and noncommunicable diseases. Technical cooperation has supported malaria control without the use of DDT and other persistent organic pesticides; the national response to HIV and AIDS; dengue control; cervical cancer prevention; determination of the prevalence of diabetes, hypertension, and NCD risk factors; and tobacco control.

(2) **Health systems and services**, which aims to support efforts to improve quality, efficiency, and effectiveness of health services and reduce inequities. Technical cooperation has addressed health sector reform, EPHF performance, HIS, HRH, quality improvement, and laboratory strengthening.

(3) **Family and community health**, which aims to improve the health of the family, and, by extension, the community. Technical cooperation has supported adolescent health, sexual and reproductive health, gender mainstreaming, EPI, neglected diseases, and mental health.

(4) **Environmental health, including disaster response and risk reduction**, which aims to reduce vector-borne diseases and environmental risks and hazards, and increase capacity for environmental protection and sustainability. Technical cooperation has addressed influenza pandemic preparedness, disaster preparedness and response, water quality standards, basic sanitation, solid waste management, environmental risk assessment, food safety, and occupational safety and health.

Over the past five years there has been an increase in the number of Technical Cooperation among Countries (TCC) projects in which Belize participates. Some specific TCC projects have included water and sanitation, and rabies control, with Guatemala; pesticide surveillance, with Nicaragua; prevention of mother-to-child transmission of HIV, with the Bahamas; safe motherhood, with Jamaica; food safety, with Jamaica and Costa Rica; implementation of WinSIG[28], with Trinidad and Tobago; and health of older persons, with Jamaica. This modality has been found to be very effective in the exchange of knowledge and experiences across countries. As a result of its ties with both Central America and the Caribbean, there is an opportunity for Belize to facilitate intercountry collaboration across both subregions.

Table 5 summarizes PAHO/WHO's main foci and functions in Belize over the past two biennia, in the framework of the Organization's current functions, to allow comparison with the functions in this CCS.

TABLE 5. PAHO/WHO's main foci and core functions, Belize, 2004–2007[29].

CORE FUNCTIONS MAIN FOCI	Providing leadership, engaging in partnerships	Shaping research, stimulating knowledge dissemination	Setting norms and standards, promoting and monitoring their implementation	Articulating policy options	Establishing technical cooperation, catalyzing change, building institutional capacity	Monitoring health situation, assessing health trends
Communicable diseases	+	+	+	+	+++	++
HIV/AIDS, STI	++	+	++	++	+++	++
Family and community health	++	-	++	++	+++	++
Noncommunicable diseases	++	+++	-	-	+++	+
Environmental health	++	++	++	+	+++	+
Response to and mitigation of emergencies and natural hazards	+++	-	+	++	+++	+
Institutional capacity of MOH	+++	-	+	++	+++	+
Health sector reform/National Health Insurance Scheme	++	-	-	++	+++	+
Human resources for health	+++	++	+	+	+++	++
Technical cooperation among countries	+++	+	+	+	+++	-

[28] WinSIG is the management information software used as a support tool for the Methodology for the Productive Management of Health Services.

[29] The number of plus (+) marks indicates the relative emphasis on core functions performed for each main focus.

In developing the projects in the current Biennial Work Plan (BWP 2008–2009), an analysis of several major frameworks was utilized to guide PAHO/WHO's technical cooperation for national health development in Belize, as noted in the Introduction to this document. In addition, there was consideration of the crosscutting issues of health promotion, gender, and human rights at all stages of the project cycle. The main foci from the two previous biennia are retained, but in the context of the strategic objectives of the WHO Medium-Term Strategic Plan 2008–2013 and the PAHO Strategic Plan 2008–2012. In recognition of the need for PAHO/WHO to support the MOH in taking leadership to rationalize and coordinate international health cooperation, technical cooperation in this area has been added in the BWP 2008–2009. Thus, the technical projects in the current biennium include Health Systems and Services (HSS), Family and Community Health (FCH), Disease Prevention and Control (DPC), Environmental Protection and Sustainability (EPS), and International Cooperation in Health (ICH). The Country Program Support (CPS) project addresses administrative and logistic support for the technical cooperation program.

4.2 Structure and ways of working

4.2.1 Organizational structure

PAHO/WHO has technical cooperation programs and projects that are implemented through organizational entities at the *global* level in WHO Headquarters, Geneva; at the *regional* level (for the Americas) in PAHO Headquarters, Washington, D.C; at the Caribbean, Central American, Southern Cone, and Andean Area *subregional* levels through specialized centers, the Office of Caribbean Program Coordination (OCPC) located in Bridgetown, Barbados, the recently established (2008) PAHO HIV Caribbean Office (PHCO) in Port-of-Spain, Trinidad and Tobago, and Country Focus Support in Washington, D.C; and at the *national* level through the Organization's Country Offices.

There are 28 PAHO/WHO Country Offices in the Region of the Americas; a Field Office at the United States-Mexico border in El Paso, Texas; and 7 specialized centers. The specialized centers include the Caribbean Food and Nutrition Institute (CFNI), the Institute of Nutrition of Central America and Panama (INCAP), the Caribbean Epidemiology Center (CAREC), the Latin American and Caribbean Center on Health Sciences Information (BIREME), the Pan American Foot-and-Mouth Disease Center (PANAFTOSA), the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS), and the Latin American Center for Perinatology and Human Development (CLAP)[30]. Three of the specialized centers are currently in the process of institutional review and strengthening. CAREC and CFNI will be integrated, along with the other three CARICOM Regional Health Institutions[31], into the Caribbean Public Health Agency (CARPHA), while INCAP will develop closer governance and management ties with SICA. These changes will likely result in adjustments in the functions and relationships each institution shares with PAHO/WHO.

PAHO/WHO Collaborating Centers also contribute to technical cooperation program implementation. These are institutions designated by the WHO Director-General and the PAHO Director to provide strategic support to PAHO in implementing its mandated work and achieving program objectives, and to develop and strengthen institutional capacity in countries and regions. There are more than 900 Collaborating Centers in 99 countries, working in nursing, occupational health, mental health, and chronic diseases, among other technical areas[32].

PAHO, the Regional Office of WHO in the Americas (AMRO) is the only WHO Regional Office that works at the subregional level, and this level of technical cooperation is being strengthened through the development and implementation of subregional cooperation strategies that respond to subregional health agendas and frameworks, such as the Caribbean Cooperation in Health.

4.2.2 Support from other PAHO/WHO entities, at all levels

- CFNI and INCAP provide technical cooperation in the area of food and nutrition safety and security, infant and child nutrition, food-based dietary guidelines, nutrition surveillance, and human resources development in nutrition, and will continue to support national capacity development in those areas. The recent placement of a veterinary public health advisor at CFNI will permit support in strengthening food safety mechanisms and dealing with zoonotic diseases of public health significance.
- CAREC provides support in the areas of immunization, food safety, microbiology, laboratory strengthening, HIV/AIDS, epidemiology, communicable disease surveillance, and cervical cancer prevention, and has committed to continue support in these areas as well as in IHR (2005) implementation, NCD surveillance, and human resources development.
- BIREME supports the country in knowledge management and sharing activities, and will continue providing support of this nature, especially for the Virtual Health Library and the Virtual Public Health Campus. BIREME will likewise support national capacity-strengthening as regards access to, and the use of, scientific information, knowledge, and evidence.
- CLAP will work with Belize in epidemiological surveillance through the Perinatal Clinical Record and the Perinatal Information System (SIP), and use of the information for planning and decision-making.
- The OCPC has provided support in disaster preparedness, mitigation, and response; influenza pandemic preparedness; health promotion; media and health activities; procurement and supplies management; and mental health initiatives. The OCPC

30 Additional information on PAHO/WHO Country Offices and specialized centers can be accessed at http://www.paho.org/english/paho/fieldoffices.htm and http://www.paho.org/english/paho/centers.htm.

31 The Caribbean Environmental Health Institute (CEHI), the Caribbean Health Research Council (CHRC), and the Caribbean Regional Drug Testing Laboratory (CRDTL).

32 More information on PAHO/WHO Collaborating Centers may be accessed at http://www.bireme.br/whocc/.

will continue support in these areas, broadening health promotion strategies to settings other than schools.
- The PAHO/WHO Eye Care Regional Program, coordinated from the PAHO/WHO-Colombia Country Office, will continue to cooperate with the Belize Council for the Visually Impaired (BCVI) in increasing the coverage and quality of eye care services.
- The PHCO provides financial and technical support to the national response to HIV and AIDS.
- The PAHO Headquarters office in Washington, D.C., provides technical, financial, and administrative support through its various programs. Areas supported include child health, neglected diseases, HIS, HRH, health services management strengthening, health legislation, tobacco control, safe blood, and mental health, as well as those related to finance, budget, and programmatic support. PAHO Headquarters will continue support in these areas and will also collaborate to address HIV in young people, nutrition, Integrated Management of Childhood Illness (IMCI), and patient safety.
- WHO Headquarters' support comes in the form of funding for HIV/AIDS and work on food safety to promote the "Five Keys to Safer Food," through a project on Communication for Behavioral Impact (COMBI); this support will continue.

4.2.3. Resource mobilization

Most resource mobilization is carried out as a part of subregional or regional initiatives through AMRO. However, in view of the declining Regular Budget in the PAHO/WHO-Belize Country Office and the strengthening of results-based management in order to meet the Strategic Objectives of the PAHO Strategic Plan 2008–2012, all levels of the Organization will need to increase their collaboration for resource mobilization.

4.2.4. PAHO/WHO partnerships and comparative advantage

The MOH is the main PAHO/WHO counterpart at the national level; however, technical cooperation is also carried out in collaboration with several other ministries, including the Ministries of Education, Agriculture and Fisheries, Human Development and Social Transformation, and Economic Development. The PAHO/WHO-Belize Country Office also collaborates with a large number of NGOs from various sectors (***Annex 13***), and with various development agencies, organizations, and institutions.

PAHO/WHO's comparative advantage lies in its access to technical expertise within and outside the Organization through its global, regional, subregional, and national reach; the use of that technical expertise to develop national and local capacity to address health priorities using innovative and proven interventions; its willingness to partner and form strategic alliances within and outside of the health sector; and its country presence and focus on national health development.

4.3 Resources

4.3.1. Financial resources (all figures quoted in US$)

The technical cooperation program budget has three main sources: the PAHO/WHO Regular Budget (RB), which comprises quota contributions from Member States plus miscellaneous income; Voluntary Contribution (VC) funds from donor partners; and funds from all other sources (OS).

For the 2006–2007 biennium, the total Regular Budget was US$ 572,412, a reduction from US$ 663,800 in 2002–2003 and US$ 670,112 in 2004–2005, as shown in Figure 3. As a result of the 2005 PAHO Regional Program Budget Policy, the PAHO/WHO-Belize Country Office has seen a reduction in regular budgetary allocations over the past two biennia (Figure 4), which has increased the need for resource mobilization to adequately respond to national health priorities. Resources from other sources have similarly declined, while voluntary contribution funds have varied across the three biennia. For the current biennium, the Regular Budget ceiling, excluding personnel costs, is US$ 404,600, and, at the end of May 2008, a total of US$ 91,000 in VC funds had been mobilized to support the technical cooperation program. It is anticipated that at least an additional US$ 400,000 will be mobilized during the remainder of the biennium.

Currently, the largest percentage of the Regular Budget (30%) is allotted to the DPC project; this represents a shift from the major portion of the budget being allotted to the HSS project in previous biennia. Projects supported by VC funds address HIV/AIDS, nutrition, women's health, immunizations, malaria, soil-transmitted helminths, NCDs, IHR (2005), and avian influenza/IPP.

4.3.2. Human resources

Up to 30 June 2008, there were 20 staff assigned to the PAHO/WHO-Belize Country Office, comprising 8 men and 12 women. This included 6 professionals—2 of whom are international staff—and 14 administrative personnel (***Annex 14***). The PAHO/WHO Representative (PWR) heads the office and manages the ICH project; each technical advisor is responsible for the management of one technical BWP project, although there is significant collaboration among them in addressing some of the projects' expected results. The administrative officer manages the CPS project. Short-term contracts for additional personnel are issued on a limited basis; all staff are responsible for the management of multiple portfolios in order to contain personnel-related costs, and each advisor functions as a focal point for several technical areas and issues.

Staff development activities are ongoing, through annual Learning Plans developed by the Country Office's Learning Focal

FIGURE 3. PAHO/WHO investment in Belize, by type and biennium, 2002–2007.

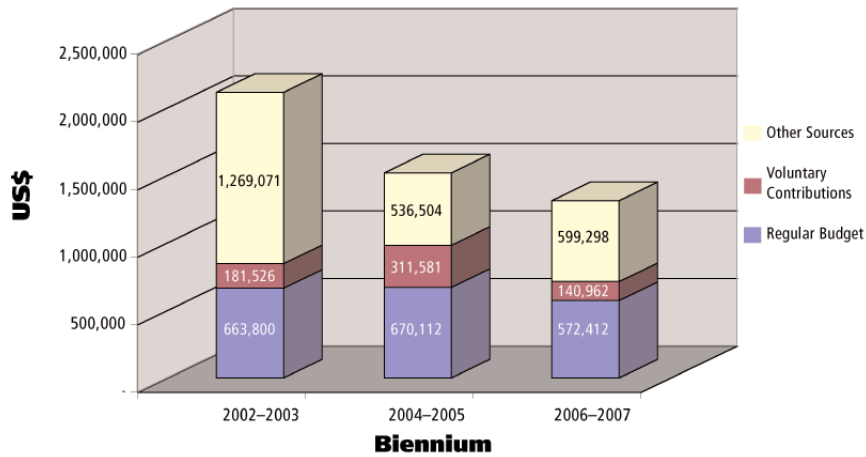
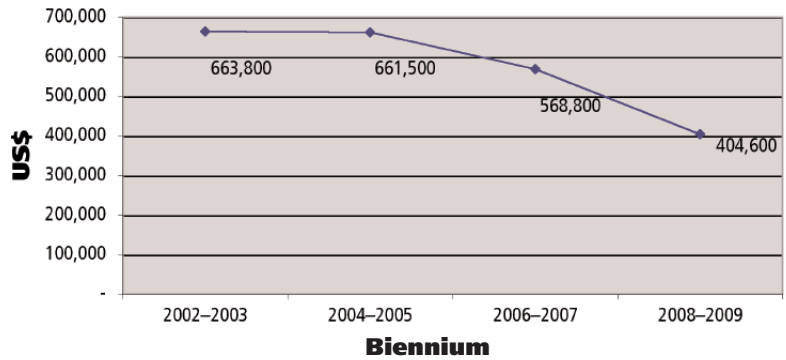


FIGURE 4. PAHO/WHO Regular Budget ceilings, by biennium, Belize, 2002–2009.



Point in collaboration with the rest of the personnel and according to technical cooperation priorities and issues raised through periodic performance evaluations. The Learning Plans, part of the wider Office Development Plans, are implemented in collaboration with relevant programs at PAHO Headquarters, and activities include annual staff retreats, language training, and local and online courses in various areas, including degree courses.

4.3.3 Office infrastructure

The PAHO/WHO-Belize Country Office is located in Belize City. The building is a two-story concrete structure with adequate spacing for staff. All technical and administrative staff except one[33] operate from this office. The location is ideal, but the ground floor has experienced flooding due to heavy rains on a number of occasions. The United Nations Department of Safety and Security (UNDSS) conducts regular inspections of the office premises, and the last inspection in March 2008 indicated that the office was in compliance with all UNDSS requirements, including Minimum Operating Security Standards (MOSS). The PAHO Director launched the "Green PAHO" program in April 2008, and the PAHO/WHO-Belize Country Office is consequently investigating ways of increasing its environmental friendliness. There is a PAHO/WHO Emergency Office in Belmopan, which serves as a shelter and provides a base from which to operate if there is need to evacuate Belize City in the event of a hurricane.

Office computers are connected via a local area network with access to shared documents and other resources. Additionally, all systems have connection to the Internet through one common point of exit. During the previous biennium, a new Microsoft Access database was introduced for the centralized management of incoming and outgoing correspondence. This database is accessible to all staff and has contributed greatly to an improved filing system. With guidance from the OCPC Systems Administrator, the PAHO/WHO-Belize Country Office has initiated an electronic filing system.

The Country Office has a Knowledge Center, which provides technical and scientific information to staff, national counterparts, and the general public. To date, a total of 4,433 monograph documents have been catalogued. The Knowledge Center has improved its management of information and knowledge-sharing by opening its services to the wider public and by using corporate tools such as the Virtual Health Library, Open Link, Elluminate, SharePoint

[33] One staff member was assigned to the Voluntary Contribution project "Sustainable Alternatives to DDT for Malaria Control" and worked mainly in the MOH Headquarters in Belmopan, some 52 miles away from Belize City. His contract ended on 30 June 2008.

and the Country Office Web site. There has been an increase in the number of users of the Center from 36 in 2001 to 281 in 2008. From 2006, when Elluminate, a Web-conferencing tool, was introduced, to 20 June 2008, a total of approximately 82 meetings and training sessions have been held using this technology.

In light of the threat of floods and ongoing U.N. reform, which stipulates a move to closer collaboration and cooperation among agencies, including common premises and services where feasible, efficient, and effective, there may be implications for the relocation of the Country Office and adjustments to its administrative systems. This last may also come about as a result of the implementation of the WHO Global Management System (GSM).

4.4 SWOT analysis of PAHO/WHO

In order to facilitate development of the strategic agenda for the Organization's work in Belize, a strengths, weaknesses, opportunities, and threats (SWOT) analysis was conducted in June 2008. Table 6 summarizes responses from Country Office personnel and external partners to a structured questionnaire. (The information collection process is described in further detail in the Introduction and Annex 1 of this document.)

TABLE 6. SWOT analysis of PAHO/WHO, Belize, 2008.

Strengths	Weaknesses
• Global recognition of PAHO's and WHO's work • Stable and committed organization • High level of technical and administrative capacity among staff who are committed to high performance standards and continuous improvement • Knowledge of organizational norms and standards and adherence to them • High level of accountability • Involvement in national needs assesment and assistance in determining and walking the way forward • Good collaboration and partnerships with the MOH and with other sectors, including in planning and evaluation; coordinated efforts with the MOH have contributed to the maximization of resources and limited duplication of efforts • As a U.N. agency, possesses the capacity to highlight health concerns and bolster the efforts of the MOH • Promotion of equity and encouragement of collaboration between local agencies • Access to strong technical expertise from the international community • Well-established and respected organization that has benefited from the guidance of PAHO Governing Bodies (comprised of Ministers of Health of PAHO Member States) • Presence of Belizeans as technical advisors • Ability to mobilize resources • Many accomplishments despite limited resources	• Very bureaucratic and rigid in processes (e.g., technical cooperation requests and restrictions for the allocation of financial resources) • Weak relationship with some non-health ministries • Different timeline for its country program from that of other U.N. agencies; need to harmonize the timing of these programs and take advantage of collaborative synergies • Limited awareness of the work of PAHO/WHO outside the realm of health and poor outreach to other non-MOH health entities • Overburdened, stressed staff • Deficiency in certain competencies, such as veterinary public health and food safety • Different human resource contractual arrangements for personnel doing similar work • Inadequate appreciation of the mutually supportive and beneficial roles of technical and administrative personnel • Limited financial resources • Funds directed to meetings, travel, etc., and few of the funds directed towards needy communities • Reducing support to the health of the elderly program may be shortsighted
Opportunities	**Threats**
• Belize's ties with both Central America and the Caribbean • Country in "no-phase" for UNDSS • Strengthened in-country U.N. coordination • Presence of strong CBOs and NGOs, with whom PAHO/WHO can partner to address vulnerable populations, including indigenous groups • New government/national health authorities • Development of the CCS • Partnerships for resource mobilization	• Reducing Regular Budget; increasing cost of living • Small cadre of staff being asked to take on more and more responsibilities • Planned relocation of the Country Office to another site in Belize City; possible relocation of the Country Office to Belmopan in the future • New government/national health authorities • More frequent natural disasters and emergence of new threats • Increasing number of stakeholders in health, with duplication of technical cooperation activities

5. STRATEGIC AGENDA FOR PAHO/WHO'S COOPERATION

Health is recognized as a critical factor in national development and as a fundamental human right. The 2001 CARICOM Nassau Declaration on Health states that the "health of the Region is the wealth of the Region" (*45*), and the Belize Health Agenda 2007–2011 states that "health is the first and most important form of wealth" (*39*).

PAHO/WHO recognizes that though many gains have been made in health in Belize, including increased vaccination coverage, health sector reform, and the development of policy frameworks for health, there remain health challenges which should no longer exist, given that there are effective interventions for overcoming them. These include neglected diseases, and water and sanitation issues. Even as these conditions persist, there are new and emerging challenges, such as increases in NCDs, violence, and injuries; HIV/AIDS; and epidemic alert and response.

Consequently, the strategic framework for PAHO's technical cooperation—completing the unfinished agenda, protecting health achievements, and tackling new challenges—and WHO's six-point agenda—health and development, health security, health systems, information and knowledge, partnerships, and performance—will inform the Organization's strategic agenda in Belize.

Taking into consideration the global, regional, subregional, and national frameworks, and the priorities and challenges noted in previous sections, as well as the work of development partners in Belize, PAHO/WHO will apply its core functions[34] to cooperate technically with agencies and institutions in Belize to address four strategic priorities:

- improving the health status of the population,
- addressing key health determinants
- strengthening health sector policies and organization, and
- enhancing PAHO/WHO's response.

Under each strategic priority, the Organization will focus on certain areas—main foci—and will apply selected core functions to address these areas. Overall, PAHO/WHO will continue to work with health authorities at the national level, while increasing cooperation with regional and district levels in the decentralized health system, and with NGOs and CBOs. There will be a greater emphasis on, and advocacy for, increased collaboration with other U.N. agencies, subregional partners in the Caribbean and Central America, civil society, and the private sector.

Several of the determinants of health are outside the scope of the health sector, and PAHO/WHO will therefore promote and support national policy interventions and intersectoral actions. In order to contribute to reducing inequities in health, the Organization will take a human rights- and gender-based approach to technical cooperation for national health development, giving special attention to vulnerable groups and communities, including

[34] The six core functions are: (1) providing leadership on matters critical to health and engaging in partnerships where joint action is needed; (2) shaping the research agenda and stimulating the generation, dissemination, and application of valuable knowledge; (3) setting norms and standards, and promoting and monitoring their implementation; (4) articulating ethical and evidence-based policy options; (5) establishing technical cooperation, catalyzing change, and building sustainable institutional capacity; and (6) monitoring the health situation and assessing health trends.

indigenous people, the Toledo District, and the Southside of the Belize District. PAHO/WHO will apply the principles of health promotion, targeting policy and decision-makers as well as technical counterparts; build on past and ongoing programs and projects; promote and support knowledge management and sharing; and facilitate TCC and resource mobilization in the areas of focus.

In mapping the CCS main foci to the WHO Medium-Term Strategic Plan (***Annex 15***), the greatest degree of focus is on Strategic Objective (SO) 3, which deals with NCD, mental disorders, and violence and injuries, and SO 12, which addresses the Organization's leadership and governance. These are followed by SO 7 (social and economic determinants of health), and SO 10 (health services). SO 13, like SO 12, targets PAHO/WHO itself, and is also reflected in the strategic agenda.

5.1 Strategic priority 1: improving the health status of the population

5.1.1 Main focus 1.1: communicable diseases

Areas for action	Core functions	Strategies
(1) Implementing the IHR (2005) and strengthening EAR	1, 5, 6	• Assessment of core capacity for IHR implementation, development and implementation of plan to fill gaps • Surveillance for EAR and IPP, including laboratory capacity strengthening • Collaboration with BHIS, HMN, Belize Agricultural Health Authority (BAHA)
(2) Controlling vector-borne diseases	1, 3, 5, 6	• Focus on malaria, dengue, Chagas' disease • Surveillance • COMBI • Case detection and management • Environmental sanitation, building on outputs of the DDT-Global Environment Facility (GEF) project • WHO Global Malaria Program and IPCA
(3) Controlling vaccine-preventable diseases	1, 5, 6	• Maintenance of surveillance and high immunization coverage • Strengthening of cold chain • Continued vaccine procurement through the PAHO Revolving Fund • Analysis of introduction of new vaccines
(4) Controlling neglected diseases	2, 4, 5	• Focus on soil-transmitted helminths • Resource mobilization through VC project already developed and formulation of "sub-projects" as necessary • Collaboration with SIF, UNICEF, Toledo Development Corporation (TDC), Belize Rural Development Program (BRDP)
(5) Strengthening the national TB program	3, 5, 6	• Public awareness • Surveillance • Case management • WHO Stop TB Strategy
(6) Strengthening food safety and veterinary public health	1, 3, 4	• Determination of priority needs • Collaboration with BAHA

5.1.2 Main focus 1.2: HIV, AIDS, and STI

Areas for action	Core functions	Strategies
(1) Strengthening detection and treatment of STI and TB/HIV coinfection and efficient use of resources mobilized for HIV	1, 2, 3, 5	• Collaboration with National AIDS Commission (NAC), U.N. partners • Contribution to implementation and monitoring of Global Fund to Fight AIDS, Tuberculosis, and Malaria; UNAIDS Program Acceleration Fund (PAF); and William J. Clinton Foundation and other HIV-related projects
(2) Integrating HIV/STI services into primary health care	3, 4, 5	• Training • Renewal of primary health care in the Americas initiative
(3) Scaling up prevention, surveillance, care, and treatment for HIV, STI, and TB	3, 4, 5	• Monitoring of drug resistance for HIV and TB • Contribution to review and monitoring of the National HIV Strategic Plan and the Health Sector Plan for Universal Access • Contribution to implementation and monitoring of Global Fund, PAF, and William J. Clinton Foundation and other HIV-related projects • Collaboration with U.N. partners, BHIS, HMN
(4) Reducing stigma and discrimination, including among health workers	1, 5	• COMBI • Collaboration with civil society, NGOs, CBOs
(5) Determining HIV and STI prevalence and appropriate response measures in vulnerable groups	1, 2, 4, 5, 6	• Focus on men who have sex with men, commercial sex workers, the indigenous population, older persons • Collaboration with NGOs, CBOs

5.1.3 Main focus 1.3: family and community health

Areas for action	Core functions	Strategies
(1) Expanding primary health care services beyond maternal and child health (MCH) to embrace all members of the family across the entire life cycle	1, 3, 5	• Collaboration with National Committee for Families and Children (NCFC), BFLA, National Council on Ageing (NCA), UNFPA, UNICEF • Development of protocols and guidelines • Training
(2) Improving indigenous people's health	1, 2, 5	• Situation analysis • Information, education, and communication (IEC) • Advocacy • Collaboration with CBOs, UNICEF

Areas for action	Core functions	Strategies
(3) Facilitating transborder cooperation in health	1, 5, 6	• TCC projects • Collaboration with Ministry of Foreign Affairs and Foreign Trade (MFA) • Collaboration in establishment of Border Health Commissions
(4) Improving sexual and reproductive health (SRH) throughout the life cycle	1, 3, 5	• Collaboration with Women's Department of the Ministry of Human Development and Social Transformation (MHD), UNFPA, UNICEF, BFLA • Implementation of National SRH Plan • Emphasis on men's SRH
(5) Maintaining and improving MCH gains, including childhood nutrition	1, 5, 6	• Safe Motherhood Program • SIP; IMCI; WHO-UNICEF Global Strategy on Infant and Young Child Feeding; new WHO Child Growth Standards • Collaboration with NCFC, UNICEF, IDB
(6) Improving adolescent health	1, 5	• Implementation of National Plan of Action for Children and Adolescents • Review and strengthening of existing teen pregnancy reduction programs • Collaboration with UNICEF, UNFPA, BFLA, NCFC
(7) Reducing violence and injuries	1, 2, 4, 5	• Surveillance • Research into socioeconomic impact of road traffic injuries • Policy development and implementation for gender-based violence and road traffic injuries • Collaboration with BHIS
(8) Strengthening mental health and substance abuse programs	1, 3, 4, 5	• Incorporation of substance abuse, including alcohol abuse prevention, into mental health program • Surveillance • Development of plan for mental health in disasters • Implementation of Mental Health Plan and Policy and recommendations from WHO-AIMS (Assessment Instrument for Mental Health Systems) • Collaboration with Mental Health Association
(9) Strengthening occupational safety and health (OSH)	3, 4, 5, 6	• Advocacy for OSH legislation enactment • Surveillance • Collaboration with SSB; PCB; Ministry of Labour, Local Government, and Rural Development (MOL); Belize Chamber of Commerce and Industry

Areas for action	Core functions	Strategies
(10) Strengthening the oral health program	1, 5	• Advocacy • Resource mobilization • Collaboration with Ministry of Education (MOE)
(11) Improving food and nutrition security	1, 5	• Implementation and monitoring of the food and nutrition security policy and plan • Collaboration with National Food and Nutrition Security Commission, Ministry of Agriculture and Fisheries (MOA)

5.1.4 Main focus 1.4: noncommunicable diseases

Areas for action	Core functions	Strategies
(1) Improving noncommunicable disease (NCD) prevention and control	1, 5, 6	• Focus on diabetes, hypertension, selected cancers • NCD plan formulation • Follow-up of Port-of-Spain Declaration to stop NCDs epidemic (2007) • Annual celebration of Caribbean Wellness Day • Advocacy • IEC • Surveillance using WHO STEPwise approach • Collaboration with BHIS • Institutional strengthening of Belize Diabetes Association • Continued participation in CAMDI, including in Qualidiab and Qualihyper[35]
(2) Promoting civil society participation in cancer prevention and control	1, 5	• Support for national cancer registry • Collaboration with National Alliance against Cancer
(3) Reducing risk factors (obesity, tobacco use, physical inactivity, unhealthy diet)	1, 2, 4, 5	• IEC • Promotion of wellness clinics in primary health care • Strengthening regional capacity for health promotion • FCTC implementation through the National Tobacco Control Plan of Action • WHO Global Strategy on Diet, Physical Activity, and Health; Regional NCD Strategic Plan; Caribbean NCD Strategic Plan; CARMEN[36] program

[35] These have been implemented as part of the Declaration of the Americas on Diabetes.

[36] Spanish acronym for Conjunto de acciones para la reducción multifactorial de las enfermedades no transmisibles, or program for the multifactorial reduction of NCD.

5.2 Strategic priority 2: addressing key health determinants

5.2.1 Main focus 2.1: health equity

Areas for action	Core functions	Strategies
(1) Analyzing public sector policies and their legal frameworks to determine facilitating factors or barriers to health	1, 2, 4, 5	• Collaboration with the Attorney General's Office and national think tanks such as Katalyst Institute for Public Policy and Research • Review and implementation of recommendations, as appropriate, in the 2008 Report of the Commission on the Social Determinants of Health • Collaboration with NGOs, CBOs, ministries, U.N. agencies, and other partners
(2) Gathering disaggregated population data (age, sex, education, income, employment, ethnicity, location)	1, 2, 4, 5, 6	• Collaboration with MHD, NGOs, CBOs, BHIS
(3) Analyzing, packaging, and disseminating information to facilitate informed decision-making, policy and program development, and social communication to promote health and gender equity and the right to health	1, 2, 5	• Collaboration with BHIS, SSB, U.N. agencies, the media, Human Rights Commission of Belize
(4) Promoting and supporting research to cover information gaps, especially concerning vulnerable groups	1, 2	• Collaboration with U.N. partners, University of Belize and other tertiary education institutions, NGOs, CBOs
(5) Contributing to strategies for poverty alleviation, national development, and MDGs monitoring and achievement	2, 4, 5	• Contribution to making the Belize Health Agenda 2007–2011 operational and monitoring its implementation • Contribution to UNDAF implementation and monitoring • Collaboration with MHD, U.N. partners, SIF, SSB, NGOs, CBOs • Continued participation in NHDAC and other intersectoral, multiagency development-oriented groupings, and contribution to MDG and other development reports • Participation in Faces, Voices, and Places initiative

5.2.2 Main focus 2.2: environmental management

Areas for action	Core functions	Strategies
(1) Completing national drinking water quality standards and improving sanitation and solid waste management	3, 4, 5	• Contribution to development, implementation, and monitoring of National Water and Sanitation Strategic Sector Plan • Collaboration with the Department of the Environment (DOE), Belize Water Services Limited (BWSL), BRDP, SIF, Solid Waste Management Authority (SWMA), Public Utilities Commission (PUC), UNDP, IDB
2) Supporting capacity-building of human and infrastructure resources, including enforcement capacity	3, 5	• Training • Provision of policy options for sustainable environmental development • Collaboration with PUC, DOE, IDB, UNDP
(3) Advocating for and supporting implementation of the Safe Hospitals Program	1, 3, 4, 5	• Collaboration with public and private hospitals

5.2.3 Main focus 2.3: impact of climate change on health

Areas for action	Core functions	Strategies
(1) Supporting risk assessment studies in relation to climate change and its health impact in the country	1, 2, 5	• Collaboration with National Climate Change Committee (NCCC), CARICOM Climate Change Centre (CCCC), UNDP
(2) Advocating for climate change and health to be a priority item on the national political agenda	1, 2, 4, 5	• Collaboration with NCCC, CCCC, UNDP, the media
(3) Sensitizing all levels of the community on the impact of climate change on health, including on food, water, and the environment	1, 2, 5	• Collaboration with NCCC, CCCC, the media, NGOs, CBOs, UNDP

5.2.4 Main focus 2.4: response to, and mitigation of, the impact of natural hazards

Areas for action	Core functions	Strategies
(1) Facilitating the revision of national and regional health sector emergency response plans	1, 5	• Collaboration with NEMO, U.N. partners, Red Cross • U.N. cluster approach to humanitarian aid—PAHO/WHO as lead agency for Health Cluster
(2) Promoting and supporting risk reduction interventions, especially at regional and district levels	1, 5	• Collaboration with NEMO, District Emergency Management Organization (DEMO), U.N. partners, Red Cross
(3) Collaborating with key partners in increasing public awareness and coordination in relation to disaster preparedness and response	1, 5	• Collaboration with NEMO, DEMO, U.N. partners, Red Cross

5.3 Strategic priority 3: strengthening health sector policies and organization

5.3.1 Main focus 3.1: institutional capacity of the MOH

Areas for action	Core functions	Strategies
(1) Updating and implementing health sector policies and legislation (General Health Act and related regulations)	1, 4, 5	• Advocacy at various levels, including Cabinet • Direct technical cooperation
(2) Strengthening institutional capacity for developing and enacting regulation frameworks and regulatory instruments	2, 3, 6	• Strengthening the MOH Regulatory Unit through advocacy, training
(3) Reassessing EPHF performance and strengthening capacity for EPHF execution	1, 5	• Second assessment of EPHF performance • Review and update of draft plan for EPHF strengthening
(4) Strengthening the capacity for critical MOH managerial functions	4, 5, 6	• Finalization and use of Health Systems Profile for health policy analysis and policy formulation • Developing capacity in strategic planning and results-based management • Strengthening National Health Accounts • Advocacy and support for the establishment of an Economic and Financing Unit in MOH • Monitoring and evaluation of health system performance and policy implementation, including identification of relevant indicators

Areas for action	Core functions	Strategies
(5) Strengthening capacity for effective decentralization	2, 3, 4, 5	• Institutional capacity development in management of decentralized health systems • Advocacy and support for implementation of renewal of primary health care strategy
(6) Building capacity for national coordination of international cooperation in health	1, 4, 5	• Support for national participation in subregional and regional integration entities • Follow-up of PAHO/WHO Leaders in International Health Program • Advocacy and support for observance and monitoring of Paris Declaration on Aid Effectiveness (2005) • Establishment of situation room for international health • Support for development, implementation, monitoring, and evaluation of Central American and Caribbean subregional health agendas • Collaboration with U.N. and other international development partners, MFA

5.3.2 Main focus 3.2: national health insurance

Areas for action	Core functions	Strategies
(1) Supporting financing of the NHIS	1, 4, 5	• Development of options and funding possibilities • Assessment of financing feasibility and sustainability of options • Provision of instruments, tools • Establishment of financial management systems
(2) Supporting NHIS rollout	1, 3, 4, 5	• Review of NHIS pilot evaluation and recommendations • Assessment of HRH and contracting experiences • Evaluation of feasibility of NHIS expansion
(3) Continuing development of primary health care and prevention package in NHIS	3, 4, 5	• Review of costing, coverage, and comprehensiveness

5.3.3 Main focus 3.3: health systems management

Areas for action	Core functions	Strategies
(1) Supporting health information system (HIS) implementation	1, 2, 5	• HIS strategic plan development and implementation • Geographic Information System (GIS) strengthening • Laboratory capacity strengthening to support surveillance • Resource mobilization—HMN, Global Fund to Fight AIDS, Tuberculosis, and Malaria • Collaboration with BHIS • Enhanced knowledge management and communication, including through virtual and electronic media
(2) Promoting and supporting access to pharmaceuticals and medicines	1, 4, 5	• Evaluation of national medicines access policy, including coverage, accountability, regulation
(3) Strengthening health services' managerial capacity	1, 5	• Capacity-building in hospital management • Promotion and support of integration of networks of health services

5.3.4 Main focus 3.4: human resources for health

Areas for action	Core functions	Strategies
(1) Strengthening HRH policy, planning, and regulation capacity	1, 2, 4, 5	• HRH study, including health workforce imbalances, migration information, and "push-pull" factors • Establishment of Strategic HRH Development Unit • HR Strategic Plan, including identification of specific HRH retention strategies • Support for national participation in HRH Observatory Initiative
(2) Bilateral cooperation for HRH	1, 4, 5	• Advocacy and support for review and update of bilateral agreements with collaborating countries • Collaboration with MFA, academic institutions
(3) Supporting subregional cooperation in HRH	1, 2, 4, 5	• Support for national contribution to standarization of health workforce curricula, training, and employment within framework of subregional health agendas

5.3.5 Main focus 3.5: technical cooperation among countries

Areas for action	Core functions	Strategies
(1) Promoting and supporting TCC	1, 2, 5, 6	• Review and promotion of the health-related aspects of the CARICOM-SICA Plan of Action • Determination of common country priorities • Identification of opportunities for sharing experiences and lessons learned • Development and submission of project proposals

5.4 Strategic priority 4: enhancing PAHO/WHO's response

5.4.1 Main focus 4.1: PAHO/WHO's capacity

Areas for action	Core functions	Strategies
(1) Ensuring adequate, competent, and committed human resources	1, 2, 3, 4, 5, 6	• Ongoing reviews of human resource needs and strengthening of recruitment and retention procedures • Support for training and retraining as necessary • Implementation of human resources policies, plans, and procedures that promote and maintain staff satisfaction
(2) Providing safe and adequate infrastructure	1, 3, 4	• Periodic review and improvement of physical and other infrastructure, including compliance with U.N. Minimum Operating Security Standards (MOSS)
(3) Improving the efficiency and effectiveness of political, managerial, technical, programmatic, and administrative procedures	1, 2, 3, 5, 6	• Continuing improvement of planning, implementation, monitoring, and evaluation processes • Strengthening of results-based management • Periodic review and improvement of administrative processes and instruments • Strengthening of priority-driven resource allocation and mobilization • Enhancement of mechanisms for knowledge management and communication • Enhancement of partnerships and strategic alliances, including at subnational levels

6. IMPLEMENTING THE STRATEGIC AGENDA: IMPLICATIONS FOR THE ENTIRE PAHO/WHO SECRETARIAT

6.1 Summary of main foci and core functions of the strategic agenda

As the previous sections and Table 7 indicate, over the period 2008–2011, PAHO/WHO will continue to focus on areas it addressed in the previous two biennia in its technical cooperation with Belize, but it also will introduce new main foci—health equity; the impact of climate change on health; the broader area of environmental management, as opposed to environmental health; and its own capacity for effective technical cooperation.

With regard to its core functions, although function 5, "establishing technical cooperation, catalyzing change, and building institutional capacity," remains a mainstay for addressing the main foci, function 1, "providing leadership on matters critical to health and engaging in partnerships where joint action is needed," assumes greater importance, given the many actors on the health stage. Function 2, "shaping the research agenda and stimulating the generation, dissemination, and application of valuable knowledge," and its corollary, function 6, "monitoring the health situation and addressing health trends," will also play an increasing role in the Organization's technical cooperation program, taking advantage of the advances in information technology and the need to share lessons learned and experiences among countries.

Information and its use are common threads among the main foci in the strategic priorities— surveillance; monitoring; assessment; information, education, and communication; and advocacy appear with regularity. Included in the agenda, and essential for its successful implementation, is the remedy for a set of organizational weaknesses highlighted by several partners—PAHO/WHO's failure to promote and inform on what it is and does, its limited outreach to health agencies other than the MOH, and the perception that it works in isolation and only at the national level.

6.2 Actions required to implement the strategic agenda

6.2.1 Country level

PAHO/WHO core capacity refers to the essential technical and administrative competencies, resources, and support needed at the country level for the implementation of the strategic agenda.

Human resources

The competencies of the small cadre of technical advisors currently in the PAHO/WHO-Belize Country Office are adequate to address functions 1 and 5 in all the main foci except health equity, some aspects of environmental management, and climate change and

health. There is no specific expertise in the Country Office that will facilitate the needed emphasis on function 6, and each advisor contributes to function 2, addressing communications with the support of the knowledge management and sharing focal point. Similarly, the administrative personnel multitask in order to efficiently and effectively perform essential support functions. Strengthening competencies in the Country Office through training of current personnel in certain areas and the acquisition of four additional human resources would not only ensure efficiency in addressing the new main foci in the strategic agenda, but would also relieve the pressure on the current cadre of human resources.

Training is needed in:

- Health equity issues, the social determinants of health, including gender, and application of the human rights-based approach to health planning and programming, for all technical personnel;
- Leadership, partnerships, networking, and building strategic alliances, for selected personnel;
- Aspects of environmental management and the impact of climate change on health, for selected personnel; and
- Resource mobilization, for all technical personnel.

Training opportunities within PAHO/WHO or the U.N. system and/or online courses will be the main methods used; the PAHO Learning Framework (2008) defines learning tracks and activities that will benefit Country Office personnel.

Additional personnel are needed for:

- Epidemiology—a full-time professional, given the current epidemiological profile; emerging diseases; and the need to build capacity to develop and monitor the health situation and assess trends. This human resource could be seconded from subregional, regional, or global organizational entities.
- Communications—a full-time professional with expertise in social communication; public information dissemination; media relations; and development, implementation, and evaluation of

TABLE 7. PAHO/WHO's main foci and core functions of the strategic agenda, Belize, 2008–2011[37].

CORE FUNCTIONS MAIN FOCI	Providing leadership, engaging in partnerships	Shaping research, stimulating knowledge dissemination	Setting norms and standards, promoting and monitoring their implementation	Articulating policy options	Establishing technical cooperation, catalyzing change, building institutional capacity	Monitoring health situation, assessing health trends
Communicable diseases	++	++	++	+	+++	+++
HIV/AIDS, STI	++	++	++	++	+++	++
Family and community health	+++	++	++	++	+++	++
Noncommunicable diseases	+++	++	+	++	+++	+++
Health equity	+++	+++	-	++	+++	++
Environmental management	++	++	++	+	++	++
Impact of climate change on health	++	++	-	+	++	++
Response to and mitigation of impact of emergencies and natural hazards	+++	++	++	+	+++	++
Institutional capacity of MOH	+++	++	+	++	+++	+++
National health insurance	+++	++	++	++	+++	+++
Health systems management	+++	++	++	+	+++	+++
Human resources for health	+++	++	+	++	+++	+++
Technical cooperation among countries	+++	++	-	+	++	-
PAHO/WHO's capacity	+++	+++	+++	+++	++	++

[37] The number of plus (+) marks indicates the relative emphasis on core functions to be performed for each main focus.

communications strategies. A U.N. Volunteer (UNV) could be recruited to fill this position.
- Administrative support—two persons, one to support the professionals above, and the other to support the Administrative Unit. These persons could be recruited through negotiation with the Ministry of Health, or through the sole employment agency in Belize.

Infrastructure

- The relocation of the Country Office to another site in Belize City, given the problems with flooding in the current site, is very likely, and will result in an increase in rent of approximately US$ 1,000 or more per month than the current rental. If this relocation takes place in December 2008, after the expiration of the current lease, an additional minimum of US$13,000 will be needed for the 2008–2009 biennium.
- If the GOB were to offer PAHO/WHO accommodations, most likely in Belmopan, there would be a cost to the Organization for relocating personnel to a new duty station, and this would apply to all categories of staff. Several current long-serving personnel would not be able to relocate, for various reasons.
- If there is relocation to Belmopan, PAHO/WHO would likely have to maintain an office for meetings in Belize City, where many of its partners reside. However, this would substitute for the current Emergency Office in Belmopan, which is maintained through the Regular Budget at a cost of US$ 20,000 per biennium; rental of a similar space in Belize City would likely have a similar cost.
- The information technology infrastructure is satisfactory, and is maintained and updated with support from PAHO Headquarters.
- U.N. Minimum Operating Security Standards (MOSS) compliance is satisfactory, but would have to be reviewed in a new location and supported by the Regular Budget.
- The vehicle fleet is satisfactory, though a replacement is needed for one of the vehicles, at an approximate cost of US$ 25,000, in addition to the amount that is likely to be realized from the sale of the vehicle. Traditionally, this one-time, but periodic, cost has been funded through the Regular Budget.
- Insurance requirements will be satisfied through the Regular Budget, in collaboration with PAHO Headquarters.

Financial resources

- The additional human resources, based on an international professional as epidemiologist; a UNV as communications officer; and two agency personnel providing administrative support are estimated to cost an additional US$ 434,000 per biennium[38].
- The higher costs in Belize for goods and services, compared with other Central American countries, mean that country program support costs are likely to increase by 15% over a biennium, adding approximately US$ 56,000 to the budget.
- Total additional costs for human resources, country program support, and office rental therefore exceed US$ 500,000. If the Organization cannot realize or mobilize this amount, alternative methods for responding to these needs will have to be considered.

6.2.2 Subregional level

- Implementation of the subregional Biennial Work Plans for Central America and the Caribbean in support of the main CCS foci, with incorporation of relevant activities into the work plans of intercountry advisors in both subregions
- Follow-up with Resolutions from the various fora of the Caribbean and Central American subregional integration entities—respectively, OCPC and PWRs of the countries of the Pro Tempore Presidencies of SICA, in collaboration with CFS
- Collaboration with PAHO/WHO Country Offices in Mexico and Guatemala to address border health issues
- Provision of resources to support technical cooperation with Belize for the country's contribution to the Central and Caribbean subregional health agendas
- Technical and financial support for mental health—OCPC
- Implementation of IHR (2005)—OCPC, CAREC
- Support for food safety and veterinary public health issues—INCAP, CFNI, PANAFTOSA
- Continued support for Belize's participation in the Caribbean Media Awards for Excellence in Health Journalism—OCPC
- Continued technical and financial support for HIV/AIDS and STI—PHCO
- Support for resource mobilization

6.2.3 PAHO Headquarters

- Continued technical and financial support for the main foci, including guidance to facilitate effective implementation of the U.N. cluster approach to humanitarian aid at the country level
- Administrative and technical recognition of the country's needs and situation, and adjustments to procedures as appropriate, so that the country focus is made explicit
- Support for resource mobilization
- Observance of WHO guidelines for working with Country Offices, to ensure enhanced collaboration and synergies between the Country Offices and PAHO Headquarters
- Provision of expertise in crosscutting health equity themes (e.g., gender, human rights, and other social determinants of health)

6.2.4 WHO Headquarters

- Technical and financial support in addressing the impact of climate change on health
- Technical and financial support in food safety, through the Five Keys to Safer Food initiative
- Technical and financial support for implementation of the new WHO Child Growth Standards
- Continued support from the Health Metrics Network
- Support for policy and legislation related to the implementation of the Framework Convention on Tobacco Control
- Technical and financial support for the strengthening of HIV/STI/TB programs
- Support for resource mobilization

[38] International professional, approximately US$ 324,000; UNV, approximately US$ 60,000; and agency personnel approximately US$ 25,000 each.

CONCLUSION

The PAHO/WHO-Belize Country Office team will coordinate Organization-wide actions and collaborate with national counterparts and international development partners to implement, monitor, and evaluate the Country Cooperation Strategy. As with all strategic agendas, the CCS provides a flexible framework for focused action, and will be modified as needed to respond to changes in the country's health situation, national health development goals, and the Organizational environment, through periodic, participatory assessment of its implementation.

REFERENCES

1. Belize, Statistical Institute of Belize. Abstract of statistics 2007. Belmopan: SIP; 2007.
2. Belize, Ministry of Health, Office of the Director of Health Services, Epidemiology Unit. Belize basic indicators 2007. Belmopan: MOH; 2008.
3. Belize, Office of the Prime Minister, The Honorable Dean Barrow. Realizing the possibilities: budget presentation for fiscal year 2008/2009. Belmopan; 2008. Available at: http://www.governmentofbelize.gov.bz/download/Budget_Speech_2008_FINAL.pdf. Accessed on 30 September 2008.
4. World Bank. Migration and remittances factbook 2008 (Belize). Washington, DC: The World Bank Group; 2008. Available at: www.worldbank.org/prospects/migrationandremittances. Accessed on 30 September 2008.
5. United Nations, Department of Economic and Social Affairs, Population Division. World population ageing 2007. New York: United Nations; 2007. (ST/ESA/SER.A/260). Available at: http://www.un.org/esa/population/publications/WPA2007/Full_text.pdf. Accessed on 30 September 2008.
6. United Nations, Department of Economic and Social Affairs, Population Division. PRED Bank 4.0 country profiles. New York: United Nations; 2006. Available at: http://www.un.org/esa/population/publications/countryprofile/belize.pdf. Accessed on 30 September 2008.
7. Belize, Ministry of National Development, Investment, and Culture, National Human Development Advisory Committee. National Poverty Elimination Strategy, NPES 2007–2011. Belmopan; 2007.
8. United States, Central Intelligence Agency. The world factbook: Belize. Available at: https://www.cia.gov/library/publications/the-world-factbook/print/bh.html. Accessed on 1 October 2008.
9. Joint United Nations Program on HIV/AIDS, UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. Epidemiological fact sheet on HIV and AIDS: Core data on epidemiology and response (Belize). Geneva: UNAIDS; 2008. Available at: http://www.unaids.org/en/KnowledgeCentre/HIVData/Epidemiology/epifactsheets.asp. Accessed on 1 October 2008.
10. Belize, Statistical Institute of Belize, Pan American Health Organization/World Health Organization. Sexual and behavioral survey among young people in Belize. Belmopan: SIB and PAHO/WHO; 2006.
11. Belize, Ministry of Health, Epidemiology Unit. Health statistics of Belize 2001–2005. Belmopan: MOH; 2006.
12. Belize, Ministry of Health, Epidemiology Unit. Health statistics of Belize 2003–2007. Belmopan: MOH; 2008.
13. Belize, Ministry of Health, Pan American Health Organization/World Health Organization. Central American Diabetes Initiative: Diabetes, hypertension, and risk factors survey, Belize 2006. Belize City: MOH and PAHO/WHO; 2007.
14. United States, Department of Health and Human Services, Centers for Disease Control and Prevention. Global Youth Tobacco Survey (GYTS) Belize fact sheet. Atlanta: CDC; 2003. Available at: http://www.cdc.gov/tobacco/Global/GYTS/factsheets/paho/2003/belize_factsheet.htm. Accessed on 1 October 2008.
15. Belize, Ministry of Health. Belize Global Youth Tobacco Survey fact sheet 2008. Belmopan: MOH; 2008.
16. Joy Woolfrey, Pan American Health Organization/World Health Organization. Safe motherhood: a matter of life and death for women in Belize. Belize City: PAHO/WHO; 2002.
17. Pan American Health Organization. Health in the Americas 2007. Washington, DC: PAHO; 2007. (Scientific and technical publication 622).
18. United Nations, Committee on the Elimination of Discrimination against Women. Consideration of reports submitted by States parties under article 18 of the Convention on the Elimination of All Forms of Discrimination against Women. Combined third and fourth periodic reports of States parties. Belize. Paragraph 106. New York: United Nations; 26 September 2005. (CEDAW/C/BLZ/3–4). Available at: http://daccessdds.un.org/doc/UNDOC/GEN/N05/525/49/PDF/N0552549.pdf?OpenElement. Accessed on 1 October 2008.
19. Belize, Ministry of Health, Office of the Director of Health Services, Epidemiology Unit. Belize basic indicators 2006, vol. 4. Belmopan: MOH; 2007.
20. Belize, National Drug Abuse Council. National secondary school drug prevalence survey report. Belmopan; 2002.
21. Belize, Central Statistical Office, Ministry of Health, Pan American Health Organization/World Health Organization. Gender, Alcohol, and Culture: An International Study (GENACIS). Belmopan; 2005.
22. Belize, Belize Social Security Board. Employment injury data. Belmopan; 2008.
23. Fernández, Mario. Diagnostic situation on the use of DDT and the control and prevention of malaria in Belize. Belmopan: Pesticides Control Board and PAHO/WHO; 2001.

24. Belize, Ministry of Health, Pan American Health Organization/World Health Organization. Study of mercury content in fish life from the Macal, Mopan, and Sibun Rivers. Belize City: MOH and PAHO/WHO; 2005.
25. United Nations. Concluding comments of the Committee on the Elimination of Discrimination against Women: Belize [39th Session]. New York: United Nations; 10 August 2007. (CEDAW/C/BLZ.CO/4). Available at: http://www.un.org/womenwatch/daw/cedaw/39sess.htm. Accessed on 2 October 2008.
26. Belize, National Human Development Advisory Committee. From boys to men. Belmopan: United Nations and Government of Belize; 2001.
27. Belize, Pan American Health Organization/World Health Organization. Baseline parasitological survey 2005, Southern Region Belize. (In press.)
28. Pan American Health Organization. Health situation in the Americas: Basic indicators 2007. Washington, DC: PAHO; 2007.
29. Belize, National Human Development Advisory Committee. 2002 Country Poverty Assessment report. Belmopan; 2004.
30. Belize, Statistical Institute of Belize. Know your stats 2007. Belmopan: SIB; 2007.
31. Belize, Statistical Institute of Belize. Belize 2007 Labour Force Survey. Belmopan: SIB; 2007. Available at: www.statisticsbelize.org.bz/dms20uc/dynamicdata/docs/20080215124404_2.pdf. Accessed on 3 October 2008.
32. Belize, Ministry of Education. Belize education statistics at a glance 2005–06. Belize City: MOE; 2007. Available at: http://intra.governmentofbelize.gov.bz/document_archives/264.pdf. Accessed on 3 October 2008.
33. World Health Organization. World directory of medical schools. Final updates through December 2007. Geneva: WHO; 2007. Available at: http://www.who.int/hrh/wdms/media/en/Belize.pdf. Accessed on 3 October 2008.
34. Pan American Health Organization. Regional evaluation municipal solid waste management services. Country analytical report Belize/evaluation 2002. Washington, DC: PAHO; 2003. Available at: http://www.bvsde.paho.org/bvsacd/cd65/belize.pdf. Accessed on 3 October 2008.
35. Belize, Ministry of Natural Resources, Environment, and Industry, Forest Department. Draft. Belize's first national report on the implementation of the United Nations Convention to Combat Desertification (UNCCD) 2000. Belmopan: Ministry of Natural Resources; 2000. Available at: http://www.unccd.int/cop/reports/lac/national/2000/belize-eng.pdf. Accessed on 3 October 2008.
36. Economic Commission for Latin America and the Caribbean, Subregional Headquarters for the Caribbean, United Nations Development Programme. Belize: macro socio-economic assessment report of the impact of hurricane Dean. August 2007. [PowerPoint presentation.] Available at: http://magic.un.org.mx/www3/rzapata/t&t%20t%20training%20dec%202007/Belize%20Assessment%20of%20Hurricane%20Dean%20%20PD-%20Nov%202007.ppt. Accessed on 3 October 2008.
37. Pan American Health Organization. Public health in the Americas: conceptual renewal, performance assessment, and bases for action. Washington, DC: PAHO; 2002. (Scientific and technical publication 589).
38. World Health Organization. Everybody's business: strengthening health systems to improve health outcomes. WHO's framework for action. Geneva: WHO; 2007.
39. Belize, Ministry of Health. Health Agenda 2007–2011. Belmopan: MOH; 2007.
40. Pan American Health Organization, World Health Organization, Health Canada, Ontario Ministry of Health and Long-term Care. Toronto call to action 2006–2015: towards a decade of human resources for health in the Americas. Available at: http://www.eerp.usp.br/panmcc/CallAction_eng1.pdf. Accessed on 7 October 2008.
41. World Health Organization. World health statistics 2008. Geneva: WHO; 2008. Available at: http://www.who.int/whosis/who stat/2008/en/index.html. Accessed on 7 October 2008.
42. Belize, National Human Development Advisory Committee. First Millennium Development Goals report: Belize 2004. Available at: http://bvsde.per.paho.org/bvsair/e/repindex/repi83/milenio/informes/belize-odm.pdf. Accessed on 7 October 2008.
43. United Nations, United Nations Development Assistance Framework. Belize, 2007–2011. Available at: http://www.unicef.org/about/execboard/files/8254-UNDAF_Belize.pdf. Accessed on 8 October 2008.
44. Belize, Press Office. CDB approves Belize country strategy paper and two loans to Belize. News release dated 14 December 2006. Available at: http://www.governmentofbelize.gov.bz/press_release_details.php?pr_id=4163. Accessed on 8 October 2008.
45. Caribbean Community Secretariat. Nassau Declaration on Health 2001: The Health of the Region. Available at: http://www.cari com.org/jsp/communications/meetings_statements/nassau_declaration_on_health.jsp. Accessed on 27 October 2008.

ANNEXES

Annex 1. BELIZE COUNTRY COOPERATION STRATEGY: SUMMARY OF PROCESS

PRELIMINARY PHASE

The decision to develop a PAHO/WHO Country Cooperation Strategy (CCS) to guide the work of the Organization in, and with, Belize over the medium term was taken in 2006, in fulfillment of the WHO's Country Focus Policy and PAHO's Organizational Change objectives, which addressed, respectively, the development of a CCS and responding better to country needs.

Various factors did not allow the development of the Belize CCS as planned in 2007. However, the delay proved opportune, as the election of a new government in the country in February 2008 allowed the CCS to take into consideration new policy directions for health. The delay also allowed the use of the new (2008) CCS e-Guide in the formulation of the CCS, which the WHO Department of Country Focus developed to replace the 2005 WHO Guide.

The PAHO/WHO Belize Country Office team, which comprised the "internal" members of the CCS team, formulated a proposal for the development of the CCS, which it shared with the Country Focus Support (CFS) unit at PAHO's Washington, D.C., Headquarters in August 2007. The proposal outlined the objectives, process, logistics, and budget for the CCS, and suggested the CCS team members, who would represent all levels of WHO and PAHO. The proposal was accepted, and planning began in earnest. As might be imagined, a major challenge was to agree on dates for the in-country mission that were convenient to representatives of all the levels of PAHO/WHO.

PREPARATORY PHASE

The Country Office team developed various instruments and tools to inform and guide the CCS development process, including:

- A questionnaire that it sent to PAHO entities, the WHO Department of Country Focus (CCO), and development partners in Belize in October 2007. The questionnaire to PAHO entities and CCO sought to determine the Organization's technical cooperation with Belize for the period 2006–2007, planned technical cooperation for 2008–2009, partners with whom they worked in the country, and factors that facilitated and hindered their work in Belize. Development partners were asked to identify national health priorities, their health-related programs or projects in Belize and the relation of these to national or international frameworks for health, factors that facilitated and hindered their work, and PAHO/WHO's strengths and weaknesses. There was a 53% response, and the Country Office team collated the responses in tabular form;
- A stakeholder interview guide and response sheet for use during the mission phase of the CCS; and
- A comparative matrix that the Country Office had formulated to guide the development of its Biennial Work Plan 2008–2009. The matrix summarized the main priorities identified in the following frameworks: the Belize Health Agenda 2007–2011; the Belize National Poverty Elimination Strategy and Action Plan 2007–2011; the U.N. Development Assistance Framework 2007–2011 for Belize; the draft regional programs in the Caribbean Cooperation in Health, Phase III, which constitutes the Caribbean Community's health agenda; the PAHO Strategic Plan 2008–2012; the Health Agenda for the Americas 2008–2017; and the Millennium Development Goals.

The Country Office also developed a draft agenda for a week-long in-country mission, and it held discussions by e-mail, teleconference, and Web conference with CFS, CCO, and other proposed team members to further plan the in-country mission dates and activities.

In addition, the Country Office established a virtual shared CCS workspace in the PAHO portal, where it posted several background and working documents. The most important of the latter were the first draft of Sections 1–4 of the CCS that the Country Office team developed and posted in April 2008, and the second draft that was posted in late May 2008, shortly before the in-country mission, incorporating the CCS team's comments on the first draft. These drafts greatly facilitated the in-country work.

IN-COUNTRY MISSION

The mission took place 2–6 June 2008. The "external" CCS team members were:

- Dr. Shambhu Acharya, Technical Advisor, WHO CCO, Geneva, Switzerland
- Dr. Alfredo Calvo, Country Program Analyst (Central America), CFS, PAHO, Washington, D.C.
- Mr. Rony Maza, Country Program Analyst (Caribbean), CFS, PAHO, Washington, D.C.
- Dr. Pedro Brito, Area Manager, Health Systems and Services (HSS), PAHO, Washington, D.C.
- Mr. Paul de la Croix Vaubois, Team Leader, Human Resources Management, PAHO, Washington, D.C.
- Dr. Laura Nervi, CFS Consultant for Central America, El Salvador
- Dr. Merle Lewis, PAHO/WHO Representative (PWR), the Bahamas and Turks and Caicos Islands
- Dr. Lloyd Webb, Caribbean Regional Veterinary Public Health Advisor, Caribbean Food and Nutrition Institute, Kingston, Jamaica

The core CCS team members from the Belize Country Office were:

- Dr. D. Beverley Barnett, PWR
- Ms. Sandra Jones, HIV/Gender Advisor
- Mr. José Pérez, Environment and Disaster Management Advisor

- Ms. Lorraine Thompson, INCAP Advisor
- Dr. Guillermo Troya, HSS Advisor

All members of the Country Office team played supporting roles, especially Ms. Ruby Dominguez, Administrator; Mr. Emir Castañeda, Knowledge Management and Communication focal point; and Mr. Stuart Simmons, Systems Administrator.

The CCS team held interviews with stakeholders, though not to the extent desired. A tropical storm affected Belize during the weekend before the mission and caused flooding, loss of life and property, and declaration of a disaster in the country. Thus, both the national systems and the Country Office had to respond, posing a challenge for the planned CCS activities. Notwithstanding, the program was adjusted as necessary and the mission proceeded, although the disaster focal point and other personnel could not participate in all CCS activities.

The CCS team discussed draft Sections 1–4 over the first two days of the mission, using hard copies and referring to the document projected on a screen; comments and changes were recorded and made in real time using a laptop computer, so that all could see and agree on them.

On the third day, the team worked on Section 5 (the strategic agenda), splitting into three groups to determine the main foci for the Organization's technical cooperation in the key challenges identified under headings of health status, health determinants, and health sector policies and organization. On the fourth day, the team developed Section 6 (implications for PAHO/WHO). Regrettably, a presentation to stakeholders of the draft strategic agenda planned for the fifth day was canceled, given the ongoing response of many of the stakeholders to the floods. However, on that day the team visited Belmopan to pay a courtesy call on the Ministry of Health to explain the preliminary findings. The team was well received and the Minister, Honorable Pablo Marin, Chief Executive Officer (CEO) Dr. Peter Allen, Acting Director of Health Services (DHS) Dr. Paul Edwards, and Deputy DHS Dr. Jorge Polanco, all provided very positive feedback.

NEXT STEPS

Upon its return to the Country Office, the team agreed upon the following actions and presumptive timelines:

- Define roles and responsibilities in the finalization process:
  - ❍ Revise document, incorporating initial feedback from Minister of Health, and post on CCS workspace for CCS team review—Country Office team, 20 June
  - ❍ Present draft CCS to national stakeholders—Country Office team, 30 June
  - ❍ Incorporate feedback and produce penultimate draft—CCS team, by 31 July
  - ❍ Disseminate to subregional, regional, and global levels for final comments—Country Office team, 1 August
  - ❍ Receive comments—CCS team, by 15 August
  - ❍ Finalize CCS, including Executive Summary—CCS team, by 31 August
  - ❍ Format and print CCS (30–40 copies for Geneva; 40–50 copies for PAHO Washington, D.C.; 150 copies for Country Office—250 copies total)—Country Office, in collaboration with Country Focus Support and Knowledge Management and Communication (KMC); PAHO, Washington, D.C.; and CCO Geneva, 30 September
  - ❍ Obtain formal endorsement of CCS by MOH, PAHO Director, and WHO Director-General—by end of October
  - ❍ Launch CCS in country and in PAHO Headquarters—Country Office, in collaboration with CFS, by end of October
- Develop budget for these activities and submit to CCO and CFS for funding support; contact KMC—Country Office team, 30 June
- Map strategic priorities to the WHO Medium-Term Strategic Plan 2008–2013/PAHO Strategic Plan 2008–2012 using template on CCS workspace—Country Office, CCO, CFS, via Elluminate, by 15 July
- Develop CCS Brief using template on CCS workspace—Country Office, CCO, CFS, via Elluminate with CCS team, by 15 July
- Post mapping and CCS Brief on CCS workspace—Country Office, by 31 August

CONCLUSION

The CCS team completed the mission tasks as planned, and, as expected, the review and discussion of Section 2 took the longest amount of time. However, it was apparent that had all the stakeholder interviews happened as planned, the time allotted for this review would have been much too short. This has implications for the duration of the in-country mission, which should be at least seven working days.

The timelines set to finalize the CCS were delayed by one to four weeks due to competing activities and commitments by all stakeholders, and emerging and urgent demands. Notwithstanding, the final process of review at subregional, regional, and global levels, and approval by the Ministry of Health, PAHO Director, and WHO Director-General, should be accomplished in a timely manner. It is anticipated that the CCS document will be printed and disseminated by early 2009.

Annex 2. MEMBERS OF CABINET, BELIZE

MINISTRY	MINISTER	CHIEF EXECUTIVE OFFICER
Office of the Prime Minister and Ministry of Finance	Hon. Dean O. Barrow, Prime Minister	Ms. Audrey Wallace, Office of the Prime Minister
Ministry of Natural Resources and the Environment	Hon. Gaspar Vega, Deputy Prime Minister Hon. Elvin Penner, Minister of State	H.E. Mr. David Gibson
Attorney General's Ministry and Ministry of Foreign Affairs and Foreign Trade	Hon. Wilfred Elrington	H.E. Mr. Alexis Rosado, Ministry of Foreign Affairs and Foreign Trade
Solicitor General, Attorney General's Ministry		Mrs. Tanya Longsworth Herrwanger
Ministry of Agriculture and Fisheries	Hon. Rene Montero	Mr. Gabino Canto
Ministry of Economic Development, Commerce, Industry, and Consumer Protection	Hon. Erwin Contreras	H.E. Ms. Yvonne S. Hyde
Ministry of Education	Hon. Patrick Faber	Mr. David Leacock
Ministry of Health	Hon. Pablo Marin Hon. Arthur William Roches, Minister of State	Dr. Peter Allen
Ministry of Housing and Urban Development	Hon. Michael Finnegan	Mrs. Rosalie Gentle
Ministry of Human Development and Social Transformation	Hon. Eden Martinez Hon. Juan Coy, Minister of State	Ms. Judith Alpuche
Ministry of Labour, Local Government, and Rural Development	Hon. Gabriel Martinez Hon. Michael Hutchinson, Minister of State	Ms. Marion McNab
Ministry of National Security	Hon. Carlos Perdomo	General Lloyd Gillett (retired)
Ministry of the Public Service, Governance Improvement, and Elections and Boundaries	Hon. John Saldivar	Mr. Charles Gibson
Ministry of Public Utilities, Transport, Communications, and National Emergency Management	Hon. Melvin Hulse	Mr. Ambrose Tillett
Ministry of Tourism and Civil Aviation	Hon. Manuel Heredia, Jr.	Mr. Michael Singh

Annex 3. GROSS DOMESTIC PRODUCT, BY ACTIVITY, BELIZE, 2002–2007
CONSTANT 2000 PRICES (IN BZ$ MILLION)

Year	Quarter	Agriculture, hunting, and forestry	Fishing	Manufacturing (includes mining and quarrying)	Electricity and water	Construction	Wholesale and retail trade; repair	Hotels and restaurants	Transport and communication	Other private services (excl. FISIM[a])	Producers of government services	All industries at basic prices	Taxes on products	GDP at market prices	GDP, seasonally adjusted
2002		183.9	60.3	168.6	60.2	87.0	302.1	68.0	176.4	285.6	181.2	1,573.3	262.4	1,835.7	
2003		212.4	126.8	167.8	65.3	71.5	306.3	77.9	191.5	309.7	192.7	1,721.9	285.0	2,006.9	
2004		237.6	133.8	187.5	64.3	74.7	306.1	84.4	201.1	326.2	195.3	1,811.0	289.0	2,100.0	
2005		235.5	146.9	179.9	64.0	72.0	322.6	88.1	218.8	345.1	198.0	1,879.7	283.6	2,163.3	
2006		233.7	123.2	243.4	88.3	67.3	329.6	87.5	231.9	360.1	189.0	1,966.2	312.7	2,279.0	
2002	1	51.5	6.6	55.3	10.3	21.4	68.7	20.0	45.3	68.4	42.3	389.8	58.3	448.1	416.2
	2	60.3	5.7	50.7	14.4	23.0	77.7	18.0	46.1	70.4	46.0	412.4	66.8	479.1	459.5
	3	33.2	23.2	30.0	19.3	21.0	73.3	14.0	41.1	72.5	42.8	370.3	63.9	434.2	466.2
	4	38.9	24.8	32.6	16.3	21.7	82.5	16.1	43.8	74.2	50.2	400.9	73.4	474.3	498.2
2003	1	78.6	22.7	60.6	13.6	18.5	72.2	23.8	50.3	75.4	52.3	468.1	65.6	533.7	497.1
	2	53.6	26.9	44.9	15.9	18.7	85.0	19.9	49.6	76.8	47.3	438.5	78.6	517.1	496.6
	3	36.8	48.8	29.7	19.1	18.1	73.4	16.1	45.0	78.2	43.5	408.8	69.0	477.8	513.1
	4	43.4	28.4	32.5	16.7	16.2	75.6	18.1	46.6	79.3	49.5	406.4	71.9	478.3	499.9
2004	1	72.8	35.5	60.7	13.9	17.6	71.6	27.3	52.1	80.6	54.3	486.5	68.3	554.8	517.7
	2	76.8	21.4	57.9	15.2	19.0	77.9	21.5	50.7	81.2	48.5	470.1	74.4	544.6	524.3
	3	38.3	40.6	30.7	19.3	19.0	75.9	16.6	46.8	81.6	44.3	413.2	71.7	485.0	520.6
	4	49.8	36.3	38.2	15.9	19.0	80.8	18.9	51.5	82.8	48.1	441.2	74.5	515.7	537.2
2005	1	77.5	29.3	73.7	12.3	19.7	78.2	30.8	58.1	84.6	48.9	513.1	69.4	582.4	543.5
	2	68.0	36.3	52.3	17.4	18.6	83.5	23.3	54.9	85.6	52.3	492.3	72.8	565.1	545.7
	3	40.1	37.7	27.5	17.3	17.4	77.7	15.9	50.6	86.6	44.2	415.0	67.7	482.7	518.5
	4	49.9	43.6	35.1	17.0	16.3	83.1	18.1	55.3	88.4	52.6	459.4	73.7	533.1	553.1
2006	1	78.4	27.8	73.4	15.6	16.6	75.9	29.3	62.0	88.1	50.7	517.9	69.7	587.6	548.8
	2	74.5	17.0	73.3	19.3	17.3	78.4	23.5	60.4	89.3	49.1	502.1	73.9	576.0	557.4
	3	39.6	37.1	50.0	29.2	17.0	88.8	16.1	53.3	90.7	39.6	461.4	85.7	547.1	587.7
	4	45.2	41.3	55.5	24.2	16.5	85.9	18.5	56.2	92.0	49.4	484.8	83.4	568.2	588.2
2007	1	71.8	21.9	84.5	20.5	16.5	83.3	31.9	64.3	93.3	49.7	537.7	80.6	618.2	577.8
	2	69.4	6.5	79.4	19.5	16.8	88.6	24.0	63.5	94.6	50.0	512.3	85.7	598.0	579.0
	3	36.9	26.8	55.7	23.1	16.8	87.8	15.6	56.9	94.9	41.2	455.7	84.8	540.5	580.9
	4	41.3	26.8	56.7	24.7	17.6	86.0	18.4	59.8	93.3	50.3	474.9	83.1	558.1	576.7

[a] FISIM: Financial Intermediary Services Indirectly Measured.
Source: Statistical Institute of Belize.

Annex 4. NUMBER AND PERCENTAGE OF TEN LEADING CAUSES OF DEATH, BELIZE, 2001–2005

Cause	2001			2002			2003			2004			2005		
	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%
Transport accidents	1	87	6.9	2	83	6.5	5	75	5.9	6	63	4.9	4	78	5.7
Diseases of pulmonary circulation and other forms of heart disease	2	82	6.5	6	70	5.5	3	86	6.7	5	68	5.2	9	55	4.0
Hypertensive disease	3	72	5.7	1	92	7.2	1	111	8.7	1	135	10.4	1	94	6.9
Diabetes mellitus	4	71	5.6	5	72	5.6	6	72	5.6	2	89	6.9	1	94	6.9
Ischemic heart disease	5	69	5.5	3	79	6.2	7	71	5.6	7	51	3.9	3	81	5.9
Acute respiratory disease	5	69	5.5	4	76	5.9	2	90	7.0	4	72	5.5	6	65	4.7
Cerebrovascular disease	7	59	4.7	9	50	3.9	9	48	3.8	8	39	3.0	7	61	4.5
Homicide and injury purposely inflicted	8	54	4.3	8	57	4.4	8	57	4.5	10	37	2.9	10	45	3.3
Other chronic pulmonary disease, diseases due to external agents, and residual	9	44	3.5	10	48	3.7	10	38	3.0	9	38	2.9	-	-	-
Accidental drowning and submersion	10	41	3.3	-	-	-	-	-	-	-	-	-	-	-	-
HIV/AIDS	-	-	-	7	68	5.3	4	84	6.6	3	85	6.5	5	76	5.6
Injury undetermined, whether accidentally or purposely inflicted	-	-	-	-	-	-	-	-	-	-	-	-	8	57	4.2
Subtotal		648	51.4		695	54.2		732	57.3		677	52.2		706	51.6
Signs, symptoms, and ill-defined conditions		28	2.2		49	3.8		36	2.8		40	3.1		25	1.8
Residual		18	1.4		17	1.3		19	1.5		22	1.7		27	2.0
Total other causes		567	45.0		523	40.7		490	38.4		559	43.0		611	44.6
Total all causes		1,261	100		1,284	100		1,277	100		1,298	100		1,369	100

Source: Belize, Ministry of Health, Epidemiology Unit. Health statistics of Belize 2001–2005. Belmopan: MOH; 2006.

Annex 5A. NUMBER AND PERCENTAGE OF TEN LEADING CAUSES OF DEATH, BELIZE, 2006

Cause	Rank	No.	%
Diabetes mellitus	1	131	9.4
Hypertensive disease	2	84	6.0
Disease of pulmonary circulation and other forms of heart disease	3	79	5.7
HIV/AIDS	4	75	5.4
Cerebrovascular disease	5	69	4.9
Transport accidents	6	68	4.9
Ischemic heart disease	7	65	4.7
Acute respiratory infections	8	63	4.5
Injury undetermined, whether accidentally or purposely inflicted	9	50	3.6
Homicide and injury purposefully inflicted on other persons	10	47	3.4
Subtotal		731	52.4
Symptoms, signs, and ill-defined conditions		42	3.0
Residual		22	1.6
Total other causes		601	43.1
Total all causes		1,396	100.0

Source: Belize, Ministry of Health, Office of the Director of Health Services, Epidemiology Unit. Belize basic indicators 2006, vol. 4. Belmopan: MOH; 2007.

Annex 5B. NUMBER AND PERCENTAGE OF TEN LEADING CAUSES OF HOSPITALIZATION, BELIZE, 2006

Cause	Rank	No.	%
Complications of pregnancy, childbirth, and the puerperium	1	7,335	37.5
Acute respiratory infections	2	1,263	6.4
Diseases of other parts of the digestive system	3	780	4.0
Diabetes mellitus	4	657	3.4
Bronchitis, chronic and unspecified; emphysema; and asthma	5	583	3.0
Appendicitis, hernia of abdominal cavity, and intestinal obstruction	6	572	2.9
Injury, poisoning, and certain other consequences of external causes	7	553	2.8
Intestinal infectious diseases	8	521	2.7
Diseases of the urinary system	9	472	2.4
Diseases of the pulmonary circulation and other forms of heart diseases[a]	10	313	1.6
Subtotal		13,049	66.6
Symptoms, signs, and ill-defined conditions		618	3.2
Residual		1,444	7.4
Total other causes		4,471	22.8
Total all causes		19,582	100.00

[a] In reviewing the Ministry of Health source publication, it was noted that cancer caused 401 hospitalizations, 2.0% of the total of 19,582 in 2006. This means that cancer should be #10, rather than diseases of the pulmonary circulation and other forms of heart diseases (which elsewhere in the publication is listed as 314 hospitalizations, not 313).

Source: Belize, Ministry of Health, Office of the Director of Health Services, Epidemiology Unit. Belize basic indicators 2006, vol. 4. Belmopan: MOH; 2007.

Annex 6. MID-YEAR POPULATION ESTIMATES, BY AGE GROUP AND SEX, BELIZE, 2007

	Total	%	Male	%	Female	%
Total	311,500	100	154,700	100	156,800	100
0–4	37,300	12	18,500	12	18,800	12
5–9	42,200	13.5	21,400	13.8	20,800	13.3
10–14	41,800	13.4	21,300	13.8	20,500	13.1
15–19	35,300	11.3	17,900	11.6	17,400	11.1
20–24	25,000	8	12,300	8	12,700	8.1
25–29	21,600	6.9	10,000	6.5	11,600	7.4
30–34	20,900	6.7	9,700	6.3	11,200	7.1
35–39	19,200	6.2	9,100	5.9	10,100	6.4
40–44	16,600	5.3	8,100	5.2	8,500	5.4
45–49	13,000	4.2	6,600	4.3	6,400	4.1
50–54	10,200	3.3	5,200	3.4	5,000	3.2
55–59	7,100	2.3	3,600	2.3	3,500	2.2
60–64	6,000	1.9	3,100	2	2,900	1.8
65–69	5,100	1.6	2,700	1.7	2,400	1.5
70–74	4,000	1.3	2,100	1.4	1,900	1.2
75–79	2,900	0.9	1,500	1	1,400	0.9
80–84	1,600	0.5	800	0.5	800	0.5
85+	1,700	0.5	800	0.5	900	0.6

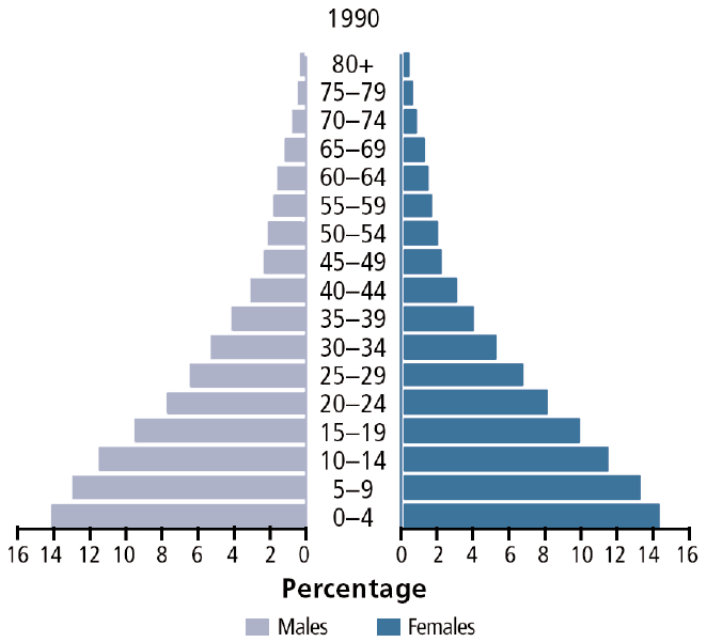
Source: Statistical Institute of Belize.

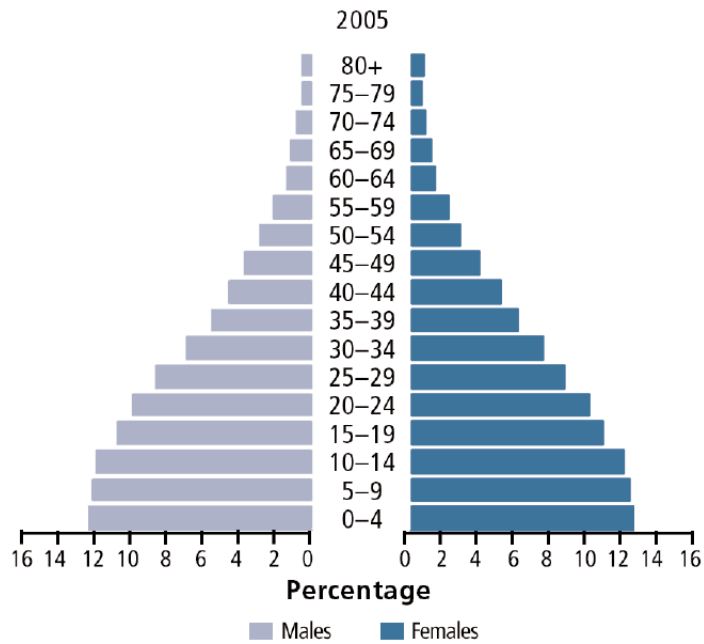
Annex 7. MID-YEAR POPULATION ESTIMATES, BY REGION AND SEX, BELIZE, 2007

District and subdivisions	Total	%	Male	%	Female	%
Country total	311,500	100	154,700	100	156,800	100
Urban	159,000	51	76,700	49.6	82,300	52.5
Rural	152,500	49	78,000	50.4	74,500	47.5
Corozal	36,300	11.7	18,100	11.7	18,200	11.6
Corozal Town	9,100	2.9	4,300	2.8	4,800	3.1
Corozal Rural	27,200	8.7	13,800	8.9	13,400	8.5
Orange Walk	47,100	15.1	24,000	15.5	23,100	14.7
Orange Walk Town	16,000	5.1	8,000	5.2	8,000	5.1
Orange Walk Rural	31,100	10	16,000	10.3	15,100	9.6
Belize	93,200	29.9	45,300	29.3	47,900	30.5
Belize City	63,700	20.5	30,300	19.6	33,400	21.3
San Pedro Town	10,400	3.3	5,300	3.4	5,100	3.3
Belize Rural	19,100	6.1	9,700	6.3	9,400	6
Cayo	73,400	23.6	36,400	23.5	37,000	23.6
San Ignacio/Santa Elena	18,300	5.9	8,800	5.7	9,500	6.1
Benque Viejo	8,200	2.6	4,000	2.6	4,200	2.7
Belmopan	16,400	5.3	8,000	5.2	8,400	5.4
Cayo Rural	30,500	9.8	15,600	10.1	14,900	9.5
Stann Creek	32,200	10.3	16,400	10.6	15,800	10.1
Dangriga	11,600	3.7	5,500	3.6	6,100	3.9
Stann Creek Rural	20,600	6.6	10,900	7	9,700	6.2
Toledo	29,300	9.4	14,500	9.4	14,800	9.4
Punta Gorda	5,300	1.7	2,500	1.6	2,800	1.8
Toledo Rural	24,000	7.7	12,000	7.8	12,000	7.7

Source: Statistical Institute of Belize.

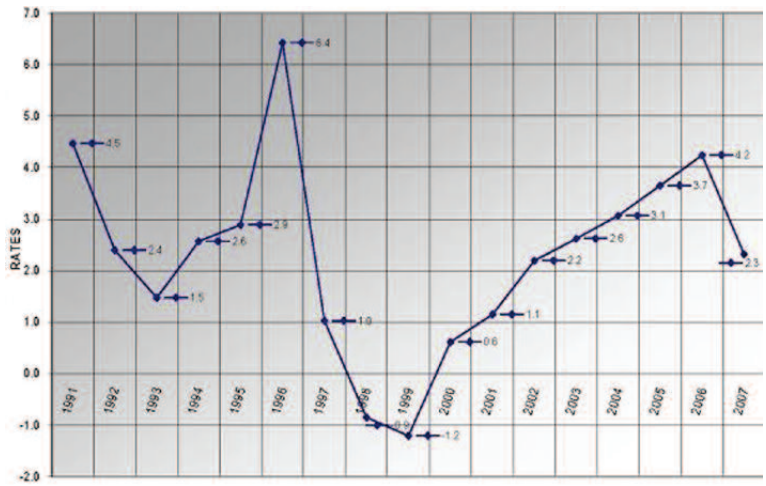
Annex 8. POPULATION STRUCTURE, BY AGE AND SEX, BELIZE, 1990 AND 2005





Source: Pan American Health Organization. Health in the Americas 2007. Washington, DC: PAHO; 2007. (Scientific and technical publication 622).

Annex 9. ANNUAL INFLATION RATES BY MAJOR COMMODITY GROUPS NATIONAL CONSUMER PRICE INDICES



YEAR	All items	Food, beverages, and tobacco	Clothing and footwear	Rent, water, fuel, and power	Household goods and maintenance	Medical care	Transportation and communication	Recreation, education, and culture	Personal care
1991	4.5	5.5	2.4	0	6.1	3.9	a	a	a
1992	2.4	3.0	4.0	0.2	2.8	4.3	2.1	1.1	3.6
1993	1.5	1.6	-0.4	1.3	3.6	3.0	0.5	2.1	1.7
1994	2.6	1.1	-0.5	5.8	1.7	0.7	1.6	8.7	3.3
1995	2.9	2.7	-0.3	6.5	0.5	7.7	1.8	2.9	3.3
1996	6.4	6.4	2.9	9.4	4.6	6.4	5.5	7.0	5.7
1997	1.0	1.8	-1.8	2.7	0.4	1.1	-0.7	2.5	-0.2
1998	-0.9	-1.0	-3.7	0.4	-0.4	0.1	-1.0	-1.2	-1.1
1999	-1.2	-1.7	-5.4	0.8	-2.5	1.7	-0.2	-1.2	-1.7
2000	0.6	0.6	-3.7	1.6	-0.6	2.6	1.9	0.4	1.2
2001	1.1	0.5	-3.5	2.1	-0.9	1.9	5.3	-0.4	0.3
2002	2.2	1.1	-1.0	-1.1	0.3	2.3	9.7	3.4	0.8
2003	2.6	2.6	0.8	3.7	0.2	0.9	5.2	-0.4	0.2
2004	3.1	2.5	0.4	5.2	0.1	1.0	5.5	1.3	-0.9
2005	3.7	4.7	-0.1	4.2	0.7	1.8	5.7	0.8	0.9
2006	4.2	4.2	1.5	4.9	2.3	2.7	6.8	1.2	2.8
2007	2.3	5.3	0.8	1.4	2.3	1.6	-0.6	0.9	2.2

[a] Either was not a part of the 1980 CPI or formed a part of the "miscellaneous goods" category.

Source: Statistical Institute of Belize.

Annex 10. BELIZE: NATIONAL GUIDELINES, POLICIES, PROTOCOLS, AND PLANS

Following is a list of public health instruments that have been developed and/or implemented in recent years; legislation has also been drafted and/or is being enacted.

- Guidelines for the Clinical Management of Mother-to-child Transmission of HIV
- The Family Violence Protocol
- The Protocol for the Use of Psychotropic Drugs
- The National Policy for Older Persons
- Sexual and Reproductive Health Policy
- Draft Mental Health Policy
- Draft Medical Practice Bill
- Draft General Health Act
- Domestic Violence Act
- Draft Policy for Disabled Persons
- National Policy on Health and Family Life Education
- Food and Nutrition Security Policy
- National Referral System Policy Guidelines and Protocols
- National Plan of Action for Children and Adolescents
- National Strategic Plan for HIV and AIDS
- National Care and Treatment Plan for HIV and AIDS
- National Poverty Elimination Strategy and Action Plan 2007–2011
- National Health Agenda and Health Plan 2007–2011

Annex 11. HEALTH STAFF INVENTORY, BELIZE, 2004

Health districts			Northern Region				Southern Region				Western Region				Central Region				Country	
			Orange Walk		Corozal		Stann Creek		Toledo		Belmopan		San Ignacio		Karl Heusner Memorial Hospital		Belize		National	
POPULATION			42,800		34,600		27,900		26,000		20,281		38,403		81,400				271,384	
BED CAPACITY			57		30		52		28		44		18		109		0		338	
STAFF (# and rate per 10,000 population)			#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Specialists	Private[a]		5	1.14	4	1.14	3	1.04	0	0.00	4	1.97	6	1.56	0	0.00	85	10.10	107	3.86
	MOH		7	1.60	0	0.00	2	0.69	0	0.00	9	4.44	0	0.00	16	1.90	0	0.00	34	1.23
	Volunteers	Cubans	3	0.68	1	0.29	4	1.38	0	0.00	2	0.99	0	0.00	7	0.83	0	0.00	17	0.61
		Nigerians	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Total		15	3.42	5	1.43	9	3.11	0	0.00	15	7.40	6	1.56	23	2.73	85	10.10	158	5.70
General practitioners	Private[a]		13	2.97	12	3.43	9	3.11	3	1.12	1	0.49	5	1.30	0	0.00	39	4.63	77	2.78
	MOH		5	1.14	4	1.14	1	0.35	1	0.37	5	2.47	3	0.78	18	2.14	6	0.71	43	1.55
	Volunteers	Cubans	5	1.14	7	2.00	8	2.77	5	1.87	4	1.97	5	1.30	0	0.00	7	0.83	41	1.48
		Nigerians	2	0.47	0	0.00	2	0.72	0	0.00	0	0.00	0	0.00	1	0.12	0	0.00	5	0.18
	Total		25	5.84	23	6.57	20	7.17	9	3.36	10	4.93	13	3.39	19	2.33	52	6.176	166	6.12
Dentists			1	0.23	1	0.29	1	0.35	1	0.37	1	0.49	1	0.26	0	0.00	3	0.36	9	0.32
Public health nurses			2	0.46	2	0.57	1	0.35	1	0.37	2	0.99	1	0.26	0	0.00	3	0.36	12	0.43
Registered nurses	MOH		35	7.99	14	4.00	6	2.08	8	2.99	28	13.81	7	1.82	103	12.23	22	2.61	223	8.04
	Volunteers	Cubans	6	1.37	0	0.00	6	2.08	0	0.00	4	1.97	1	0.26	17	2.02	0	0.00	34	1.23
		Nigerians	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Total		41	9.36	14	4.00	12	4.15	8	2.99	32	15.78	8	2.08	120	14.25	22	2.61	257	9.27
Rural health nurses			9	2.05	7	2.00	5	1.73	3	1.12	3	1.48	5	1.30	0	0.00	20	2.38	52	1.83
Public health inspectors			6	1.37	3	0.86	3	1.04	2	0.75	3	1.48	4	1.04	0	0.00	10	1.19	31	1.12
Pharmacists	MOH		2	0.46	2	0.57	1	0.35	1	0.37	2	0.99	1	0.26	6	0.71	7	0.83	22	0.79
	Volunteers	Nigerians	1	0.23	0	0.00	0	0.00	1	0.37	0	0.00	0	0.00	0	0.00	0	0.00	2	0.07
		Cubans	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Total		3	0.70	2	0.57	1	0.35	2	0.77	2	0.99	1	0.26	6	0.71	7	0.83	24	0.88
Medical technologists	Private		0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.26	0	0.00	5	0.61	6	0.22
	MOH		1	0.23	1	0.29	0	0.00	0	0.00	0	0.00	0	0.00	2	0.25	10	1.23	14	0.52
	Volunteers	Nigerians	0	0.00	1	0.29	1	0.35	1	0.37	1	0.49	0	0.00	0	0.00	3	0.36	7	0.26
		Cubans	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	Total		1	0.23	2	0.57	1	0.35	1	0.37	1	0.49	1	0.26	2	0.25	18	2.21	27	0.99
Radiographers[b]	Private		0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	1.23	10	0.37
	Public[b]		1	0.23	1	0.29	1	0.35	0	0.00	1	0.49	0	0.00	7	0.86	0	0.00	11	0.41
	Total		1	0.23	1	0.29	1	0.35	0	0.00	1	0.49	0	0.00	7	0.85	10	1.23	21	0.77
Community nurses' aides			59	13.47	51	14.57	39	13.49	48	17.91	13	6.41	13	3.39	0	0.00	25	2.97	248	8.94

[a] Figures are for 2002.

[b] Note: The areas not indicated have assistant radiographers.

Source: Belize, Ministry of Health. Health Agenda 2007–2011. Belmopan: MOH; 2007.

Annex 12. HEALTH IN THE MILLENNIUM DEVELOPMENT GOALS

Goal 1: Eradicate extreme poverty and hunger.

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.
Indicators:
- Prevalence of underweight children under 5 years of age
- Proportion of population below minimum level of dietary energy consumption

Goal 2: Achieve universal primary education.

Target 3: Ensure that by 2015, boys and girls everywhere will be able to complete a full course of primary schooling.

Goal 3: Promote gender equality and empower women.

Target 4: Eliminate gender disparity in primary and secondary education and at all levels of education no later than 2015.

Goal 4: Reduce child mortality.

Target 5: Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate.
Indicators:
- Under-5 mortality rate
- Infant mortality rate
- Proportion of 1-year-old children immunized against measles

Goal 5: Improve maternal health.

Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.
Indicators:
- Maternal mortality ratio
- Proportion of births attended by skilled personnel

Goal 6: Combat HIV/AIDS, malaria, and other diseases.

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS.
Indicators:
- HIV prevalence among pregnant women aged 15–24
- Condom use rate of the contraceptive prevalence rate
- Number of children orphaned by HIV/AIDS

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.
Indicators:
- Prevalence and death rates associated with malaria
- Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures
- Prevalence and death rates associated with tuberculosis
- Proportion of tuberculosis cases detected and cured under Directly Observed Treatment Short-course (DOTS)

Goal 7: Ensure environmental sustainability.

Target 9: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.
Indicator:
- Proportion of population using solid fuels

Target 10: Halve by 2015 the proportion of people without sustainable access to safe drinking water.
Indicator:
- Proportion of population with sustainable access to an improved water source, urban and rural

Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.
Indicator:
- Proportion of urban population with access to improved sanitation, urban and rural

Goal 8: Develop a global partnership for development.

Target 12: Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system.

Target 13: Address the special needs of the least developed countries.

Target 14: Address the special needs of landlocked countries and small island developing states.

Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.

Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth.

Target 17: In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries.
Indicator:
- Proportion of population with access to affordable essential drugs on a sustainable basis

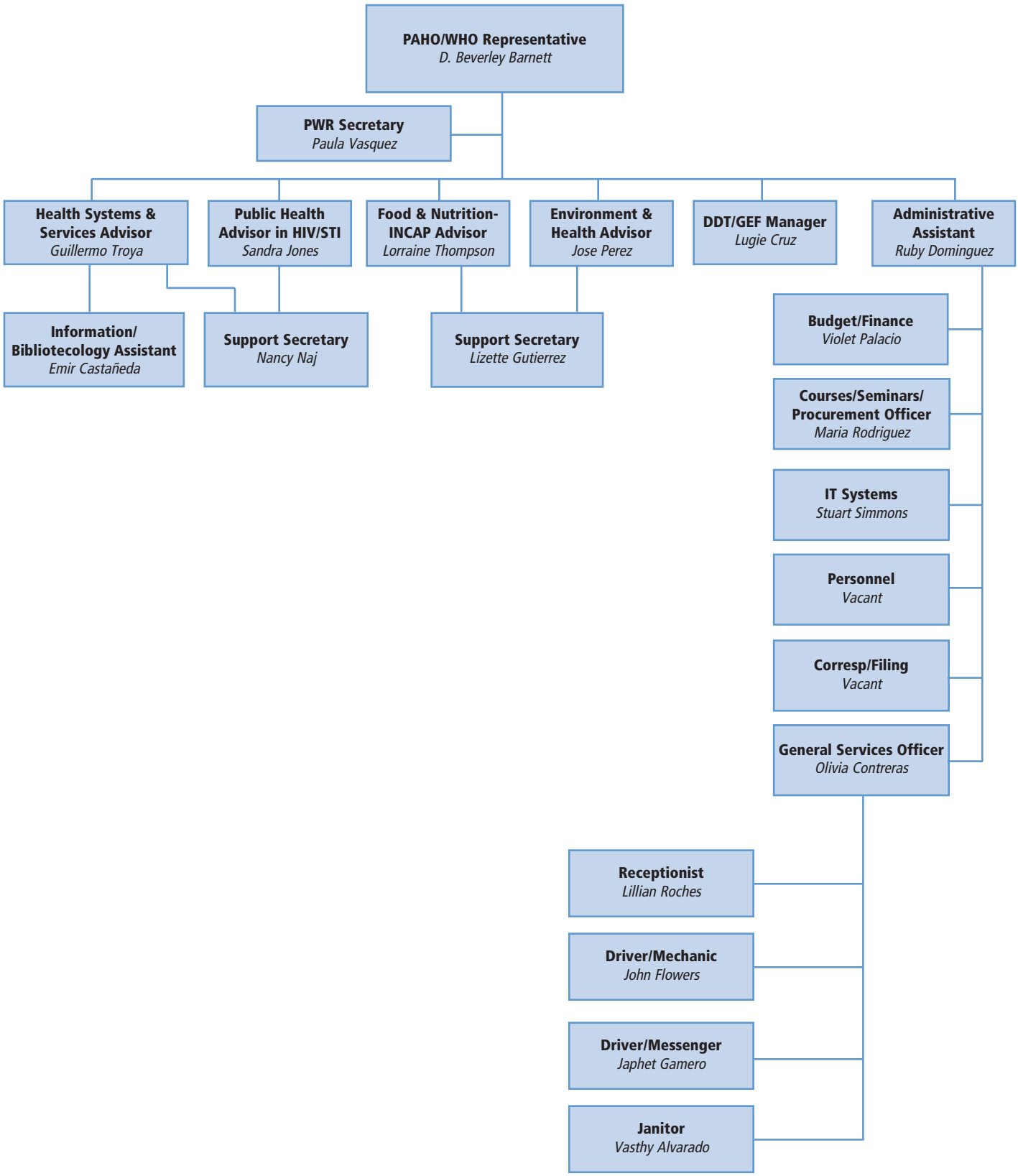
Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.

Source: World Health Organization. Millennium Development Goals. Health in the Millennium Development Goals. Available at: http://www.who.int/mdg/goals/en/index.html. Accessed on 10 November 2008.

Annex 13. SELECTED PARTNERS AND COUNTERPARTS, PAHO/WHO-BELIZE

- Ministry of Health
- Ministry of Education
- Ministry of Human Development and Social Transformation: Women's Department
- Ministry of Agriculture and Fisheries
- Ministry of Foreign Affairs and Foreign Trade
- Ministry of Labour, Local Government, and Rural Development
- National AIDS Commission
- Social Security Board
- National Emergency Management Organization
- Transport Department
- Department of the Environment
- Police Department
- Pesticides Control Board
- Public Utilities Commission
- University of Belize
- National Library Service
- ADM Belize Mills Ltd.
- Statistical Institute of Belize
- Vital Statistics Unit
- Belize Diabetes Association
- Belize Red Cross
- HelpAge Belize
- Mercy Care Center
- National Council on Ageing
- Belize Family Life Association
- Mental Health Association
- Plenty International
- Belize Agricultural Health Authority
- National Occupational Safety and Health Committee
- National Pro Tempore Water Commission
- Indigenous population groups
- United Nations agencies
- Inter-American Institute for Cooperation on Agriculture
- Inter-American Development Bank

Annex 14. ORGANIZATIONAL CHART, PAHO/WHO-BELIZE COUNTRY OFFICE



Annex 15. MAPPING OF CCS STRATEGIC AGENDA TO STRATEGIC OBJECTIVES IN WHO MEDIUM-TERM STRATEGIC PLAN 2008–2013, BELIZE

SO1 To reduce the health, social, and economic burden of communicable diseases.

SO2 To combat HIV/AIDS, tuberculosis, and malaria.

SO3 To prevent and reduce disease, disability, and premature death from chronic noncommunicable conditions, mental disorders, violence, and injuries.

SO4 To reduce morbidity and mortality and improve health during key stages of life, including pregnancy, childbirth, the neonatal period, childhood, and adolescence; improve sexual and reproductive health; and promote active and healthy aging for all individuals.

SO5 To reduce the health consequences of emergencies, disasters, crises, and conflicts, and minimize their social and economic impact.

SO6 To promote health and sustainable development and prevent or reduce risk factors for health conditions associated with the use of tobacco, alcohol, drugs, and other psychoactive substances; unhealthy diets; physical inactivity; and unsafe sex.

SO7 To address the underlying social and economic determinants of health through policies and programs that strengthen health equity and integrate pro-poor, gender-responsive, and human rights-based approaches.

SO8 To promote a healthier environment, intensify primary prevention, and influence public policies in all sectors so as to address the root causes of environmental threats to health.

SO9 To improve nutrition, food safety, and food security throughout the life course and in support of public health and sustainable development.

SO10 To improve health services through better governance, financing, staffing, and management, informed by reliable and accessible evidence and research.

SO11 To ensure improved access, quality, and use of medical products and technologies.

SO12 To provide leadership, strengthen governance, and foster partnership and collaboration in engagement with countries, the United Nations system, and other stakeholders in order to fulfill the mandate of WHO in advancing the global health agenda as articulated in the 11th General Program of Work.

SO13 To develop and sustain WHO as a flexible, learning organization, enabling it to carry out its mandate more efficiently and effectively.

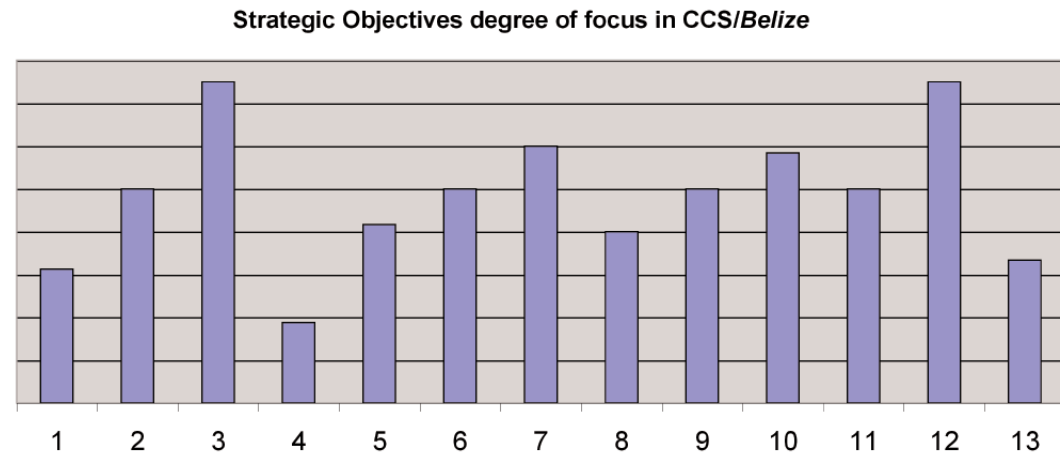


Photo courtesy PAHO/WHO-Belize

Support from the Government of Belize, local nongovernmental organizations, and international development agencies enables this health post in Dolores Village, Toledo District, to provide needed services to members of the indigenous population in southern Belize.

Pan American Health Organization

Regional Office of the World Health Organization

PAHO/WHO COUNTRY OFFICE- BELIZE
P.O. BOX 1834
#168 NEWTOWN BARRACKS
BELIZE CITY, BELIZE
TELEPHONE: (501) 224–4885, (501) 224–5536
(501) 223–3946 *INTERNATIONAL CALLS*
EMAIL: ADMIN@BLZ.PAHO.ORG

PAHO HEADQUARTERS
525 TWENTY-THIRD STREET, N.W.,
WASHINGTON, D.C. 20037
UNITED STATES OF AMERICA
TELEPHONE: (202) 974–3000

WWW.PAHO.ORG