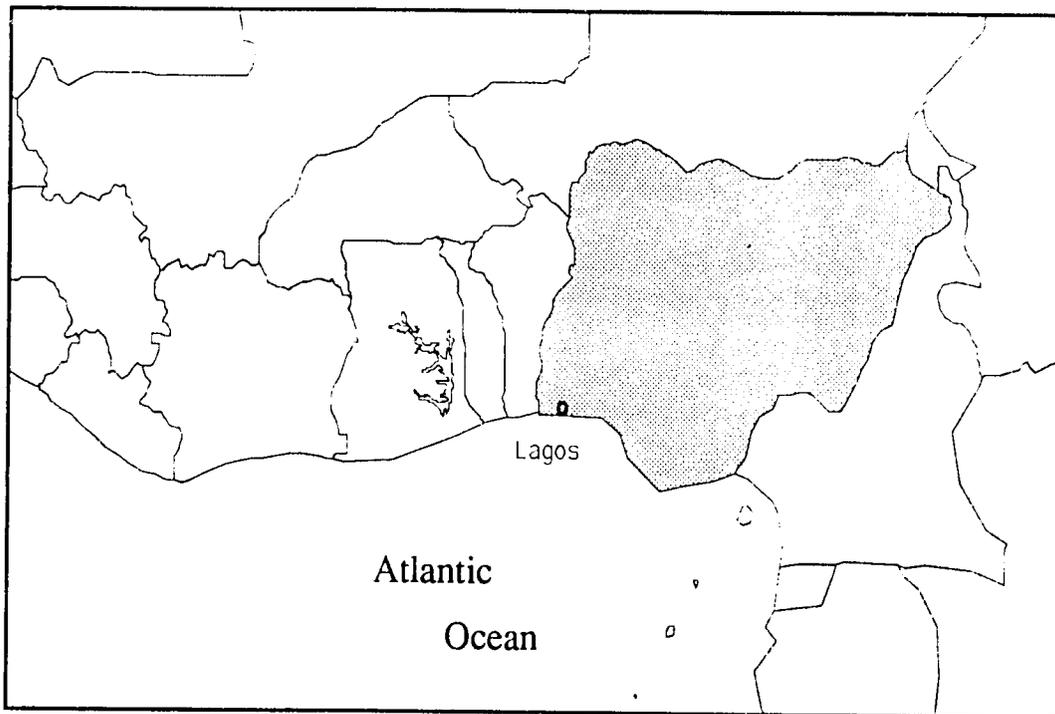

Nigeria

USAID Health Profile

(Selected Data)

July 1991



Center for International Health Information

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 of Science and Technology, U.S. Agency for International Development.

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NIGERIA

USAID Health Profile (Selected Data) July 1991

This is one of a series of USAID Health Profiles published by ISTI's Center for International Health Information. Each 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 health activities in that country. 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, and are updated annually. 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 Country Health Profiles and Standard Reports.

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CENTER FOR INTERNATIONAL HEALTH INFORMATION/ISTI
USAID Health Information System



DEMOGRAPHIC INDICATORS

Total Population:	108,541,897 (90)	Annual Infant Deaths:	518,152 (90)
Life Expectancy at Birth:	51 Years (90)	Infant Mortality Rate:	100/1,000 (90)
Children Under 1:	4,793,034 (90)	Under 5 Mortality Rate:	165/1,000 (90)
		Total Fertility Rate:	6.7 Children (90)

CHILD SURVIVAL INDICATORS

Immunization Coverage:		Oral Rehydration Therapy:		Appropriate Infant Feeding:	N/A
DPT3:	47% (89)	ORS Access:	60% (88)	Exclusively Breastfed:	N/A
Polio3:	47% (89)	ORT Use:	35% (88)	Introduction of Solids:	N/A
Measles:	31% (89)	Contraceptive Prevalence:	1% (81-82)	Breastfed 1 Year or Longer:	N/A
BCG:	76% (89)	Adequate Nutritional Status:	N/A		
Tetanus2+:	16% (88)				

See DATA NOTES

NIGERIA HIGHLIGHTS

■ A 1989 international evaluation of the Expanded Program on Immunization estimated that immunization services provided that year averted 100,000 deaths that would have otherwise resulted from the six vaccine-preventable diseases targeted by the program.

■ Health and child survival messages are gaining coverage on broadcast programs, such as children's shows, family entertainment, and documentaries. The Federal Ministry of Health (FMOH) has been developing new approaches to health communication and public education since 1984. With assistance from HEALTHCOM, state-level workshops for media writers and producers of popular Nigerian programs are promoting the incorporation of primary health care and family planning messages into popular programs.

BILATERAL PROJECT

■ **Nigerian Health Sector Assistance** is designed to encourage major reforms in primary health care policies by providing grants directly to local government areas where health services are delivered. Field studies are under way to test the feasibility of changes in health financing policies. These include contracting with the private sector for support services in tertiary health care facilities, operating private patient wings in public health facilities, permitting private physicians to use the facilities of public hospitals, and allowing all senior medical staff employed at public facilities to have private practice during off-duty hours.

REGIONAL PROJECT

■ **Africa Child Survival Initiative-Combating Childhood Communicable Diseases (ACSI-CCCD)**, which was begun in 1987, is a multi-donor project of the FMOH, USAID, UNICEF, and the World Health Organization. The project works to expand the nation's primary health care services, especially immunizations for infants, prevention and control of diarrheal diseases, and malaria control. During 1989-1990, the project supported the administration of 1.4 million doses of DPT3 and polio3 vaccines and 1.6 million doses of measles vaccine. Recently, the project helped expand the malaria sentinel surveillance system and develop national guidelines for malaria control in conjunction with Nigeria's National Council on Health. The African Regional Health Education Center serves as a regional training center in health education for 31 countries.

USAID/WASHINGTON SUPPORT

U.S. Private Voluntary Organizations/FVA/PVC

■ **Adventist Development and Relief Agency** has built an outreach system for child survival using existing Adventist health facilities in six states. In 1990, a vaccination coverage survey conducted in four states showed that 70 percent of children were fully immunized, up from 29 percent reported in 1989, and that the highest levels documented were in project areas.

■ **Africare** supports the Imo state Ministry of Health's child survival program in three areas, where 160 local women volunteers serve as health promoters in their communities and have counseled more than 7,000 mothers during home visits. The health volunteers mobilize women to address health, food production, and income-generation needs. A recent survey found that mothers

registered and counseled by the volunteers demonstrated consistently higher levels of knowledge and improved health practices than those mothers not involved in the project. The project is implementing two income-generating activities that focus on planting improved crop varieties and use of more productive farming techniques. By recognizing community needs directly and indirectly linked to health, the project has strengthened community support and enthusiasm for maternal and child health services.

■ **Rotary International's PolioPlus** program mobilizes the private sector in support of the national immunization effort in Nigeria. Project activities are establishing a grass roots volunteer corps. In 1990, the project trained over 3,000 health care workers, mothers, students, and other volunteers to provide such services as tracking babies to make sure they get their complete vaccination series and providing public information and logistical support during vaccination campaigns. The program has also worked with the FMOH to decentralize management of immunization programs. In April 1990, Nigerian Rotarians presented the FMOH with over US \$1 million worth of cold chain equipment. Rotarians are actively involved in the planning, management, and implementation of state and national immunization days.

■ **World Vision Relief and Development** works with a local private voluntary organization, the Baptist Medical Center, in two remote areas of Oyo state. The areas have over 37,000 inhabitants and minimal basic health facilities. Interventions consist of vaccinating women and children, promoting the use of oral rehydration therapy, growth monitoring, and nutritional counseling. A 1990 midterm project evaluation reported that immunization coverage rates

have risen to 88 percent for BCG, 73 percent for DPT3, and 79 percent for measles. A complete census of families in the project area is serving as the cornerstone of a health information referral system. Village health workers are responsible for this activity, assisted by local council members, chiefs, religious leaders, school teachers, and members of village health committees.

Bureau for Science and Technology Support

■ **AIDSTECH** assists the FMOH in developing and implementing HIV/AIDS education and condom promotion programs directed at high risk groups.

■ **Applied Diarrheal Disease Research** project supports research to identify the factors that put children at risk for diarrheal diseases.

■ **Demographic and Health Surveys** assisted the FMOH in collecting national data on fertility, family planning, and maternal and child health.

■ **HEALTHCOM** (Communication for Child Survival) works with the FMOH's Health Education Division to support communication efforts. In collaboration with numerous local media organizations, such as the Federal Radio Corporation, the Nigeria Television Authority, and regional and state broadcasting authorities, the project trains health staff and media personnel at the federal, zonal, and state levels and assists in communication planning and message development.

Short-term technical assistance was reported as follows:

■ **AIDSCOM** assisted in AIDS education through mass media campaigns and training private sector health care providers.

■ **WASH** (Water and Sanitation for Health) reviewed and field-tested a hygiene education training guide.

Source: *Child Survival: A Sixth Report to Congress on the USAID Program*, US Agency for International Development, Washington, DC 1991.

NIGERIA
Currently Active USAID-Funded
Health Projects

Project Title	Project Number	Total Authorized Life-of-Project (\$Thousands)	U.S. Contractor/Grantee
Primary Health Care Support Program	620-0003	36,000	Government of Nigeria
Africa Child Survival Initiative	620-ACSI	4,089	DHHS/CDC
HEALTHCOM	931-1018	911	Academy for Educational Development
FRICOR II	936-5920	*	University Research Corporation
Demographic and Health Surveys	936-3023	*	Macro Systems/Institute for Resource Development
CSAP Support (Child Survival Fellow)	936-5951	*	Johns Hopkins University
Applied Diarrheal Disease Research	936-5952	176	Harvard Institute for International Development
PRITECH II	936-5969	469	Management Sciences for Health
AIDSTECH	936-5972	*	Family Health International
Child Survival Grant to WVRD	938-0505	400	World Vision Relief and Development
Child Survival Grant to ADRA	938-0517	300	Adventist Development and Relief Agency
Child Survival Grant to Rotary International	938-0537	1,100	Rotary International
Child Survival Grant to AFRICARE	938-0AFR	400	Africare

Funding is based on reported attributions for health, child survival and AIDS activities from all funding accounts.

* Total authorized Life-of-Project is not currently available in the CIHI Health Projects Database

CIHI, July 1991

**Fiscal Year Obligations for USAID-funded
Bilateral Projects Related to Health and Population
FY 1985 – FY 1992
(\$000)**

Project Title	Project #	FY85	FY86	FY87	FY88	FY89	FY90	FY91	FY92
Nigerian Family Health Services	620-0001			21,089	10,000	10,000	8,000	8,000	9,911
Primary Health Care Support Program*	620-0003					36,000			
Africa Child Survival Initiative**	620-ACSi							3,000	1,089
TOTAL				21,089	10,000	46,000	8,000	11,000	11,000

Notes: Funding is based on reported attributions for health, child survival and AIDS activities from all funding accounts. Only two activities with a primarily health focus have been receiving bilateral funds since 1989. This chart does not include projects listed in the "Timeline" chart which receive only regional or central funds. FY 1985 - FY 1989 funding figures are actual; figures for FY 1990 - FY 1991 are planned obligations.

* Non-project assistance program to encourage major reforms in primary health care policies.

**Mission bilateral funding for Regional Project #698-0421 - Africa Child Survival Initiative.

M

Africa Child Survival Initiative - CCCD NIGERIA

MAJOR ACHIEVEMENTS

Two million doses of DPT, Polio 1; 1.4 million doses of DPT 3, Polio 3; and 1.6 million doses of measles vaccine administered.

Malaria Sentinel Surveillance established at selected health facilities.

Plasmodium falciparum in-vivo drug sensitivity data provided by Malaria Surveillance Network.

National guidelines for malaria control developed and approved by the National Council on Health.

A program of continuing education based on identification of performance problems through facility assessments initiated for LGA Staff in Niger State.

Thirty-one protocols approved by the national Research Review Committee.

HEALTH INFORMATION

National EPI data processed by the Monitoring and Evaluation Unit. Two training courses conducted within the Federal Department of Primary Health Care.

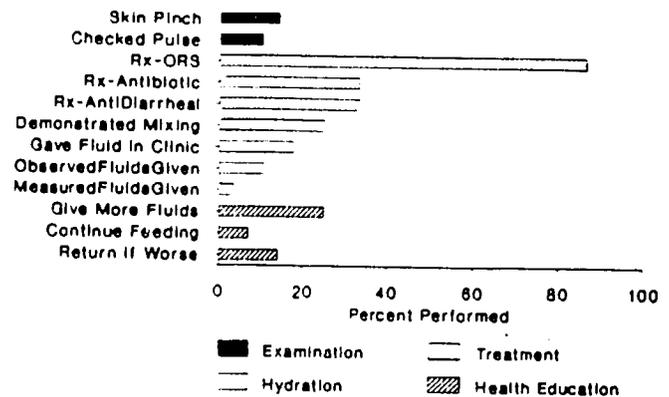
Microcomputer capability established at national level and in two of four PHC Zones.

Twenty-five federal and zonal staff trained.

TRAINING

Prototype inservice education being developed in Niger State. Pre-intervention worker performances assessed, as illustrated in the following data on diarrhea treatment practices.

Diarrhea Treatment Practices
Pre-Training Assessment, Niger State



Continuing education strategy implemented in Niger State.

EPI and CDD staff in Federal, state, and local government trained in supervision and management.

Curriculum developed and revised for Schools of Health Technology.

State and local government area health staff trained in in-vivo malaria drug sensitivity testing.

HEALTH EDUCATION

Third annual International Health Education Management Training Course, with 36 participants from 4 countries, conducted by the African Regional Health Education Centre (ARHEC) and the University of North Carolina. Health education workplans developed by participants for their programs.

Intensive health education program being carried out in two LGAs of Niger State through the HEALTHCOM Project.

Graphics art technical assistance being provided to Federal Health Education Division.

Africa Child Survival Initiative - CCCD NIGERIA (continued)

OPERATIONAL RESEARCH

Research Review Committee met four times:
15 proposals approved in 1989.

Since the initiation of Project operational research activities, 65 protocols have been submitted, 31 approved, and 13 completed.

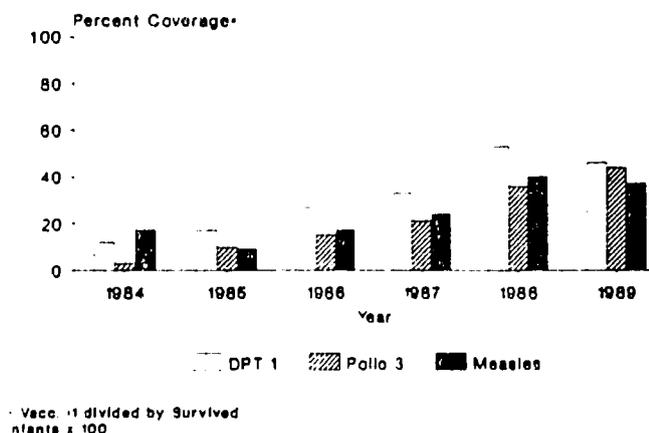
EPI

While immunization coverage levels decreased slightly from 1988 campaign levels, 1989 levels were substantially higher than any year prior to 1988.

COMPLETED STUDIES

Senior Author	Institution	Research Title
Walker, O.	Ibadan	• Studies on Cerebral Malaria in Nigeria: Risk Factors and Evaluation of Different Treatment Regimens
Oyejide, CO.	Ibadan	• Trends in Drug Utilization Pattern for Various Causes of Childhood Morbidity in a General Outpatient Department
Ogunbode, O.	Ilorin	• In Vivo and In Vitro Sensitivity of Plasmodium falciparum to Pyrimethamine in Pregnant Women in Ilorin
Babaniyi, OA.	Ilorin	• Incidence of Poliomyelitis and Neonatal Tetanus in Ilorin
Bamgboye, E.	Ibadan	• Estimation of Infant and Under Five Year Old Mortality by Indirect Method
Jinadu, MK.	Ile-Ife	• Evaluation of Home Capacity to Mix and Use Sugar and Salt Solution in a Rural Area, Oyo State
Yusuf, U.	Zaria	• Otitis Media in Children 0-5 Years in Zaria
Oyeyipo, A.	Kwara	• Assessment of Knowledge and Practices Concerning Management of Fevers in Children 0-5 Years Amongst Parents and Drug Sellers in Edu LGA, Kwara State
Ogbuokiri, JE.	Enugu	• Quality Assurance Testing of Chloroquine in Eastern Nigeria
Shoremi, MO.	Ayo-Iwoye	• Community-Based Research on Knowledge, Attitudes, and Practices and Media Habits of the People of Ogun State about EPI
Alakija, W.	Benin	• KAP Studies for ORT Promotion, Bendel State
Ogbeide	Benin	• KAP Study for ORT Promotion, Bendel State
Adigun, IO.	Oyo	• Formative Research on the Knowledge, Attitude, Practices, and Media Habits About EPI of Those Who Have Responsibility for the Care of Children Under 5 Years, Oyo State

DPT 1, Polio 3, and Measles
Vaccination Coverage
Nigeria, 1984 - 1989



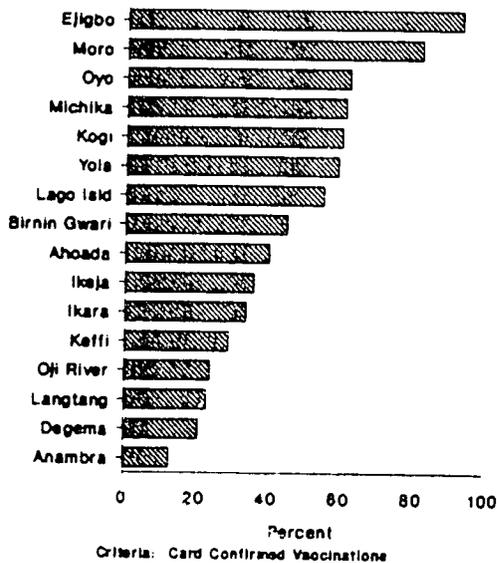
An international evaluation, conducted in November 1989, documented both areas of progress and problems in strategy and implementation.

Coverage surveys were carried out in 16 LGAs. Results showed a wide range of coverage rates.

Africa Child Survival Initiative - CCCD

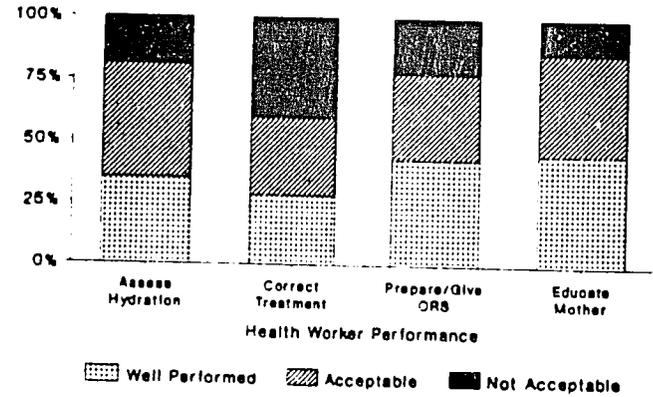
NIGERIA (continued)

Measles Vaccination Coverage
16 LGA Coverage Surveys
Nigeria, 1989



Assessment of diarrhea clinical evaluation at 63 health facilities in eight states documented the need for additional training in case management.

Assessment of Diarrhea Case Management - Nigeria, CDD Review
8 States, October 1989



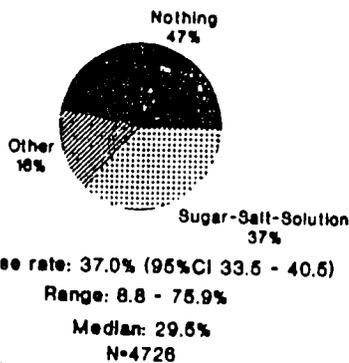
Based on 63 Observations

The international in-depth review estimated that immunization coverage prevented 100,000 deaths which could have resulted from EPI diseases in 1989.

DIARRHEA

The EPI-CDD review and operational research studies indicate that 37% of diarrhea cases received ORT in the form of SSS.

Diarrhea Treatment at Home
Nigeria



MALARIA

Sentinel surveillance system documented the widespread distribution of chloroquine-resistant *Plasmodium falciparum*.

LEVEL OF PARASITOLOGIC FAILURE TO CHLOROQUINE THERAPY
DAY 7 CHILDREN UNDER FIVE YEARS OF AGE.
NIGERIA MALARIA SURVEILLANCE NETWORK
JULY 1987 - DECEMBER 1989



National guidelines on malaria control were developed and approved by the National Council on Health.

Source: Africa Child Survival Initiative: Combating Childhood Communicable Diseases, 1989 - 90 Annual Report. US Agency for International Development, Africa Regional Project 698-0421. International Health Program Office, Centers for Disease Control, Atlanta, GA. 1990.

1

Economic Growth and Human Development

Nigeria

Nigeria's moderate rates of growth did not lead to substantial progress in human development. Its per capita GDP increased only 0.6% a year in the 1960s, partly as a result of the civil war. The discovery of oil led to per capita GDP growth of a very respectable 4% a year in the 1970s. In 1980 its per capita GDP of about \$1,000 was one of the highest in Africa, classifying it as a middle-income country. This trend reversed in the severe recession of the 1980s, with per capita GDP falling about 5% a year during 1980-87.

The unsatisfactory progress in human development, despite rapid growth in the 1970s, can be attributed to several factors.

The fruits of rapid growth do not appear to have been distributed equitably. Evidence on income distribution is weak and scattered, but there is general agreement that the distribution was getting more unequal between 1960 and 1980, with the Gini coefficient for the late 1970s reported to be about 0.60.

Nor have the supplies of the goods and services that contribute to human development been adequate. The availability of food, for example, is estimated to have fallen by nearly a quarter between 1965 and 1975. The accompanying sharp rises in food prices suggest that food supplies did not keep pace with demand.

Detailed time series on the level and structure of social sector public expenditure are not available, and the IMF provides data only for some scattered years. But other evidence on per capita public expenditures in the health sector for 1964, 1970 and 1976 show very low levels both in absolute terms and in comparison with countries at similar incomes. For example, in 1976, total expenditure (current plus capital) was only about \$1.75 per capita. By contrast, in 29 countries with a GNP per capita between \$300 and \$599, the per capita government expenditure on health exceeded \$2 in 18 countries and \$6 in 11 countries.

The bias in public spending towards curative services was also heavy. For example, in

the second five-year plan (1970-1974), 80% of federal capital expenditure was earmarked for teaching hospitals and urban areas. Lagos, with about 4% of the population in 1970, had more than 90% of all registered medical practitioners in 1973, 63% of all state hospitals and clinics and 72% of all private clinics. This strong bias towards curative care in urban areas meant that only a small proportion of the rural population had access to medical services. One estimate suggests that only 25% of Nigerians, most of them in urban areas, had health coverage in 1975.

Education received a higher priority than health in the national plans. In 1977, for example, education absorbed more than 40% of the recurrent federal budget and 55% of the recurrent state budgets, but these figures conceal the neglect of primary education. Although universal primary education was a major objective in the mid-1970s, the structure of the government's education spending has not reflected this priority. Primary education received less than 20% of public current educational expenditure in 1981, among the lowest ratios in Africa.

A systematic analysis of the distribution of the benefits of public expenditure in 1977-78 concluded that the federal government's capital expenditure was unambiguously pro-rich in both urban and rural sectors, although the distributional incidence of federal recurrent expenditure among urban and rural households was rather proportional and tended to maintain the status quo of income distribution. At the upper end of the income distribution, however, there was a tendency for benefits to rise as a proportion of income. So, the structure of public expenditure in Nigeria did nothing to compensate for the maldistribution of income.

Nigeria thus provides a clear example of failed trickle-down---of missed opportunities for human development. Rapid growth did not significantly improve the human condition because of basic flaws in the growth process and the failure to restructure meso policies to compensate for them.

HIV Infection and AIDS in Nigeria

Reported AIDS Cases

48 (as of March 1990, WHO/1990)

Incidence Rate

0.3 (per one million population,
as of August 1990)

HIV Seroprevalence†

(from selected studies)

Blood Donors

0.3% 1988-89 Lagos
(7,159 men only studied)

Commercial Sex Workers

1.7% 1988-89 Lagos
(117 women only studied)

General Population

0.3% 1989* Lagos State
(10,054 men and women studied)

Sexually Transmitted Disease Patients

0.5% 1989* Maiduguri and Calabar
(223 men and women studied)

†HIV1

*Exact date of study unclear from source literature.

FY90 USAID Funding for HIV/AIDS Supported the Following Activities:

- Epidemiology and Surveillance
- Condom Supply and Promotion
- Public Information Campaigns
- PVO Activities
- Sexually Transmitted Disease (STD) Control
- Targeted Behavior Change
- Conference Travel

Information for this table is taken directly from the HIV/AIDS Surveillance Data Base maintained by the Center for International Research of the U.S. Bureau of the Census (BUCEN). BUCEN developed this data base to track the incidence and prevalence of HIV and AIDS in developing countries. The information is compiled from epidemiologic surveys, published reports, presentations at scientific conferences and other data sources.

WHO/1990 Data is from *World Health Organization Update on AIDS Cases*. Surveillance, Forecasting and Impact Assessment Unit Office of Research, WHO Global Programme on AIDS. March 1990.



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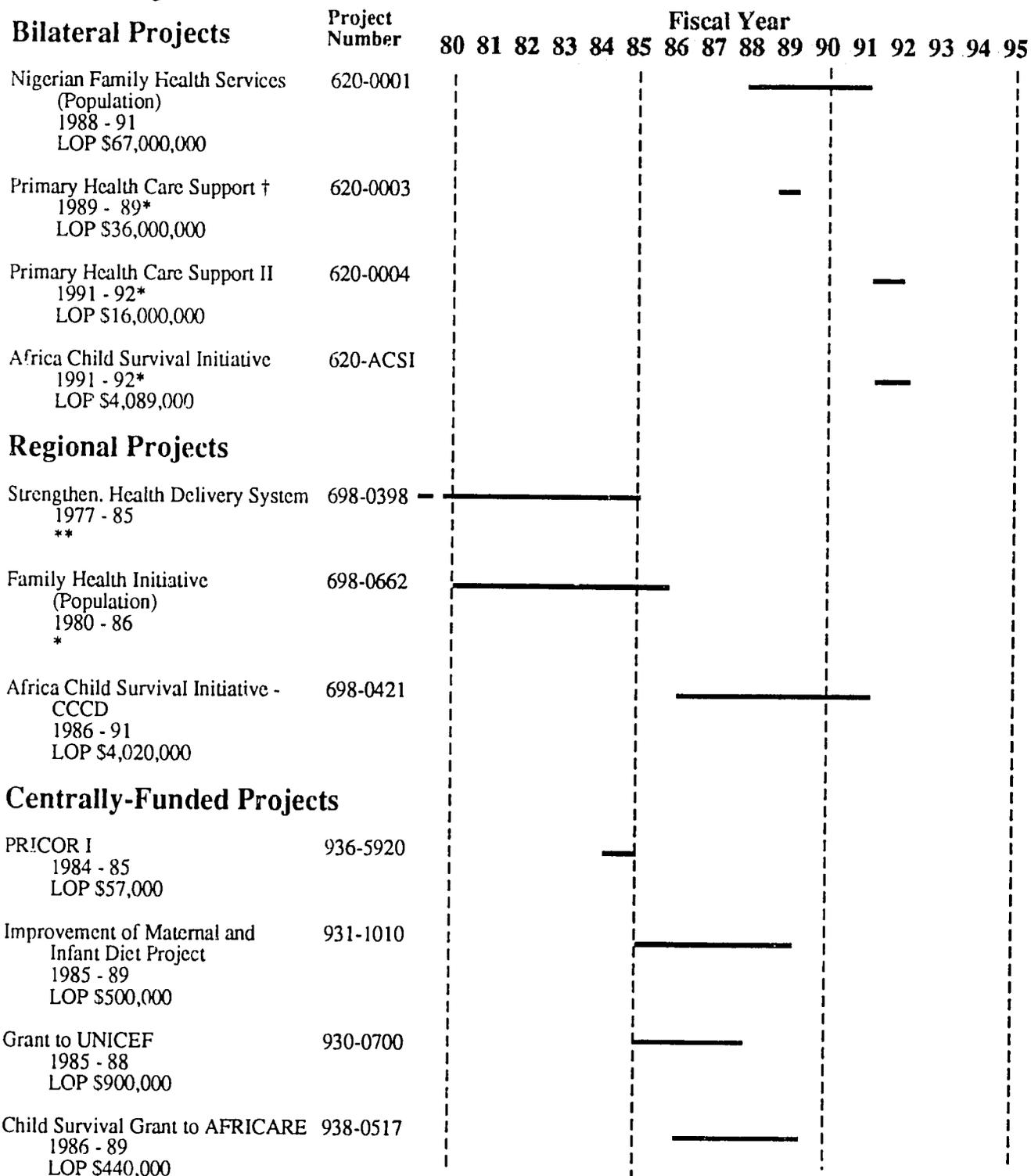
HIV Infection and AIDS Africa Regional Summary of Activities in 1990

Targeted Behavior Change	Epidemiology and Surveillance	STID Control	Resident Advisors	Public Information Campaigns	PVO Activities	Health Care Financing	Blood Product Safety	Conference Travel	Condom Supply and Promotion	Technical Assistance Activities	
								■			Botswana
■	■	■			■	■	■	■	■	■	Burkina Faso
	■			■				■			Burundi
■	■	■	■		■	■	■	■	■	■	Cameroon
■	■	■	■		■			■		■	Central African Republic
■										■	Congo
			■	■				■		■	Côte d'Ivoire
								■	■		The Gambia
■	■	■	■	■	■	■	■	■	■	■	Ghana
■	■	■	■	■	■			■	■	■	Kenya
										■	Lesotho
■	■			■	■			■	■	■	Malawi
■	■			■		■		■	■	■	Mali
										■	Mauritius
										■	Mozambique
■				■				■	■	■	Niger
■	■	■		■	■			■	■	■	Nigeria
■					■			■	■	■	Rwanda
		■						■	■		Senegal
	■							■			Sierra Leone
				■							South Africa
■				■	■						Swaziland
■	■	■	■	■	■			■	■	■	Tanzania
										■	Togo
■	■	■		■	■	■	■	■	■	■	Uganda
■	■			■	■			■	■	■	Zaire
■	■	■		■		■		■	■	■	Zambia
■		■		■	■			■	■	■	Zimbabwe
17	14	11	6	15	13	6	8	21	23	Total	

Source: *HIV Infection and AIDS: A Report to Congress on the USAID Program for Prevention and Control*. U.S. Agency for International Development, Washington, DC 20523. May 1991.

Timeline: USAID-Funded Activities Related to Health in Nigeria FY 1980 to Present

This chart contains USAID-funded projects active since 1980 known to contain a health or child survival component. Some nutrition and population projects are also included. The project's beginning year and ending year appear after the project title. Dollar amount for bilateral projects is the total authorized 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 total authorized LOP for Nigeria. Please see Data Notes.



*Fiscal Year of Final Obligation

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

†Non-Project Assistance Program



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

Centrally-Funded Projects	Project Number	Fiscal Year															
		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
PRITECH II 1987 - 92 LOP \$469,000	936-5969										—	—	—	—			
CSAP Support (Johns Hopkins U. - Child Survival Fellow) 1987 - 92 *	936-5951										—	—	—	—			
Child Survival Grant to Rotary International 1987 - 92 LOP \$1,100,000	938-0537										—	—	—	—			
HEALTHCOM 1987 - 90 LOP \$911,000	931-1018										—	—	—				
Child Survival Grant to Adventist Development Relief Agency 1987 - 90 LOP \$300,000	938-0529										—	—	—				
Child Survival Grant to World Vision Relief and Development 1988 - 92 LOP \$400,000	938-0505											—	—	—	—		
Applied Diarrheal Disease Research 1988 - 90 LOP \$176,000	936-5952											—	—	—			
Child Survival Grant to AFRICARE 1989 - 91 LOP \$400,000	938-0AFR												—	—			

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

- AIDSCOM
- AIDSTECH
- Demographic and Health Surveys
- HBCU Research Grants
- Linkages to Medical Education
- PRITECH I
- Project SUPPORT
- REACH
- USDA/NEG: Consumption Analysis of
Agricultural Policies
- Vector Biology and Control
- Water and Sanitation for Health II
- Women and Infant Nutrition

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

Timeline: USAID Centrally-Funded Population Projects in Nigeria

This chart contains USAID-funded population projects which had in-country subprojects active in 1988 and/or 1989, as reported in the *Worldwide Reports of A.I.D. Population Programs FY 89*. Information for this report comes from the Population Projects Database maintained by John Snow Incorporated.

Subproject funding and timeframe information is summarized and presented by contractor or grantee and the project title. Only those projects with in-country sub-

projects which were active in FY 88 and/or FY89 are included in the timeline. The Beginning Year indicates the start of the first subproject in Nigeria and the End Year indicates when the last subproject activity is scheduled to end. The expenditure data presented in this table is the sum of all in-country subprojects Life Of Project expenditures. The Life of Project expenditures include both actual expenditures (through 1989) and the projected expenditures (through 1990).

Contractor/Grantee "Project Title"	Project Number	Expenditures Total of Subproject LOPs	Beg. Yr.- End Yr.	Fiscal Year															
				80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) Training in Reproductive Health	936-3045	\$2,731,000	1981 - 90																
The Pathfinder Fund Family Planning Services, Pathfinder Fund	936-3042	\$2,415,000	1983 - 88																
Family Health International Family Health International	936-3041	\$164,000	1984 - 92																
Assoc. for Voluntary Surgical Contraception Assoc. for Voluntary Surgical Contraception Program	932-0968/ 936-3049*	\$1,079,000	1984 - 90																
Johns Hopkins University Population Communication Services	936-3004	\$133,000	1984 - 89																
Columbia University Strategies for Improving Service Delivery	936-3030	\$402,000	1985 - 89																
Family Planning International Assistance Family Planning International Assistance Program	936-0955	\$361,000	1985 - 89																
The Futures Group Resources for Awareness of Population Impacts on Development (RAPID)	936-3017/ 936-3046*	\$120,000	1985 - 88																
Research Triangle Institute Integrated Population Development Planning (INPLAN)	936-3027	\$254,000	1985 - 88																

* Second project number indicates a continuation of activities.



CENTER FOR INTERNATIONAL HEALTH INFORMATION/ISTI
USAID Health Information System

Timeline: USAID Centrally-Funded Population Projects in Nigeria (continued)

Contractor/Grantee Project Title	Project Number	Expenditures Total of Subproject LOPs	Beg. Yr.- End Yr.	Fiscal Year															
				80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
University of North Carolina, INTRAH Family Planning Training PAC Personnel II	936-3031	\$541,000	1985 - 88							█	█	█							
John Snow, Incorporated (JSI) Family Planning Enterprise	936-3034	\$163,000	1986 - 89								█	█	█	█					
John Short & Associates (JSA) Technical Information on Population for the Private Sector (TIPPS)	936-3035	\$25,000	1986 - 88								█	█	█						
Institute for Resource Development (IRD) Demographic and Health Surveys (DHS)	936-3023	\$159,000	1986 - 88								█	█	█						
The Futures Group Options in Population Policy (OPTIONS)	936-3035	\$62,000	1987 - 89																█
Management Sciences for Health (MSH) Family Planning Management Training	936-3039	\$209,000	1987 - 88																█
Center for Development and Population Activities (CEDPA) Extending F. P. S. through Third World Women Managers	936-3037	\$47,000	1987 - 88																█

Following is a list of additional Centrally-Funded Population projects reporting activities in Nigeria. These projects provided technical assistance but did not report any in-country subprojects.

Contractor/Grantee	Project Title
Centers for Disease Control Dual and Associates	Population Program Development and Support Population Technical Assistance (POPTECH)
The Futures Group	Contraceptive Social Marketing I (SOMARC)
Johns Hopkins University	Population Information Program
John Snow Incorporated	Family Planning Logistics Management
Population Council	Population Council Program

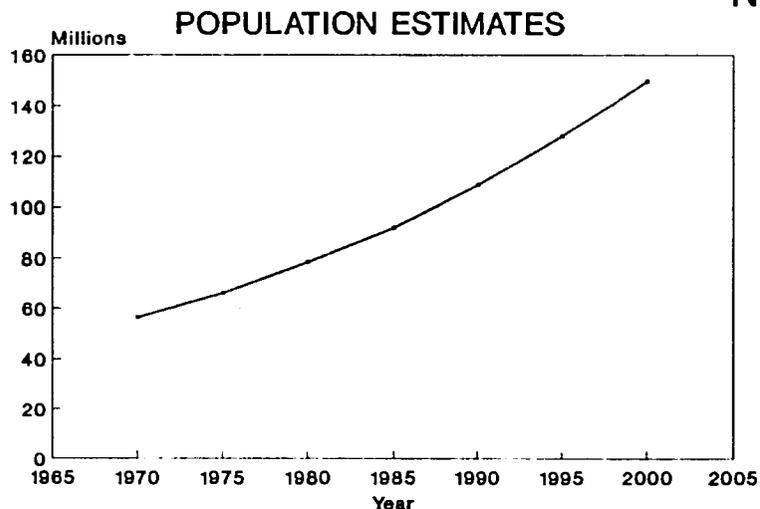
Trends: Selected Demographic Indicators Nigeria 1950 – 2000

	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
Total Population (000)*											
UN/POP/1988.....	32,935	37,094	42,305	48,676	56,581	66,346	78,430	92,016	108,542	127,694	149,621
BUCEN/1989.....	41,198	-	51,145	-	66,849	-	90,035	-	118,865	-	160,930
		1950- 1955	1955- 1960	1960- 1965	1965- 1970	1970- 1975	1975- 1980	1980- 1985	1985- 1990	1990- 1995	1995- 2000
Infant Mortality Rate											
UN/POP/1988.....		207	194	185	146	135	124	114	105	96	87
Under 5 Mortality Rate											
UN/POP/#105.....		345	325	310	290	250	209	191	173	157	141
Total Fertility Rate											
UN/POP/1988.....		6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.6	6.2
Number of Live Births (000)											
UN/POP/1988.....		8,922	10,235	11,730	13,092	15,140	17,746	20,811	24,326	27,448	30,662
Crude Birth Rate											
UN/POP/1988.....		51.0	51.6	51.6	49.8	49.3	49.0	48.8	48.5	46.5	44.2
Crude Death Rate											
UN/POP/1988.....		27.2	25.3	23.6	21.6	19.9	18.4	17.0	15.6	14.1	12.6

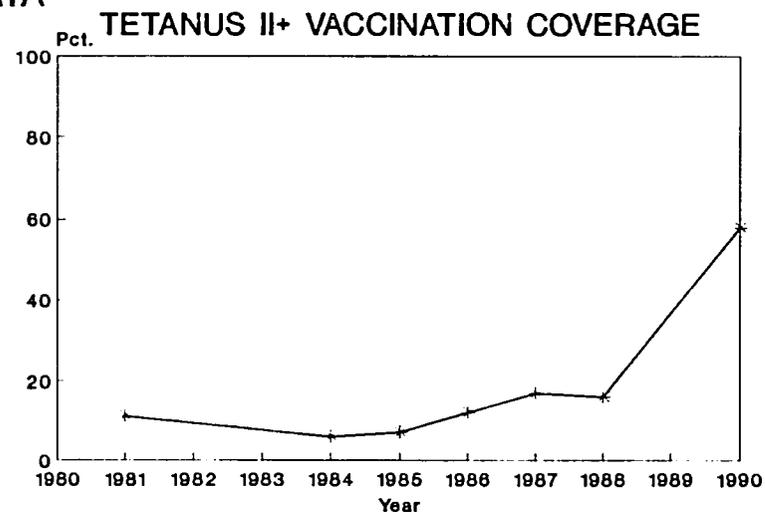
*Although two distinct sources of population estimates are presented in this chart, USAID/AFR uses those provided by the United Nations Population Office (UN/POP/1988).

CENTER FOR INTERNATIONAL HEALTH INFORMATION/ISTI
USAID Health Information System

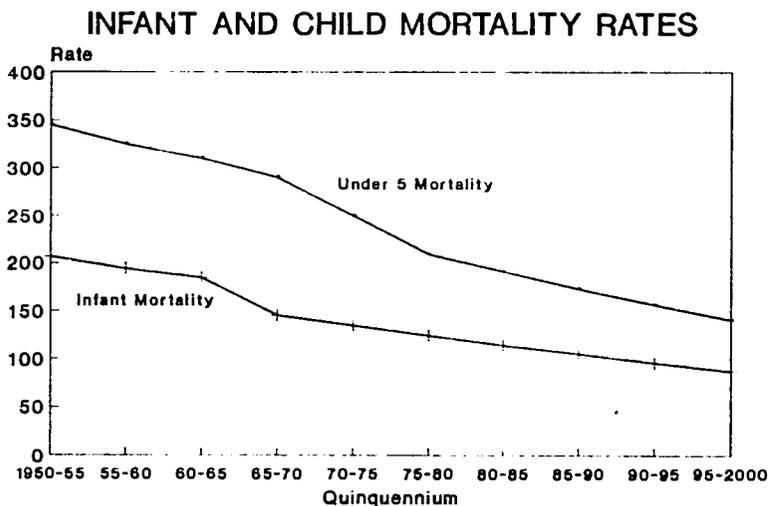
NIGERIA



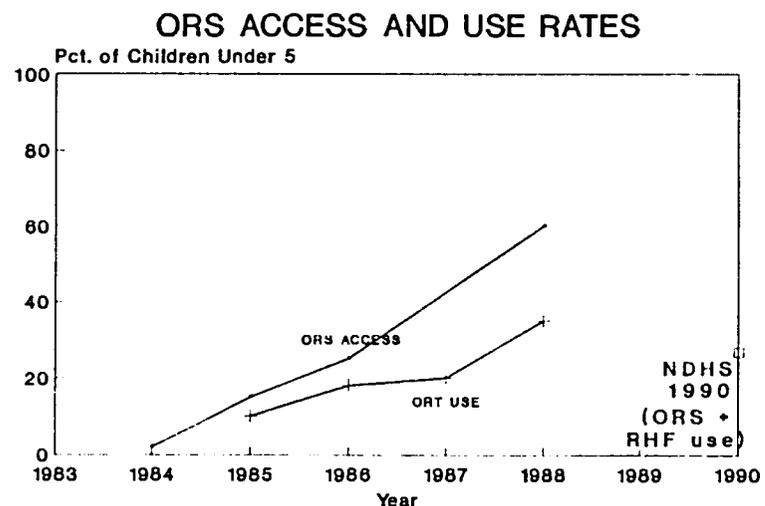
SOURCE: United Nations, World Population Prospects, 1990



SOURCE: World Health Organization Annual Reports of the EPI Programme



SOURCE: United Nations; 1) World Population Prospects, '90, and 2) Mortality of Children Under Age 5 '89



SOURCE: WHO, Annual Reports of the Programme for Control of Diarrheal Diseases; and Nigeria DHS Prelim. Report

NDHS 1990 (ORS + RHF use)
CIHI, ISTI; 6/91

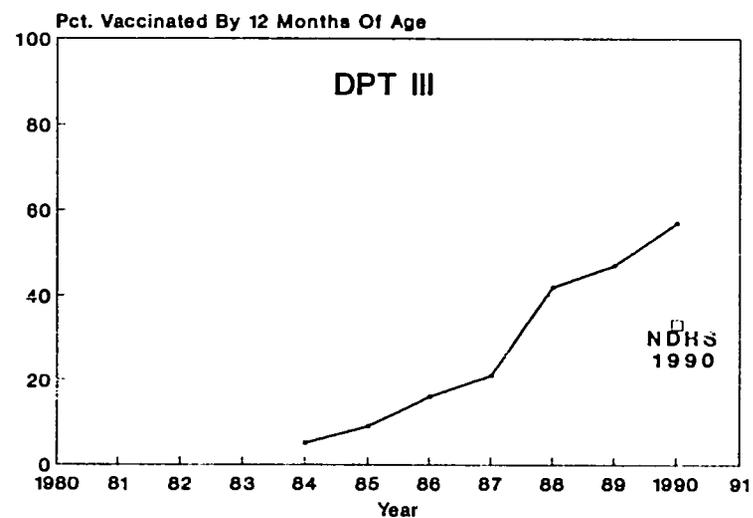
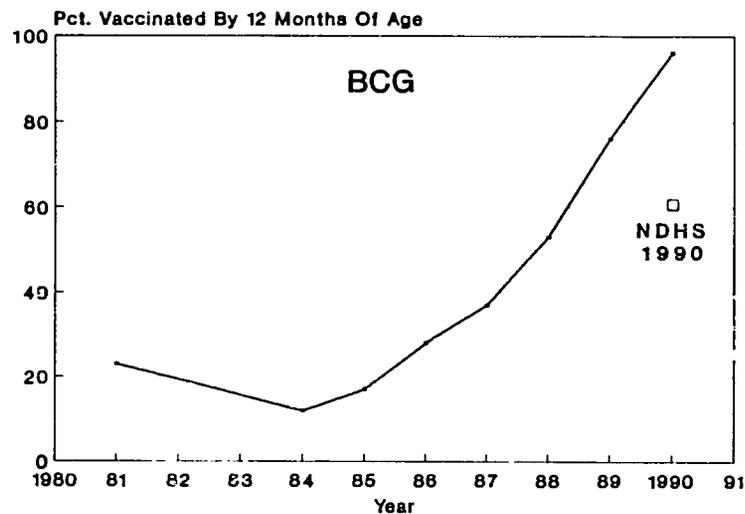
Trends: Selected Health and Child Survival Indicators Nigeria 1980 - 1990

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Vaccination Coverage											
WHO/EPI											
a. BCG.....		23	-	-	12	17	28	37	53	76	96
b. DPT 3.....		-	-	-	5	9	16	21	42	47	57
c. Measles.....		55	-	-	17	9	17	24	42	31	54
d. Polio 3.....		-	-	-	3	10	22	21	42	47	57
e. Tetanus 2.....		11	-	-	6	7	12	17	16	16	58
ORS Access and ORT Use											
WHO/CDD, DHS/1990											
a. ORS Access.....					2	15	25	-	60	-	-
b. ORT Use.....					-	10	18	20	35	-	27
Contraceptive Prevalence											
BUCEN/1989, DHS/1986, DHS/1990											
a. All Methods.....			6.2				13.0**				6.0
b. Modern Methods.....			0.7				9.3**				3.5
Nutrition and Infant Feeding											
DHS/1990											
a. Exclusively Breastfed (0-3 months).....											1.3
b. Introduction of Solids.....											57.2
Water Supply Coverage (% Served)											
WASH/1989											
a. Urban Areas.....	60%								60%		
b. Rural Areas.....	20%								30%		
Adequate Sanitation Coverage (% Served)											
WASH/1989											
a. Urban Areas.....	-								10%*		
b. Rural Areas.....	-								10%*		

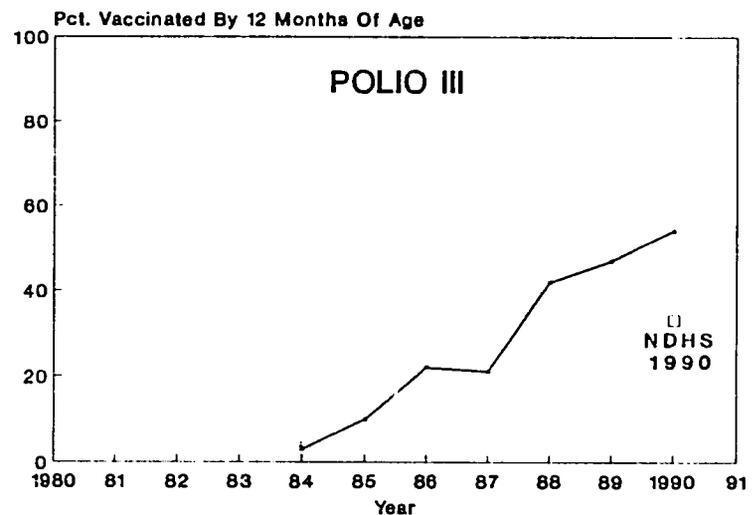
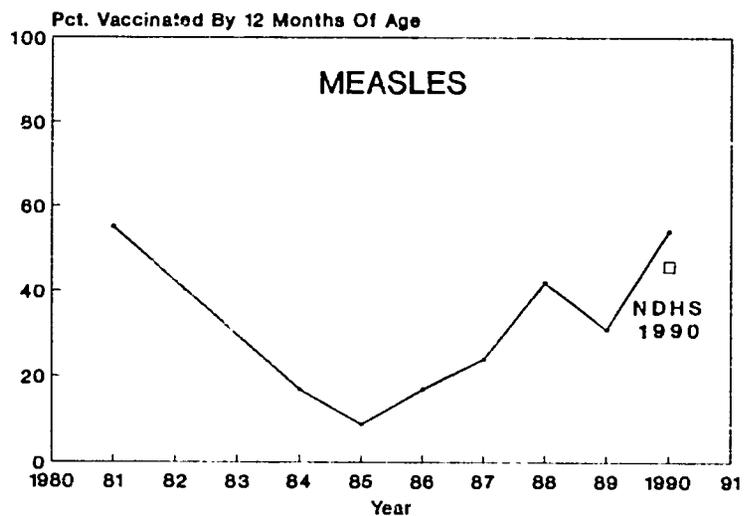
See Data Notes.

*Sanitation coverage values shown are rough estim **Ondo State only. 1986 Demographic and Health Survey.

VACCINATION COVERAGE RATES IN NIGERIA



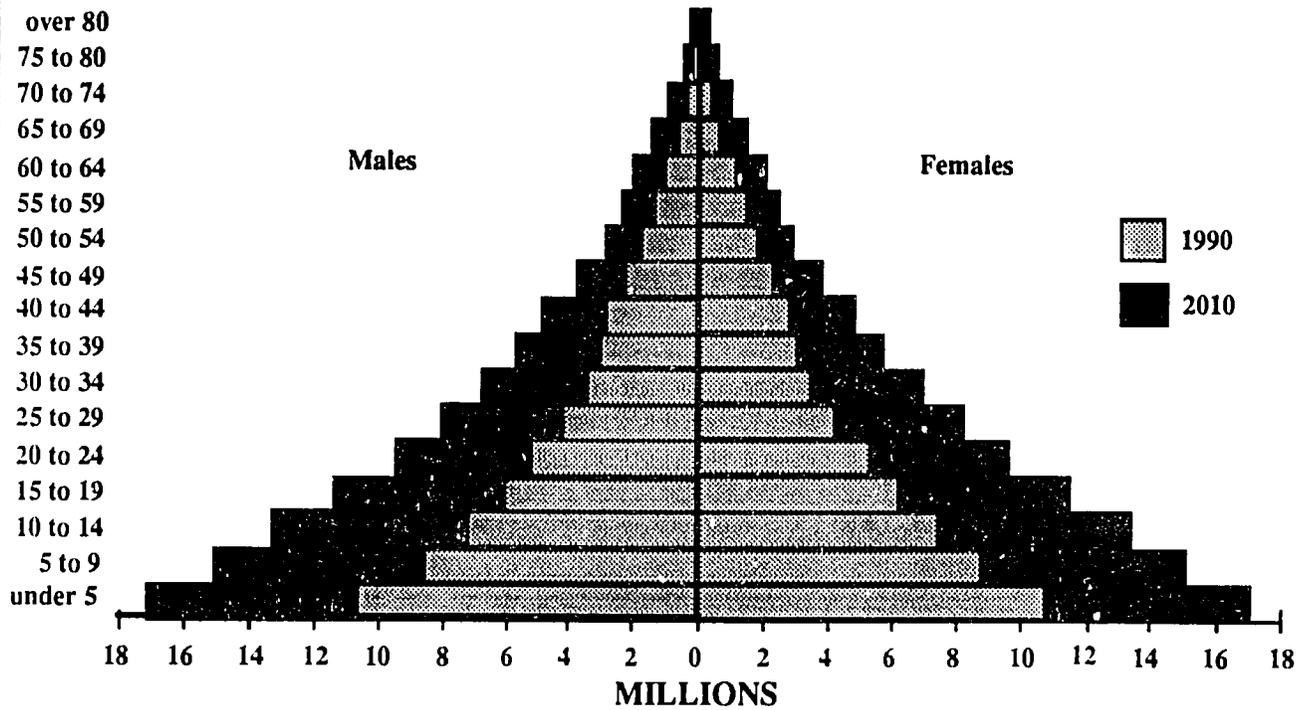
Note: DHS data are for children 12-12 months of age whose mothers were able to present a health card.



SOURCE: CEIS/EPI/WHO and Nigeria DHS Preliminary Report

CIHI, ISTI; 6/91

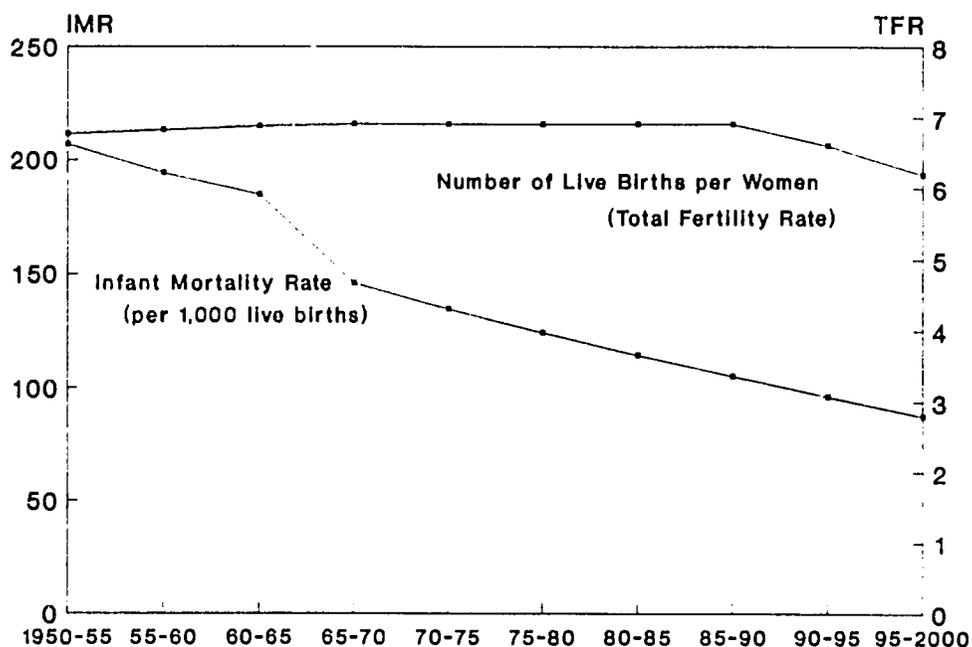
Population Pyramid for Nigeria by age and gender for 1990 and 2010



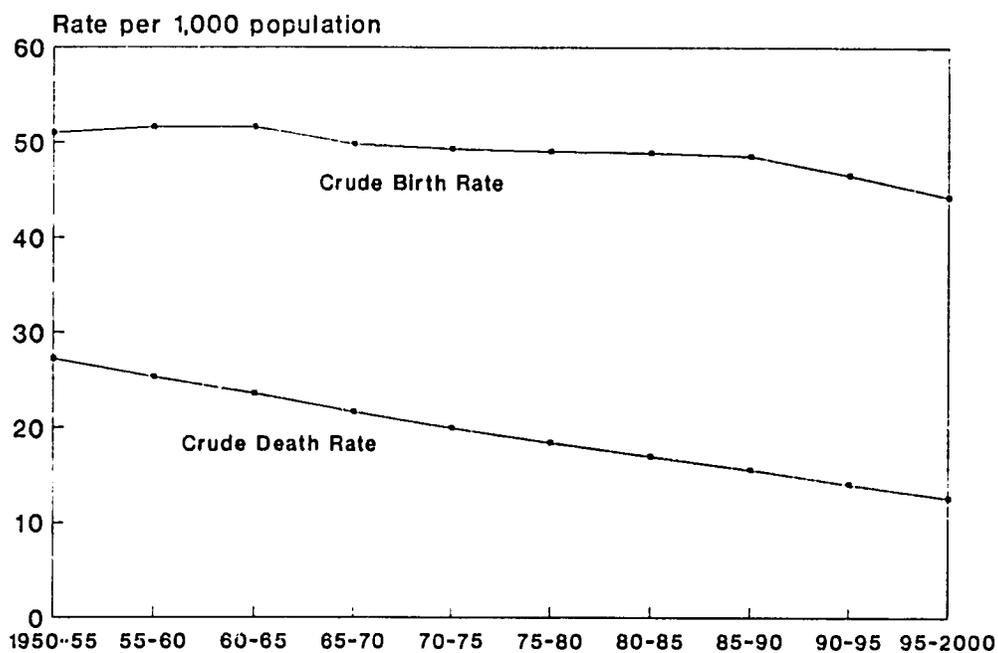
Age Group	Percent of Nigerian population	
	1990	2010
under 5	18.1	16.1
5 to 14	26.8	26.7
15 to 59	51.2	52.2
over 60	3.9	5.0
Total	100	100

Source: U.S. Bureau of Census, International Data Base. 1991

The Demographic Transition in Nigeria 1950-2000



The relationship between IMR and TFR is currently a subject under review by the scientific community. While there is not conclusive evidence that the IMR and TFR are causally linked and necessarily decline together, there is empirical evidence for suspecting that such a reinforcing relationship exists as the pattern is observable in most countries.

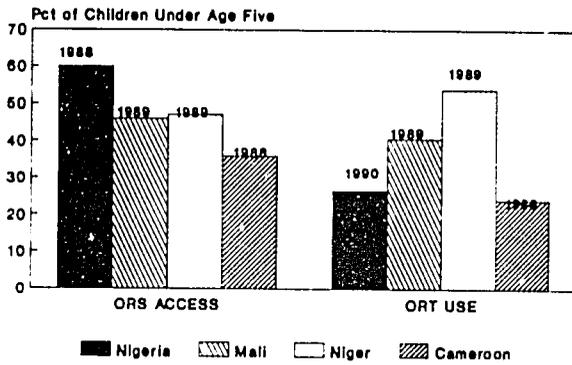


Source: UN/POP/1990

CIHI/ISTI 7/91

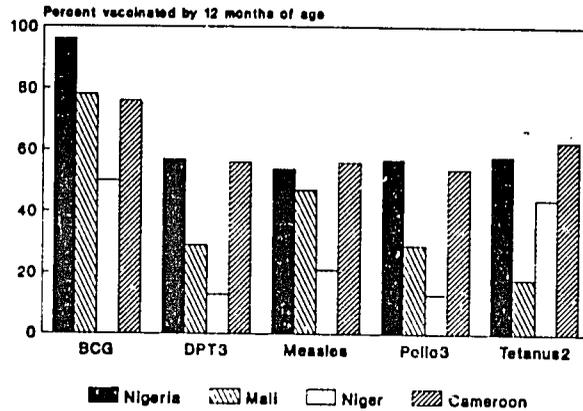
COMPARATIVE CHILD SURVIVAL INDICATORS NIGERIA AND SELECTED COUNTRIES

ORS Access and ORT Use Rates



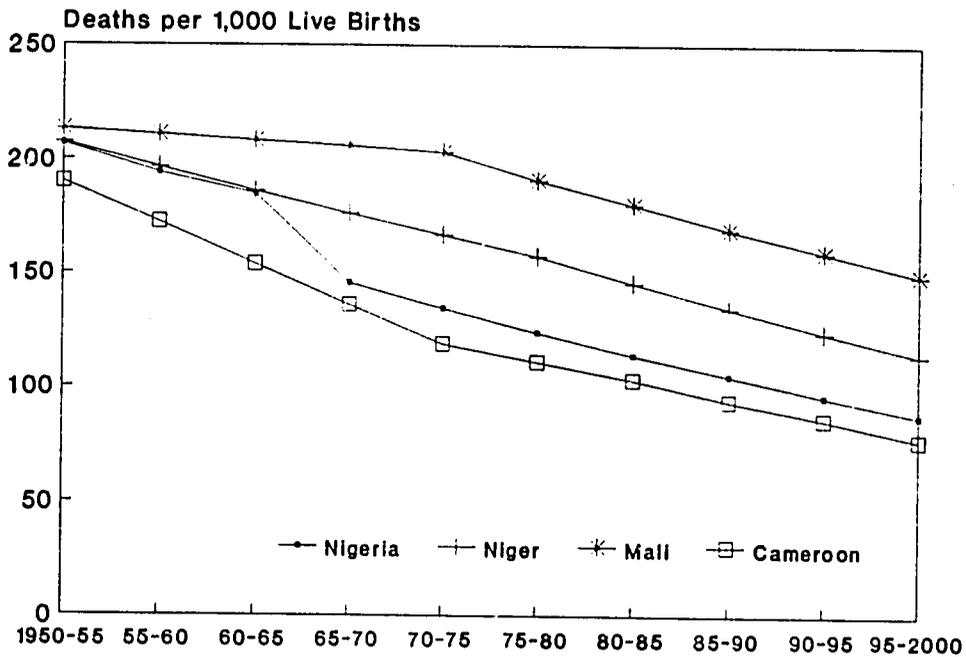
SOURCE: CDD Programme Reports/WHO;
Mali ORT use-PRITECH/GRANA 1989;
Nigeria ORT use-NDHS Prelim. Report 1990

1990 Vaccination Coverage Data



SOURCE: EPI/WHO

Estimates of Infant Mortality Rates



Source: World Population Prospects, 1990

CIHI, ISTI; 7/91

Anthropometric Indicators of Nutritional Status in Nigeria

Region Country Area	Dates of Survey	Number examined	Age Group (Years)	Wasted Weight for Height	Stunted Height for Age	Low Weight for Age	Notes	Ref. no.
				percent below median				
				-2 SD	-2 SD	-2 SD		
Local	1976-77	483	0-2.99			47.0	Zaria Village; Controls	1025
		161	0-0.99			29.0		
		161	1			62.0		
		161	2			50.0		
	1983	915	0-1.99	2.2	38.8	20.4	low- income in Ibadan	1015

E = Estimate ! = Sample Size < 50

This table is taken directly from the World Health Organization's Anthropometry System. This recently developed system presents a collection of historical nutrition data as well as most current studies.

1025 Cherian, A. et al. The Epidemiology of Malnutrition in Young Children in Zaria, Nigeria. *Ecology of Food and Nutrition*, 16: 1-12 (1985).

1015 Omotola, B.D., et al. Nutritional Status of infants and children from the low income group of Ibadan. *Nutrition Reports International*, 31(6): 1309-18 (1985)

Water and Sanitation Country Summary Nigeria

December 1988

Decade Progress

* Population: Total 112 M (Urban 32%, Rural 68%)
* Population Growth Rate: 2.9% per year (Urban 5.2%)
GNP Per Capita: US \$640
Adult Literacy: Total 42% (Male 54%, Female 31%)
* Life Expectancy: 47 years (Male 46, Female 48)
* Infant Mortality (under 1 year): 107 per 1,000 births
* Child Mortality (under 5 years): 182 per 1,000 births
Status of Decade/Sector Plan: No formal plan; memorandum on rural water supply and sanitation is pending GON approval
Water and Sanitation Agencies
State Water Boards, State Ministries of Works
Department of Water Resources, Federal Ministry of Agriculture, Water Resources, and Rural Development
Local Government Authorities

Nigeria is Africa's largest country in terms of population. The 1988 estimated level is approximately 112 million, and by the year 2000 there will be approximately 160 million Nigerians. Because the population is large and the level of coverage is relatively low, especially in rural areas, the sector places enormous investment demands on the country's development budget.

Nigeria has no formal Decade Plan. A World Bank sector memorandum prepared in 1984 has been adopted by the central government and a final draft of a rural water supply and sanitation sector memorandum prepared under the World Bank's sponsorship is said to be pending government approval.

On the whole, sector development is driven by the largely autonomous actions of Nigeria's 20 separate states. Each state has a water board which is supposed to act as an autonomous public utility. In reality, the state water boards have limited autonomy due to interference by one or several state ministries.

Over the last several years, external development assistance has been chan-

neled to the state water boards of various states, mainly by the World Bank and other UN agencies (virtually no bilateral aid has been available), for the development of urban water supply projects. Urban sanitation has largely been left to local government authorities but provision of this service is extremely poor even in the largest cities.

In the rural water supply sector, there is no one agency with clear cut responsibility. Many agencies at the state and federal levels are involved, but none has had any significant success. Recently, the government has adopted the UNICEF approach for rural water supply and sanitation services. This 'RUWATSAN' program is intended to function as the national model for this sub-sector. However, the RUWATSAN program is still limited to the UNICEF project functioning in 10 of the country's 20 states, providing coverage for about 4 million rural persons.

Table 1 represents rough cost estimates required to reach 80 and 30% coverage levels, respectively, for water supply and sanitation services. As may be seen, the amounts needed are enormous.

TABLE 1
INVESTMENT REQUIREMENTS
NIGERIA

ESTIMATED COVERAGE COSTS AND POPULATION	URBAN		RURAL		TOTALS
	SUPPLY	SANITATION	SUPPLY	SANITATION	
Population Served 1988	20.5	3.4	23.3	7.8	
Coverage Target 2000	56.5	18.8	86.3	29.5	
Shortfall/Unserved	36.0	15.4	63.0	21.7	
Cost (US \$)	1,008.0	1,879.0	1,170.0	152.0	4,209.0
Proposed Investment					
Net Shortfall					

1 Population and costs in millions.

2 Assume population 1988 34.2M urban, 77.7M rural; year 2000 62.8M urban, 98.1M rural.

3 Assume urban growth rate of 5.2%.

4 Assume % access to water supply 1988 80% urban, 30% rural; year 2000 90% urban, 90% rural.

5 Assume % access to sanitation 1988 10% urban, 10% rural; year 2000 30% urban, 30% rural.

6 Assume per capita cost urban water supply \$28 for standpipe service, urban sanitation \$122, rural water supply \$18, sanitation \$7.

NOTE: Many table values, especially estimates for sanitation coverage are rough estimates. Basis of estimates given in notes accompanying Table 1.

* These are figures from 1988 when WASH completed its publication and are therefore different from the current figures presented throughout this profile.

Source: *Recommendations to A.I.D. for a Water and Sanitation Strategy, with Profiles of Twenty African Countries*. WASH Project, CDM & Associates, Arlington, VA. February 1989.

DATA NOTES

DEMOGRAPHIC INDICATORS

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

The **Number of Live Births** is an estimate of the number of children born alive in a given year.

The **Crude Birth Rate** is the number of live births in a year over the total per thousand midyear population.

The **Crude Death Rate** is the number of deaths for all ages in a given year per thousand midyear population.

The **Infant Mortality Rate** is the estimated number of deaths in infants (children under age one) in a given year per thousand 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).

Although acknowledged as one of the best indicators of "development," the infant mortality rate is one of the more difficult to calculate. One problem inherent in the definition of the indicator is the fact that some portion of the deaths in the given year are occurring among children born in the previous year; that is the numerator of the indicator is determined in a different cohort of children than is the denominator. Estimates are generally made for a three or five year period to minimize the effects of this inherent weakness. For this reason, efforts to observe annual trends in this indicator can be misleading.

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

Life Expectancy at Birth is 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 is a mid-year estimate of the total number of children under age 1.

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

The **Total Fertility Rate** is an estimate of the average number of children a woman would bear during her entire reproductive lifespan given current age-specific fertility rates.

VACCINATION COVERAGE RATES

Vaccination Coverage in Children is defined as an estimate of the percentage of living children between the ages of 12 through 23 months who have been vaccinated before their first birthday – three times in the cases of polio and DPT and once for both measles and BCG. 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 is 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. (This appropriate

number varies with the number received and time elapsed.) The revised indicator is referred to as IT2+. Rates are computed using administrative methods or surveys.

ORS ACCESS AND ORT USE RATES

The **ORS Access Rate** is 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 and, therefore, it may fluctuate dramatically as improved methods of estimation are devised.

The **ORT Use Rate** is an estimate of the proportion of all cases of diarrhea in children under age five treated with ORS and/or a recommended home fluid. 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 the two week period prior to the survey.

CONTRACEPTIVE PREVALENCE

The **Contraceptive Prevalence Rate** is an estimate of the proportion of women, aged 15 through 44 (or in some countries 15 through 49), in union or married, currently using contraception. "Modern methods" of contraception depend on the use of products, devices, or surgery, such as pills, injectables, IUDs, condoms, vaginal methods (spermicides, diaphragms, or caps) and voluntary sterilization. Traditional methods of contraception do not depend on the use of products or devices, such as periodic abstinence, rhythm, or withdrawal. "All methods" include modern and traditional methods. Data in the "How USAID Helps" Fact Sheet is for modern methods only.

NUTRITION

Adequate Nutrition Status is the proportion of children 12 through 23 months of age who are adequately nourished. 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" (standard deviations) below the median for 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 the World Health Organization. Adequate nutrition status, as defined in this paragraph, is the complement to the more traditional indicator – percent inadequately nourished or, as commonly phrased, malnourished.

The percent inadequately nourished is a composite indicator of two distinct manifestations of nutritional deficiency. A child of a certain age is **stunted** if his/her height is less than the height corresponding to two "Z-scores" (standard deviations) below the median height for children of that age. Stunting is evidence of long-term nutritional deprivation. A child of a certain height is **wasted** if his/her weight is less than the weight corresponding to two "Z-scores" (standard deviations) below the median weight for children of that height. Wasting is evidence of a severe nutritional deficiency of short duration.

Appropriate Infant Feeding is 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 considered 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 children in the target group (children under 1) are being fed correctly at the moment of the survey. They do not give an indication of the proportion of children fed appropriately throughout their first year.

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Exclusively Breastfed is an estimate of the proportion of infants through four months (120 days) of age who receive no foods or liquids other than breast milk.

Introduction of Solids is an estimate of the proportion of infants over six months (181 days) of age still breastfeeding but also receiving complementary weaning foods.

Median Duration of Breastfeeding is an estimate of the median duration of breastfeeding computed from cross-sectional survey data using the Current Status Method. According to this method, the value reported is the first month of life during which half of the children surveyed are no longer breastfed. The first month of life is counted as "0", the second as "1", etc.

HIV/AIDS

Human Immunodeficiency Virus (HIV) seroprevalence is a measure of the proportion of a study population showing serologic evidence of antibodies to HIV. HIV seroprevalence is considered a measure of persons with HIV infection, and not with AIDS. However, over 50% of persons with HIV are expected to develop AIDS within 8 to 10 years of being infected, and most are expected to develop AIDS within 20 years.

Most HIV seroprevalence studies are conducted in urban areas and among people who are at increased risk of becoming infected with HIV. Sentinel surveillance in these groups of people is an important means of monitoring the spread of infection. Thus the data is rarely a reflection of the level of HIV infection in the general population.

WATER AND SANITATION

Urban Water Supply Coverage is an estimate of the percentage of all persons living in urban areas (defined as population centers

of 2000 or more persons) who live within 200 meters of a stand pipe or fountain source of water.

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

Urban Adequate Sanitation Coverage is an estimate of the percentage of all persons living in urban areas (defined as population centers of 2000 or more persons) with sanitation service provided through sewer systems or individual in-house or in-compound excreta disposal facilities (latrines, septic tanks).

Rural Adequate Sanitation Coverage is an estimate of the percentage of all persons not living in urban areas with sanitation service provided through individual in-house or in-compound excreta disposal facilities (latrines).

USAID PROJECTS AND FUNDING

The primary source for information related to USAID projects is the USAID Health Projects Database (HPD) operated by ISTI's Center for International Health Information.

The HPD tracks bilateral, regional and centrally-funded USAID projects and sub-projects with a health component, including child survival, AIDS, nutrition, water supply and sanitation, and other health related activities. Projects are identified for the HPD through the annual Health and Child Survival Questionnaire, Annual Budget Submissions (ABS), and the Congressional Presentation (CP). The HPD includes some, but not all, health and nutrition related projects funded with local currency (PL480) or with Population Account monies. Project Development and Support (PD&S) activities are included in the HPD when they have been identified as health related in the CP, ABS or questionnaire.

Sources as referred to throughout the profile:

BUCEN/1989 - *World Population Profile: 1989*, Bureau of Census, U.S. Department of Commerce.

DHS/1986 - Ondo State, Nigeria: Demographic and Health Survey 1986, Medical/Preventive Health Division Ministry of Health, Akure, Ondo State, Nigeria and Demographic and Health Surveys, IRD/Macro Systems, Inc. Columbia, MD, April 1989.

DHS/1990 - Nigeria Demographic and Health Survey, 1990. Preliminary Report. Federal Office of Statistics, Nigeria and Demographic and Health Surveys, IRD/Macro Systems, Inc. Columbia, MD, March 1991.

UN/POP/1990 - *World Population Prospects: 1990*, Population Division, Department of International Economic and Social Affairs, United Nations.

UN/POP/105 - *Mortality of Children under Age 5: World Estimates and Projections, 1950 - 2025*, Population Studies No. 105, Population Division, Department of International Economic and Social Affairs, United Nations.

WASH/1989 - *Recommendation to A.I.D. for a Water and Sanitation Strategy with Profiles of Twenty African Countries*. Water and Sanitation for Health, CDM and Associates, Arlington, VA June 1989.

WHO/EPI - The annual reports of the Expanded Programme on Immunization Report of the World Health Organization the most recent being WHO/EPI/CEIS/91.1, July 1991.

WHO/CDD - The annual reports of the Diarrheal Disease Control Program of the World Health Organization

WHO/NU1989 - The Anthropometry System of the World Health Organization, Nutrition Unit, 1989.

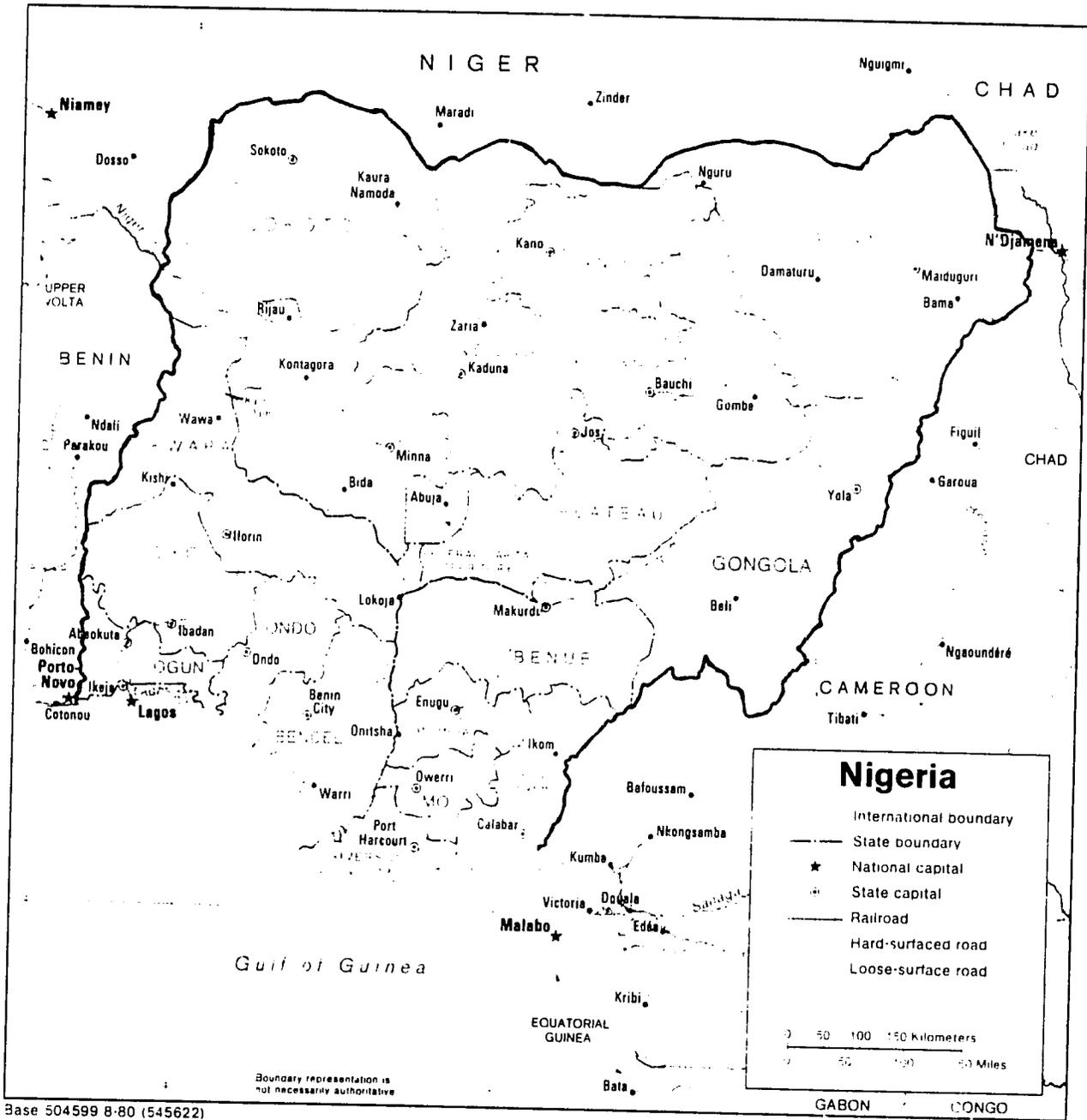
"How USAID Helps" fact sheet sources: (not included above)

Contraceptive Prevalence (Modern Methods, 15-49) - The CPR is from the World Fertility Survey as cited in the World Population Profile; 1989 published by the US Department of Commerce, Bureau of the Census.

Sources for Funding and Timeline information:

Funding and project information for the Timelines and Funding charts is taken primarily from the Health Projects Database of the USAID Health Information System maintained by the Center for International Health Information. Additional sources include Congressional Presentations from FY 1980 through FY 1992. Population project information came from two additional sources: 1) Project Accounting Information System Data File (Report WW DAØIX), Office of Financial Management, USAID, December 1989 and, 2) *World-wide Reports of A.I.D. Population Projects, FY 1989*, Population Projects Database, John Snow, Inc., Boston, MA. April 1990.

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