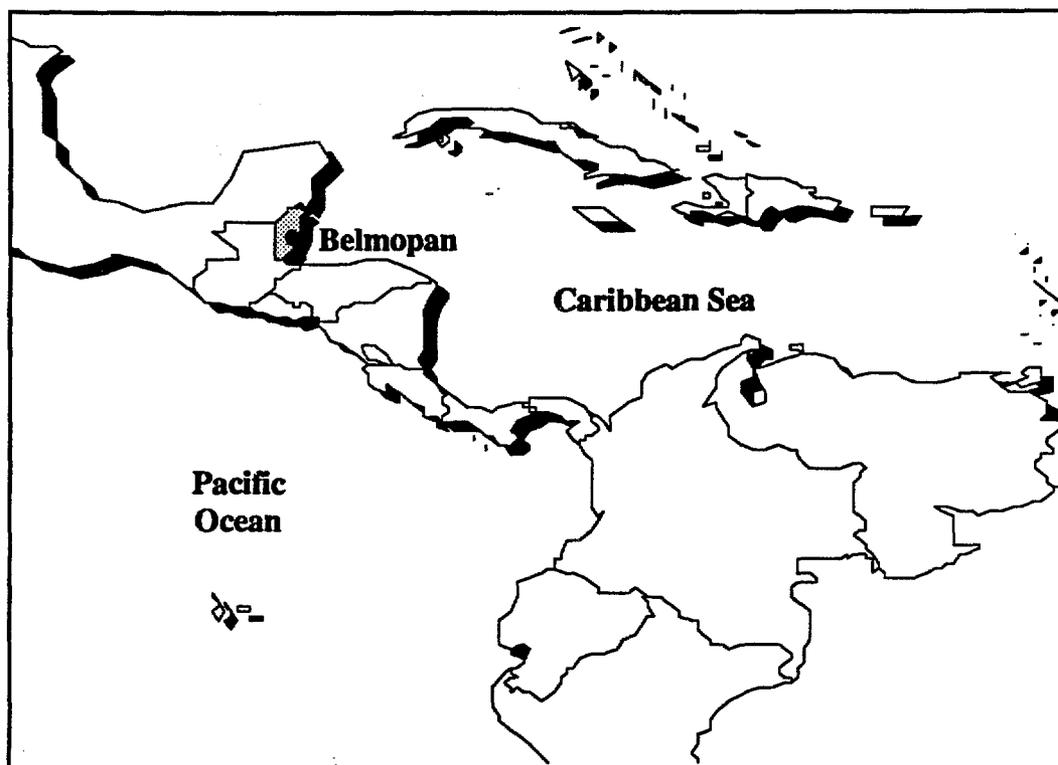

Belize

USAID Health Profile Abbreviated Version

October 1992



Center for International Health Information/ISTI

USAID Health Information System

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The Center for International Health Information, a division of ISTI, operates the USAID Health Information System under the Child Survival Action Program-Support project, #936-5951.13, contract number DPE 5951-Z-00-8004-00 with the Office of Health, Bureau for Research and Development, U.S. Agency for International Development.

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BELIZE

USAID Health Profile

Abbreviated Version

October 1992

This is one of a series of USAID Health Profiles published by ISTI's Center for International Health Information (CIHI). Each Health Profile contains a collection of tables, graphs and summary descriptions about the health and demographic conditions and activities in a country, including descriptions of USAID-supported activities in that country when available. While some of the information comes from the Center's databases, succinct reports from other publications are also included when available.

The USAID Health Profiles are intended to provide current and trend data in a concise format to evaluation teams, consultants and other interested individuals. They are not intended to provide a comprehensive description of the total health sector of a country. Contact the Center for information on the availability of other Health Profiles and Standard Reports.

This profile contains national level health and demographic statistics available in the Center's databases as of the above date. In order to enable the Center to report the most current health and demographic statistics, please provide any more recent or more accurate data by contacting us at the address below or through USAID, Bureau of Research and Development, Office of Health.



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BELIZE
USAID Health Profile
Abbreviated Version
October 1992

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August, 1992

USAID HEALTH INFORMATION SYSTEM
Managed By The
CENTER FOR INTERNATIONAL HEALTH INFORMATION/ISTI

BELIZE

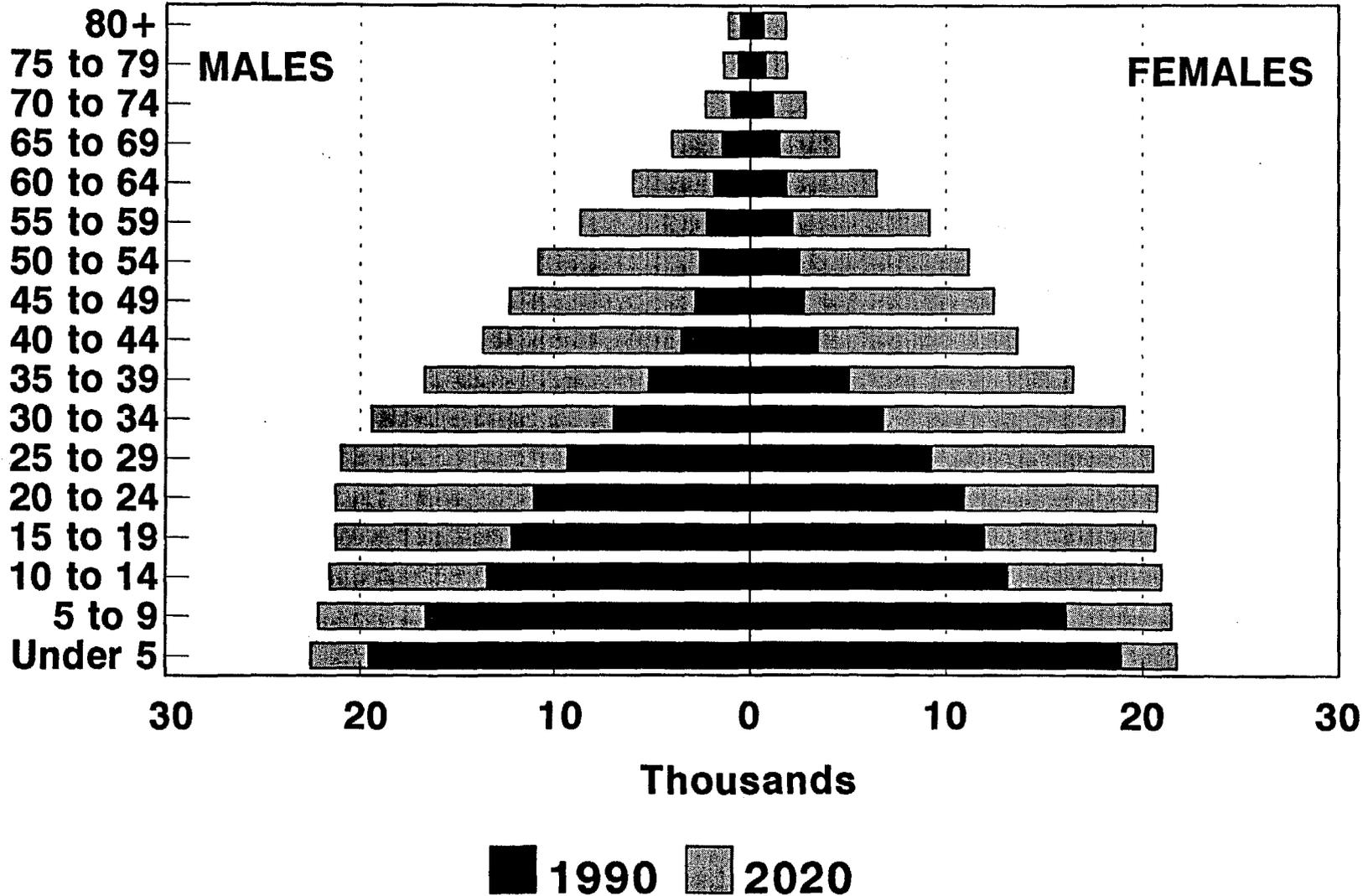
	Value	Year	Source
<u>Demographic Indicators</u>			
Total Population	190,000	1991	A
Infant Mortality Rate	25	1987	B
Under 5 Mortality	43	1990	C
Maternal Mortality	N/A		
Life Expectancy At Birth	69	1989	C
Children Under Age 1	6,900	1990	D
Annual Infant Deaths	200	1990	D
Total Fertility Rate	5.2	1991	E
<u>Child Survival Indicators</u>			
Vaccination Coverage			
BCG	77.0%	1991	F
DPT 3	84.0%	1990	G
Measles	74.0%	1991	F
Polio 3	80.0%	1990	G
Tetanus 2	94.0%	1985	H
DPT Drop Out	N/A		
Oral Rehydration Therapy			
ORS Access Rate	100.0%	1991	I
ORT Use Rate	65.0%	1991	I
Contraceptive Prevalence			
Modern Methods (15-47)	41.7%	1991	J
All Methods (15-47)	46.7%	1991	J
Nutrition			
Adequate Nutritional Status	N/A		
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Complementary Feeding	N/A		
Continued Breastfeeding	N/A		
<u>Other Health Indicators</u>			
HIV-1 Seroprevalence			
Urban	N/A		
Rural	N/A		
Access To Improved Water			
Urban	95.0%	1990	K
Rural	53.0%	1990	K
Access To Sanitation			
Urban	66.0%	1990	K
Rural	21.0%	1990	K
Deliveries/ Trained Attendants	N/A		

SOURCES FOR BELIZE

- A Central Statistics Office. Census (Preliminary Results) as cited in FY 1991 Mission Response Form.
- B A.I.D. Action Plan, Belize as cited in Burleigh, Elizabeth, Central American Initiative: Trends in Health and Nutrition, 1980 to 1987. Center for International Health Information/ISTI 1990.
- C U.S. Bureau of the Census, U.S. Department of Commerce. World Population Profile: 1989. Washington, D.C.: U.S. Government Printing Office, 1989.
- D Calculated from total population, crude birth rate and infant mortality rate sources.
- E Centers for Disease Control (CDC). Belize Family Health Survey 1991 (Preliminary results) as cited in FY 1991 Mission Response Form.
- F World Health Organization. Expanded Programme on Immunization Information System Report, April 1992. (WHO/EPI/CEIS/92.1) Geneva: WHO, 1992.
- G World Health Organization. Expanded Programme on Immunization Information System Report, April 1991. (WHO/EPI/CEIS/91.1) Geneva: WHO, 1991.
- H World Health Organization. Expanded Programme on Immunization Information System Report, January 1987. Geneva: WHO, 1987.
- I World Health Organization, Programme for Control of Diarrhoeal Diseases provisional data as cited in WHO/CDD facsimile, February 1992.
- J Central Statistics Office Ministry of Finance, Belize Family Life Association Ministry of Health, Division of reproductive Health Centers for Disease Control
- K Water and Sanitation for Health Project, U.S. Agency for International Development. WASH Field Report No. 334: Planning For Water and Sanitation Programs in Central America, August 1991.

Current and Projected Population by Age and Gender in Belize: 1990 - 2020

Total Population: FY 1990: 219,830; FY 2020: 451,466

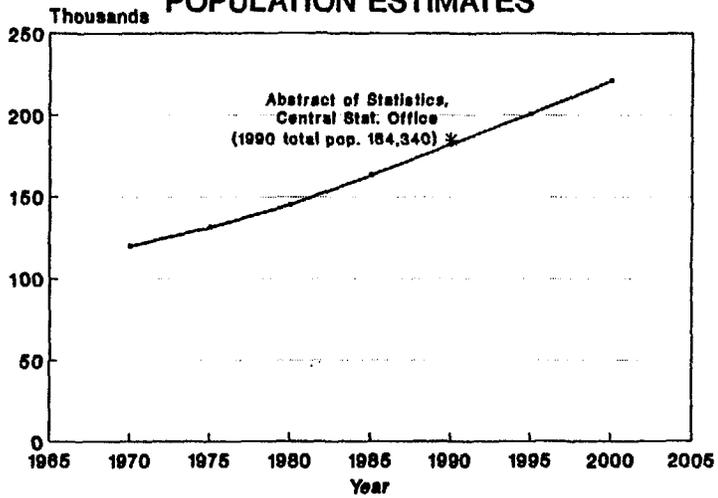


**Trends: Selected Health and Child Survival Indicators
Belize: 1980-1991**

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Vaccination Coverage												
WHO/EPI/CEIS 87-92; MOH Annual Report, 1989 cited FY 90 MRF												
a. BCG.....	65.0	54.0	75.0	81.0	82.0	81.0	80.0	92.0	97.0	90.7	80.0	77.0
b. DPT 3.....	47.0	54.0	61.0	59.0	54.0	59.0	95.0	69.0	73.0	79.5	84.0	--
c. Measles.....	21.0	40.0	51.0	43.0	44.0	49.0	81.0	64.0	70.0	70.8	81.0	74.0
d. Polio 3.....	21.0	51.0	52.0	61.0	54.0	60.0	81.0	69.0	73.0	73.8	80.0	--
e. Tetanus 2.....	--	83.0	88.0	94.0	--	94.0	--	--	--	--	--	--
ORS Access and ORT Use												
WHO/CDD/87-91												
a. ORS Access.....	--	--	--	--	60.0	--	100.0	100.0	100.0	100.0	--	100.0
b. ORT Use.....	--	--	--	--	37.6	37.6	65.0	--	65.0	--	--	65.0
Contraceptive Prevalence (15-49)												
Belize Family Health Survey (Preliminary), 5/91												
a. All Methods.....	--	--	--	--	--	--	--	--	--	--	--	46.7
b. Modern Methods.....	--	--	--	--	--	--	--	--	--	--	--	41.7
Nutrition and Infant Feeding												
a. Adequate Nutritional Status.....	--	--	--	--	--	--	--	--	--	--	--	--
b. Appropriate Infant Feeding.....	--	--	--	--	--	--	--	--	--	--	--	--
c. Exclusively Breastfed.....	--	--	--	--	--	--	--	--	--	--	--	--
d. Complementary Feeding.....	--	--	--	--	--	--	--	--	--	--	--	--
e. Continued Breastfeeding....	--	--	--	--	--	--	--	--	--	--	--	--
Water Supply Coverage (% Served)												
WASH Field Report No. 334, 8/91; WHO Diskette, 10/91												
a. Urban Areas.....	97.0	--	--	--	91.0	100.0	--	--	--	--	95.0	--
b. Rural Areas.....	38.0	--	--	--	35.0	26.0	--	--	--	--	53.0	--
Adequate Sanitation Coverage (% Served)												
WASH Field Report No. 334, 8/91; WHO Diskette, 10/91												
a. Urban Areas.....	59.0	--	--	--	62.0	87.0	--	--	--	--	66.0	--
b. Rural Areas.....	73.0	--	--	--	63.0	45.0	--	--	--	--	21.0	--

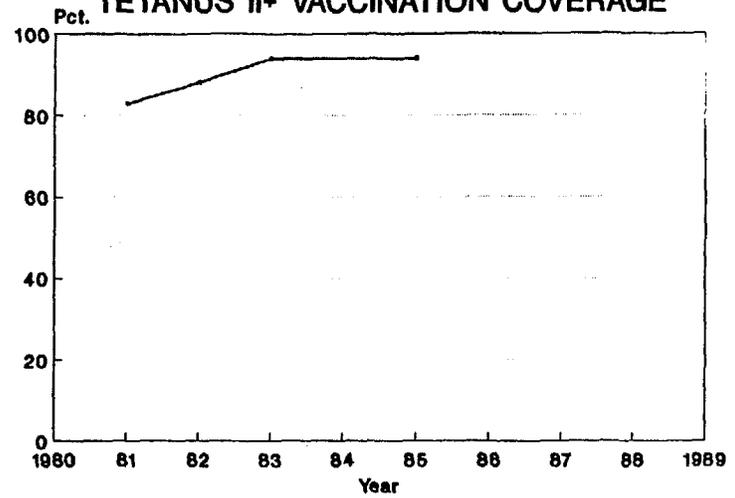
BELIZE

POPULATION ESTIMATES



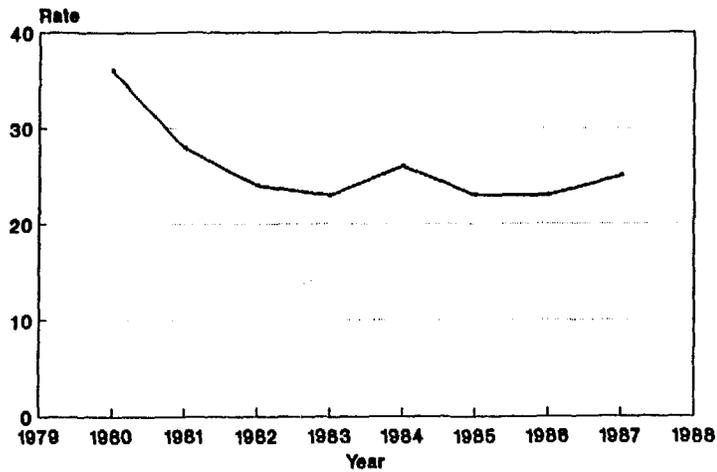
SOURCE: United Nations,
World Population Prospects, 1988

TETANUS II+ VACCINATION COVERAGE



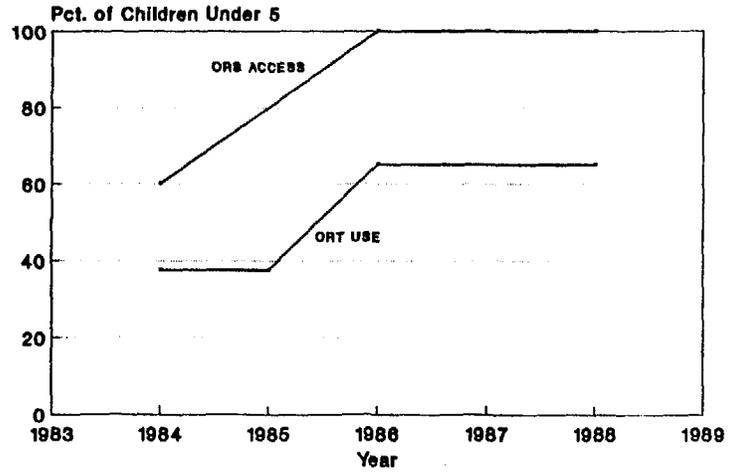
SOURCE: World Health Organization
Annual Reports of the EPI Programme

INFANT MORTALITY RATES



SOURCE: Trends in Selected Health and
Nutrition Indicators 1980-1987.
CIHI/ISTI/90

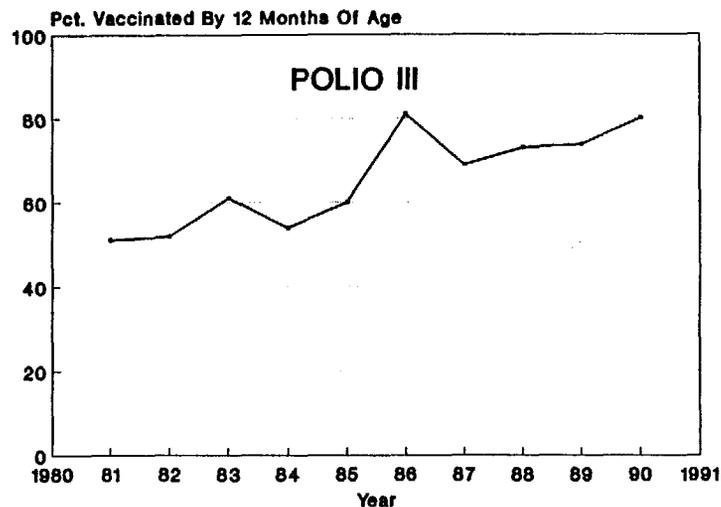
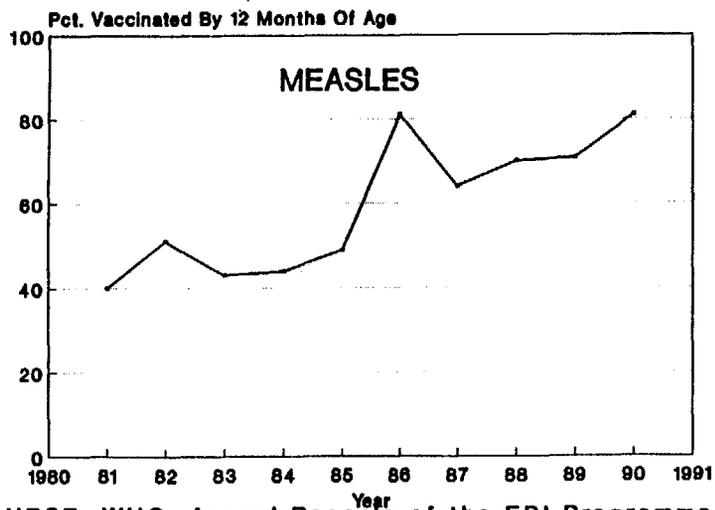
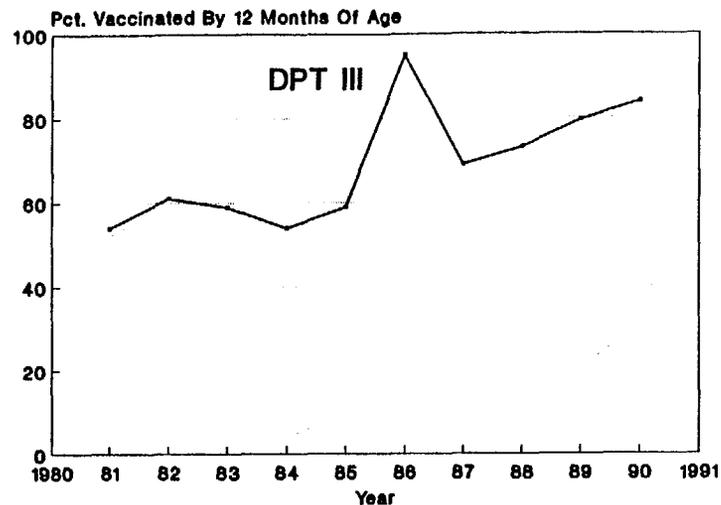
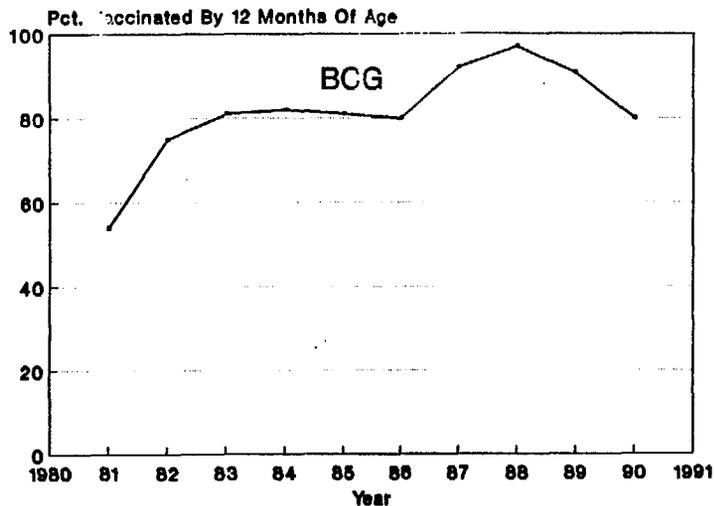
ORS ACCESS AND ORT USE RATES



SOURCE: World Health Organization,
Reports of the Programme for
Control of Diarrhoeal Diseases

CIHI, ISTI; 6/91

VACCINATION COVERAGE RATES IN BELIZE



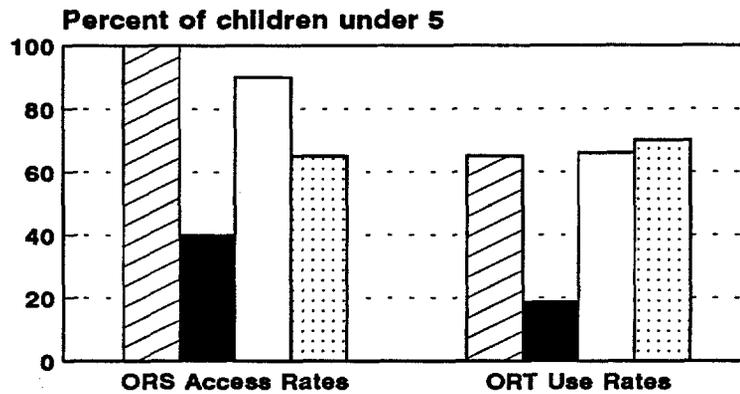
SOURCE: WHO, Annual Reports of the EPI Programme
Annual Report, Medical Stat. Office, MOH, 1989

CIHI, ISTI; 6/91

COMPARATIVE INDICATORS:

Belize and selected Neighbors

1991 ORS Access and ORT Use Rates

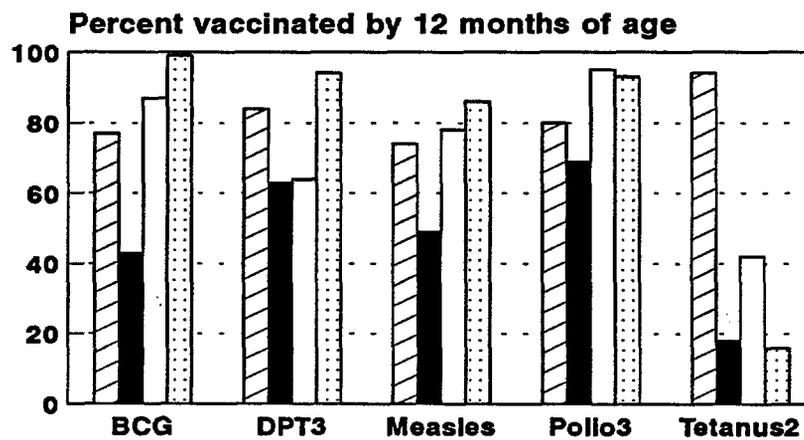


BELIZE
 GUATEMALA
 MEXICO
 HONDURAS

SOURCE: WHO/CDD

ORT use rate for Guatemala is from a national health information system (FY 91 Questionnaire).

1991 Vaccination Coverage Data



BELIZE
 GUATEMALA
 MEXICO
 HONDURAS

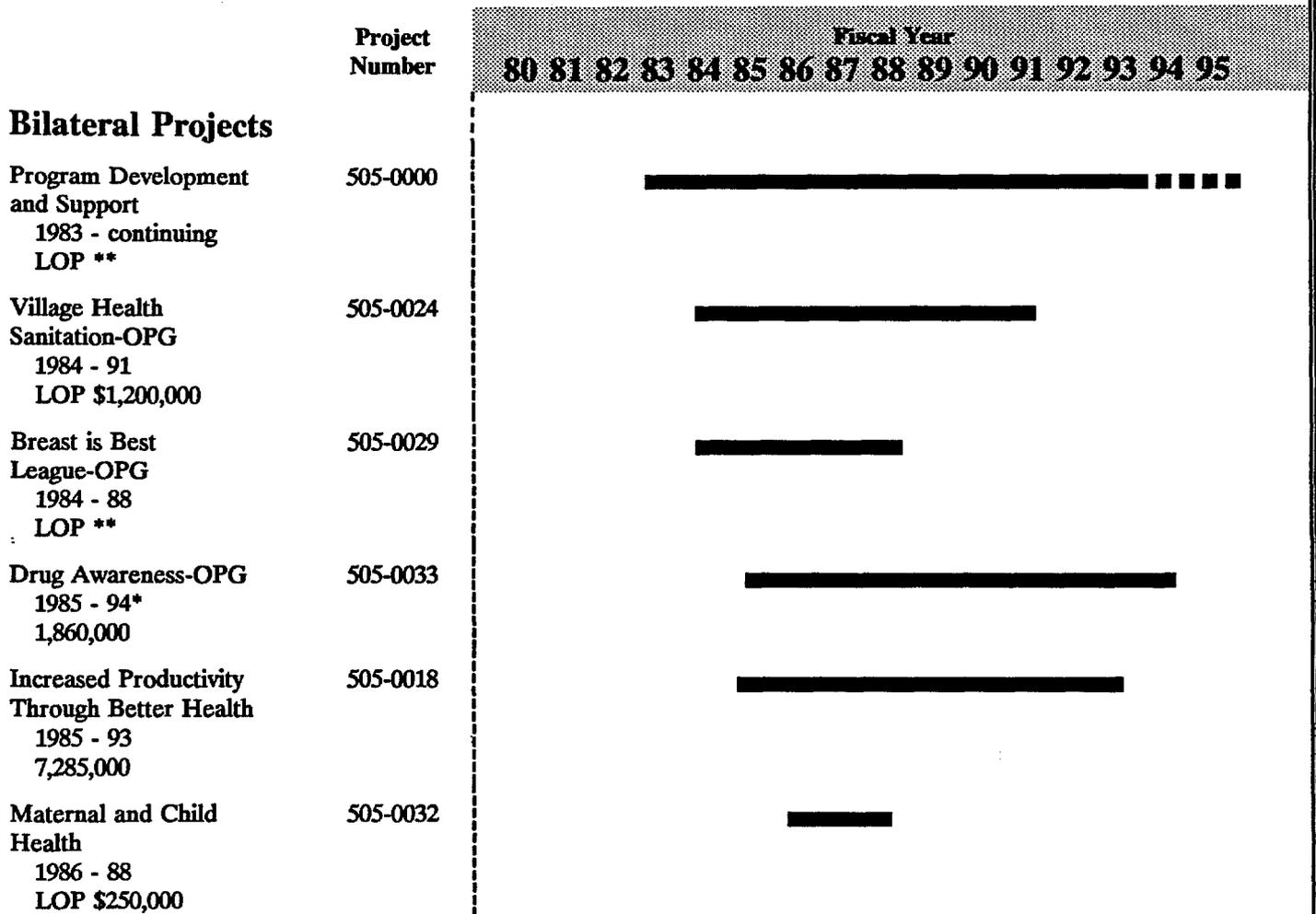
SOURCE: EPI/WHO

DPT 3 & Polio 3 rates for Belize are from 1990. Tetanus 2 rates for Guatemala & Honduras are from 1989, for Mexico from 1987, for Belize from 1985.

Projects: Bilateral, Regional and Centrally-Funded Projects

**Timeline: USAID-Funded Activities Related to Health and Population in Belize
FY 1980 to Present**

This chart contains USAID-funded projects active since FY 1980 known to contain a health or child survival component. Some projects with a nutrition or population component may also be included. The beginning and ending fiscal years appear after the project title. Dollar amount for bilateral projects is the approximate total life-of-project (LOP) funds for the entire project and not an amount allocated to a specific component of the project. The centrally-funded LOP reflects the authorized LOP for Belize.



* Fiscal Year of Final Obligation

** Country-specific funding information is currently not available in the Center's Health Projects Database.

SOURCE: Center for International Health Information/ISTI, USAID Health Information System, May 1992.

**Timeline: USAID-Funded Activities Related to Health and Population in Belize
(continued)
FY 1980 to Present**

	Project Number	Fiscal Year															
		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Bilateral Projects (continued)																	
OPG: Child Survival Technical Support 1986 - 88 LOP \$500,000	505-0017								■	■	■						
Belize Peace Scholarships 1987 - 93 LOP \$2,000,000	505-0039								■	■	■	■	■	■	■		
Child Survival Support 1988 - 91 LOP \$2,260,000	505-0037								■	■	■	■					
Clasp II 1990 - 98 LOP \$1,800,000	505-0047											■	■	■	■	■	■
Fiscal Policy Planning Management 1992 - 94 LOP \$5,400,000 (6% of project reported for health)	505-0045													■	■		
Regional Project																	
Accelerated Immunization 1988 - 90* LOP \$38,000	598-0643										■	■	■				

* Fiscal Year of Final Obligation

** Country-specific funding information is currently not available in the Center's Health Projects Database.

SOURCE: Center for International Health Information/ISTI, USAID Health Information System, May 1992.

**Timeline: USAID-Funded Activities Related to Health and Population in Belize
(continued)
FY 1980 to Present**

Project Number	Fiscal Year															
	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Central Projects																
Project Concern International 1983 - 85 LOP **				■	■	■										
Project HOPE 1984 - 86 LOP **					■	■	■									
HBCV Grants (Nutritional value of Vegetables) 1985 - 87 LOP \$79,000						■	■	■								

Other, usually short-term, health and nutrition projects known to have worked in Belize include:

Regional Projects	
Food Assistance Program Malaria and Essential Drugs	Technology Development/Transfer in Health
Central Projects	
AIDSTECH Integration of Health/Nutrition Services Health Financing and Sustainability	PRITECH REACH Water and Sanitation for Health WHO/Global Programme on AIDS Vector Biology and Control

* Fiscal Year of Final Obligation

** Country-specific funding information is currently not available in the Center's Health Projects Database.

SOURCE: Center for International Health Information/ISTIL, USAID Health Information System, May 1992.

Descriptions of USAID-funded Bilateral Projects

The following project descriptions have been compiled from several sources and provide accurate, up-to-date summaries of project activities, lessons learned, highlights and plans for future activities.

Project Number: 505-0018
Project Title: Increased Productivity Through Better Health
Country: Belize
Project Area: For vector control: entire country; for water supply and sanitation: Cayo District, Stann Creek District and Belize District
Project Duration: FY 1985 - 9/30/93
Primary Implementing Organization (s): Government of Belize, Ministry of Health (MOH), Ministry of Natural Resources (MNR), Water and Sewage Authority (WASA) of the MNR
Other Participating Organization(s):

Project Overview:

Project seeks to control the incidence of malaria and dengue fever and extend coverage of water supply and sanitation (WS&S) in three rural districts. The project assists the National Malaria Control Services (NMCS) and Aedes Aegypti Control Program (AACCP) to upgrade their field operations. The project supports the following activities: intradomiciliary spraying with DDT, mosquito larval control with ABATE; selective adulticiding through Ultra Low volume applications; community projects to destroy breeding sites; biological control methods; chemotherapy delivered by NMCS personnel and voluntary collaborators; and mass drug administration (if needed).

Recent Project Activities and Accomplishments:

Amendment of 3/18/91 increased the level of funding and extended the project to September 1993. In response to recommendations resulting from project evaluations, the project is placing greater emphasis on the issue of sustainability. Project activities now properly focus on weaknesses in organization and management, health education, and community participation. Technical assistance is to be provided to strengthen the institutional, educational, and technical capabilities of the Government of Belize (GOB) to determine effective demand for vector control and water and sanitation and to promote greater community responsibility in the planning, implementation and overall management of those programs. Activities aim to assist the GOB to undertake and improve level of performance and to develop sustainable, community-based water supply and sanitation and vector control programs.

Sources:

1. FY 1991 USAID Health and Child Survival Project Questionnaire
2. USAID/CDIE/DISC Development Information System

DATA NOTES AND SOURCES

Demographic Indicators

Total Population: The mid-year estimate of the total number of individuals in a country.

Life Expectancy at Birth: An estimate of the average number of years a newborn can expect to live. Life expectancy is computed from age-specific death rates for a given year. It should be noted that low life expectancies in developing countries are, in large part, due to high infant mortality.

Children Under Age 1: The mid-year estimate of the total number of children under age one.

Annual Infant Deaths: An estimate of the number of deaths occurring to children under age one in a given year.

Infant Mortality Rate (IMR): The estimated number of deaths in infants (children under age one) in a given year per 1,000 live births in that same year. An IMR may be calculated by direct methods (counting births and deaths) or by indirect methods (applying well-established demographic models).

Under 5 Mortality Rate: The estimated number of children born in a given year who will die before reaching age five per thousand live births in that same year. The under 5 mortality rate may also be calculated by direct or indirect methods.

Maternal Mortality Ratio: The estimated number of maternal deaths per 100,000 live births where a maternal death is one which occurs when a woman is pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management. Although sometimes referred to as a rate, this measure is actually a ratio because the unit of measurement of the numerator (maternal deaths) is different than that of the denominator (live births). The measure would be a rate if the units were the same. Extremely difficult to measure, maternal mortality can be derived from vital registration systems (usually underestimated), community studies and surveys (requires very large sample sizes) or hospital registration (usually overestimated).

Total Fertility Rate: An estimate of the average number of children a woman would bear during her lifetime given current age-specific fertility rates.

Child Survival Indicators

ORS Access Rate: An estimate of the proportion of the population under age five with reasonable access to a trained provider of oral rehydration salts (ORS) who receives adequate supplies. This is a particularly difficult indicator to measure; therefore, it may fluctuate dramatically from year to year as improved methods of estimation are devised.

ORT Use Rate: An estimate of the proportion of all cases of diarrhea in children under age five treated with ORS and/or a recommended home fluid. Oral rehydration therapy (ORT) use may be determined using administrative means or surveys. In general, administrative estimates are based on estimates of the number of episodes of diarrhea in the target population for a given year and the quantity of ORS available. Thus, changes in the estimates of the frequency of diarrhea episodes can alter the ORT use rate as well as "real" changes in the pattern of use. Surveys are more precise in that they focus on the actual behavior of mothers in treating diarrhea in the two-week period prior to the survey.

Adequate Nutritional Status: An individual child of a certain age is said to be adequately nourished if his/her weight is greater than the weight corresponding to "two Z-scores" (two standard deviations) below the median weight achieved by children of that age. The median weight and the distribution of weights around that median in a healthy population are taken from a standard established by the National Center for Health Statistics, endorsed by WHO.

The indicator for the population as a whole is the proportion of children 12 through 23 months of age who are adequately nourished.

Appropriate Infant Feeding: A composite estimate of the proportion of infants (children under age one) being breastfed and receiving other foods at an appropriate age according to the following criteria: breastfed through infancy with no bottle-feeding, exclusively breastfed through four months (120 days) of age, and receiving other foods if over six months of age (181 days). Water is not acceptable in the first four months (120 days). ORS is considered acceptable at any age. Surveys are the only source of data to form this indicator. Surveys yield an estimate of how many infants are being fed correctly at the moment of the survey. They do not give an indication of the proportion of individual children fed appropriately throughout their first year of life.

The breastfeeding indicators listed below have been recalculated in 1992 from the original data sources according to the definitions developed by the WHO Working Group on Infant Feeding.

Exclusive Breastfeeding: An estimate of the proportion of infants less than four months (120 days) of age who receive no foods or liquids other than breast milk.

Complementary Feeding: An estimate of the proportion of infants six to nine months of age (181 to 299 days) still breastfeeding but also receiving complementary weaning foods.

Continued Breastfeeding: An estimate of the proportion of children breastfed for at least one year. In this report, all values presented for this indicator are the proportion of children 12 to 15 months of age at the time of the survey still receiving breast milk.

Contraceptive Prevalence Rate: An estimate of the proportion of women, aged 15 through 44, union or married, currently using a modern method of contraception unless otherwise noted.

Vaccination Coverage in Children: An estimate of the proportion of living children between the ages of 12 and 23 months who were vaccinated before their first birthday -- three times in the cases of polio and DPT (diphtheria, pertussis and tetanus) and once for both measles and BCG (tuberculosis). Vaccination coverage rates are calculated in two ways. Administrative estimates are based on reports of the number of vaccines administered divided by an estimate of the pool of children eligible for vaccination. Survey estimates are based on sample surveys of children in the target age group and may or may not include children without vaccination cards whose mothers recall that their children had been vaccinated.

Vaccination Coverage in Mothers: An estimate of the proportion of women in a given time period who have received two doses of tetanus toxoid during their pregnancies. Currently under worldwide review, this indicator is being changed to account for the cumulative effect of tetanus toxoid boosters. A woman and her baby are protected against tetanus when a mother has had only one or, perhaps, no boosters during a given pregnancy so long as the woman had received the appropriate number of boosters in the years preceding the pregnancy in question. (The appropriate number of boosters required during any given pregnancy varies with number received previously and the time elapsed.) The revised indicator is referred to as TT2+. Rates are computed using administrative methods or surveys.

DPT Drop-Out: An estimate of the proportion of living children between the ages of 12 and 23 months who received at least one DPT vaccination but who did not receive the entire series of three vaccinations before their first birthdays.

Other Health Indicators

Urban Water Supply Coverage: An estimate of the proportion of all persons living in urban areas (defined roughly as population centers of 2,000 or more persons) who live within 200 meters of a stand pipe or fountain source of water.

Rural Water Supply Coverage: An estimate of the proportion of all persons not living in urban areas with a source of water close enough to home that family members do not spend a disproportionate amount of time fetching water.

Urban Adequate Sanitation Supply Coverage: An estimate of the proportion of all persons living in urban areas with sanitation service provided through sewer systems, or individual in-house or in-compound excreta disposal facilities (latrines).

Rural Adequate Sanitation Coverage: An estimate of the proportion of all persons not living in urban areas with sanitation coverage provided through individual in-house or in-compound excreta disposal facilities (latrines).

HIV-1 Seroprevalence - Urban: An estimate of the proportion of all persons (pregnant women, blood donors, and other persons with no known risk factors) living in urban areas infected with HIV-1, the most virulent and globally prevalent strain of the human immunodeficiency virus.

HIV-1 Seroprevalence - Rural: An estimate of the proportion of all persons living in rural areas infected with HIV-1.

Deliveries by Trained Attendants: An estimate of the proportion of deliveries attended by at least one physician, nurse, midwife, or trained traditional birth attendant.

Sources and Comments

Each year, data on the child survival indicators are collected from USAID missions on the Mission Response Forms (referred to as MRF with the given year) disseminated along with the above mentioned questionnaires.

Another major source of information is the Demographic and Health Surveys (referred to as DHS with the year of the survey), Institute for Resource Development/Macro Systems, Inc.

Demographic Indicators - The primary, and unless otherwise noted, source for the demographic indicators is World Population Prospects: 1990 U.N. Tape #PRO206, (referred to as WPP) prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations. The source for Under 5 Mortality data, unless otherwise noted, is Mortality of Children Under Age 5: World Estimates and Projections, 1950-2025, ST/ESA/SER.A/105, 1988 published by the same Section (also referred to as WPP).

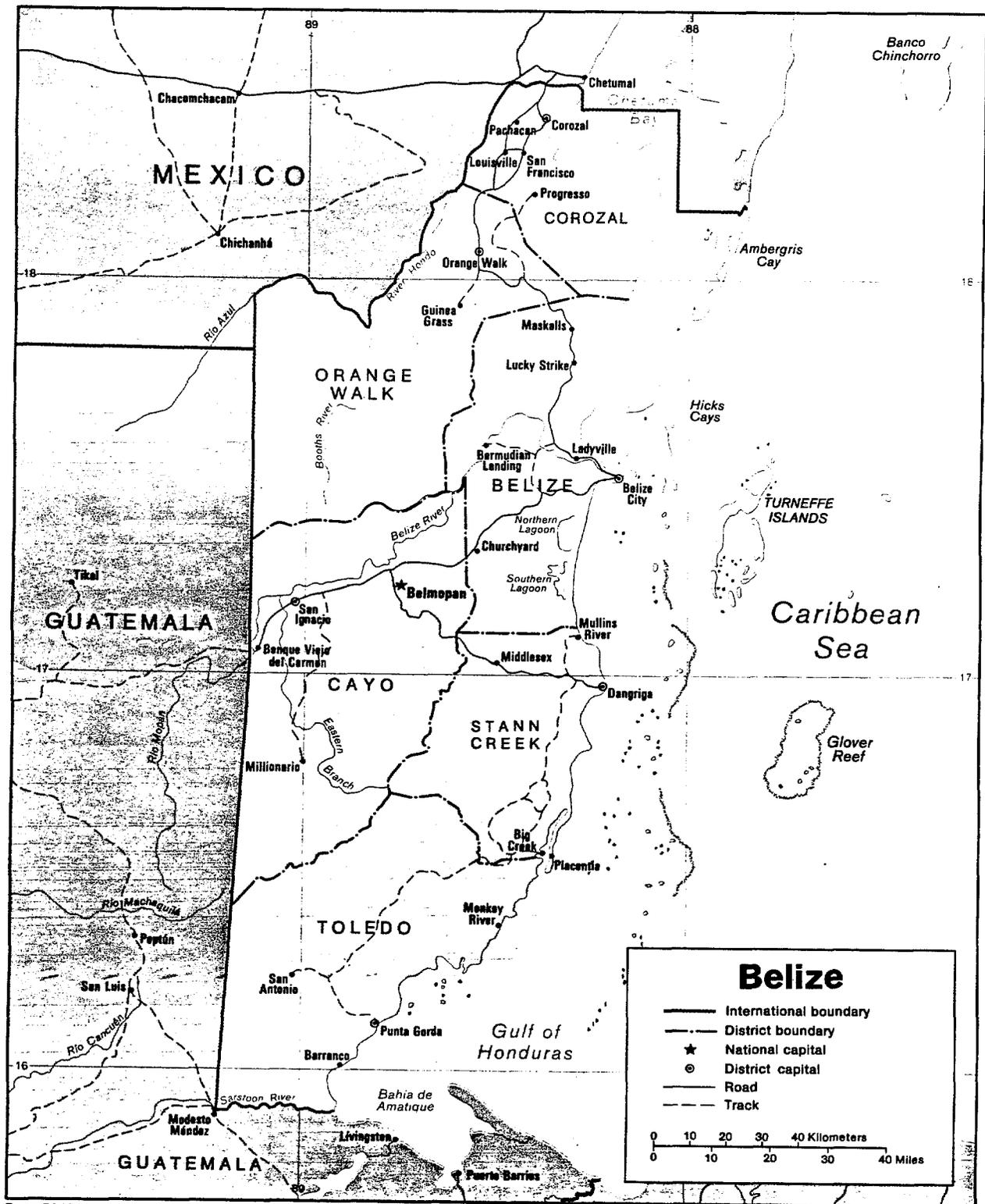
Vaccination Coverage - The primary, and unless otherwise noted, sources for vaccination coverage data are the annual reports of the Expanded Programme on Immunization of WHO (referred to as WHO).

ORT - The primary, and unless otherwise noted, sources of data on ORT, both access and use, are the annual reports of the Diarrheal Disease Control Programme of WHO (referred to as WHO). An advanced copy of the indicators to be published in the next report was provided by that program. These data are provisional and subject to change.

Maternal Mortality and Deliveries by Trained Attendants - The primary, and unless otherwise noted, source of data on maternal mortality and on the percentage of deliveries performed by a trained attendant is the WHO Publication, Maternal Mortality: A Global Factbook (referred to as WHO/MCH/MSM/91.3.)

HIV/AIDS - All HIV seroprevalence data is drawn from the HIV/AIDS Surveillance Database, compiled by the Center for International Research, U.S. Department of Commerce Bureau of the Census. The reported prevalences are the results of the latest surveys in populations without special risk factors.

Water and Sanitation - Water and Sanitation data come primarily from two sources, a data diskette provided by the WHO (referred to as WHO Diskette, 10/29/91) and field reports of the USAID supported Water and Sanitation for Health project (referred to as WASH).



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