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PROJECT APPRAISAL DOCUMENT

FOR

PROPOSED LOANS

IN THE AMOUNT OF US$25.0 MILLION TO THE DOMINICAN REPUBLIC
AND US$15.15 MILLION TO BARBADOS

IN SUPPORT OF THE FIRST PHASE OF THE US$155.0 MILLION
MULTI-COUNTRY HIV/AIDS PREVENTION AND CONTROL
ADAPTABLE PROGRAM LENDING (APL)
FOR THE CARIBBEAN REGION

June 5, 2001

Country Management Unit for the Caribbean
Human Development Sector Management Unit
Latin America and the Caribbean Region

ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
APL	Adaptable Lending Program
ARV	Anti-Retroviral
AZT	Azido-Deoxy Thymidine
CAFRA	Caribbean Association of Feminist Research and Action
CAREC	Caribbean Epidemiology Center
CARICOM	Caribbean Community and Common Market
CARIFORUM	Commission of African, Caribbean and Pacific States
CAS	Country Assistance Strategy
CBO	Community-Based Organization
CCC	Caribbean Council of Churches
CCH	Caribbean Co-operation in Health
CDB	Caribbean Development Bank
CDC	Centers for Disease Control
CGCED	Caribbean Group for Cooperation in Economic Development
CHA	Caribbean Hotel Association
CHRC	Caribbean Health Research Council
CIDA	Canadian International Development Agency
COHSOD	CARICOM Ministerial Council on Human and Social Development
CRN+	Caribbean Network of People Living with HIV/AIDS
CRC	Caribbean Red Cross
CSW	Commercial Sex Worker
CTO	Caribbean Tourism Organization
DALE	Disability-Adjusted Life Expectancy
DFID	British Department for International Development
EC	European Commission
EDF	European Development Fund
EU	European Union
FMU	Fertility Management Unit (UWI)
FTC	French Technical Co-operation
GDP	Gross Domestic Production
GTZ	German Technical Co-operation
HAART	Highly Active Anti-retroviral Therapy
HIV	Human Immune-deficiency Virus
HFLE	Health and Family Life Education
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IDB	Inter-American Development Bank
IDU	Injecting Drug Users
IEC	Information, Education and Communication
ILO	International Labor Organization
IPPF	International Planned Parenthood Federation

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LACASO	Latin American and Caribbean Council of AIDS Service Organizations
MIS	Management Information System
M&E	Monitoring and Evaluation
MSM	Men who have Sex with Men
MTCT	Mother to Child Transmission
NAC	National AIDS Committee
NCB	National Competitive Bidding
NAP	National AIDS Program
NGO	Non-Governmental Organization
OECS	Organization of Eastern Caribbean States
PAD	Project Appraisal Document
PAHO	Pan American Health Organization
PCU	Project Coordination Unit
PLWHA	People Living with HIV/AIDS
PMR	Project Management Reports
QER	Quality Enhancement Review
SIDALAC	Regional Initiative on AIDS for Latin America and the Caribbean
SOE	Statement of Expenditures
STI	Sexually Transmitted Infections
TB	Tuberculosis
TCC	Technical Co-operation among Countries
TF	Caribbean Task Force on HIV/AIDS
TG	UN Theme Group on AIDS
TTLs	Task Team Leaders
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDCP	United Nations Drug Control Program
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNV	United Nation Volunteer
UWI	University of the West Indies
VCT	Voluntary Counseling and Testing
WAC	World AIDS Campaign
WB	World Bank
WHO	World Health Organization
WPA	Work Program Agreement
WTO	World Tourism Organization

Caribbean Countries
Multi-Country HIV/AIDS Prevention and Control Program

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Annexes

Caribbean Countries
Multi-Country HIV/AIDS Prevention and Control Program

Project Appraisal Document

Latin America and the Caribbean Region
Caribbean Country Management Unit

Date: June 5, 2001	**Team Leader:** Patricio Márquez
Country Manager/Director: Orsalia Kalantzopoulos	**Sector Manager/Director:** Xavier Coll
Project ID: PE-P-071505	**Sector:** Health
Lending Instrument: APL	**Theme(s):** Health/Nutrition/Population
	Poverty Targeted Intervention: [X] Yes [ ] No

Program Financing Data

APL	Indicative Financing Plan				Estimated Implementation Period (Bank FY)		Borrower
	IBRD US$ m	%	Others US $ m	Total US $ m	Commitment Date	Closing Date	
APL 1 Loan/	40	75	13.5	53.5	June 2001	December 31, 2006	Dominican Republic and Barbados
APL 2 Loan/ Credit	55	85.0	10.0	65.0	December 2001	June 30, 2006	To be determined; see B4, Entry into the program
APLs 3; 4 Loan/ Credit	60	85.0	10.0	70.0	December 2002	June 30, 2007	To be determined; see B4, Entry into the program

Country Project Financing Data

Dominican Republic

[x] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other [Specify]

For Loans/Credits/Others:

Amount (US$m): 25.0

Proposed terms: Fixed-Spread Loan in US$

Grace period (years): 17
Years to maturity: 5
Front-end fee on Bank loan: 1%

Financing plan:

Source	Local	Foreign	Total
Government	5.0		5.0
IBRD	15.52	9.48	25.0
Total:	20.52	9.48	30.0

Borrower: Dominican Republic
Responsible agency(ies): National HIV/AIDS Council/COPRESIDA

Estimated disbursements (Bank FY/US$M):

FY	2002	2003	2004	2005	2006	2007
Annual	4.5	6.5	5.1	4.8	3.0	1.1
Cumulative	4.5	11.0	16.1	20.9	23.9	25.0

Project implementation period: 5 years
Expected effectiveness date: 10/15/01 **Expected closing date:** 12/31/06
Implementing agency: National HIV/AIDS Council (COPRESIDA)
Contact person: Dr. Luis Montalvo, Director, COPRESIDA,
Dr. Jose Rodríguez Soldevilla, State Secretary of Health, SESPAS
Address: Edificio Centro de Desarrollo de Recursos Humanos en Salud (CEDERHSA)
Tel: (809) 6831526 **Fax:** (809) 472-2919 **E-mail:** Copresida@hotmail.com

Barbados
[x] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other [Specify]

For Loans/Credits/Others:
Amount (US$m): US$ 15.15 million (including 1% front-end fee to be financed out of the loan proceeds
Proposed terms: Fixed-spread loan (FSL) terms, with a repayment schedule linked to actual disbursements

Grace period (years): 3 years for each Disbursed Amount
Years to maturity: 10.5 years for each Disbursed Amount

Front-end fee on Bank loan: 1% of the loan amount

Financing plan:

Source	Local	Foreign	Total
Government	8.50		8.5
IBRD	2.60	12.55	15.1
Total:	11.10	12.55	23.6

Borrower: Barbados
Responsible agency(ies): Office of the Prime Minister's National HIV/AIDS Commission

Estimated disbursements (Bank FY/US$M):

FY	2002	2003	2004	2005	2006	2007
Annual	3.05	1.60	3.10	3.70	2.70	1.00
Cumulative	3.05	4.65	7.75	11.45	14.15	15.15

Project implementation period: 5 years

Expected effectiveness date: Sept./Oct. 2001 **Expected closing date:** 12/31/06
Implementing agency: Office of the Prime Minister's National HIV/AIDS Commission
Contact person: Senator Phillip C. Goddard
Address: Ministry of Health, Jemmott's Lane, St. Michaels, Barbados
Tel: (246) 426-4669 **Fax:** (246) 426-5570 **E-mail:** pgoddard@caribnet.net

A. Program Purpose and Project Development Objective

1. Program purpose and program phasing

The Problem. As reported in newspaper articles and other publications, a deadly scourge lies beneath the "tropical tranquility" of the Caribbean—HIV/AIDS. HIV/AIDS has spread in the last two decades from high-risk groups (e.g., commercial sex workers (CSW) and their clients, men who engage in sexual intercourse with other men (MSM), and newborns of HIV-infected women) to the general population causing massive human death and suffering, particularly in the developing world. There is a growing recognition that HIV/AIDS is not just a serious health issue in developing countries, but a major developmental catastrophe that threatens to dismantle the social and economic achievements of the past half-century.

In the Caribbean region[1], many national governments have initiated a response to HIV/AIDS. Few, however, have brought their response to the scale necessary to turn the epidemic around. Official estimates indicate that 360,000 people are living with HIV/AIDS in the Caribbean, but given widespread underreporting in the region, more than half a million people could be infected with HIV. The percentage of adult ages 15 to 49 living with HIV/AIDS is about 2%. The HIV/AIDS epidemic in the Caribbean is second only to that of sub-Saharan Africa in terms of the percentage of adult population affected and the rate of acceleration. In the Caribbean, more than half of all the AIDS cases that have occurred to date were the result of unprotected sexual intercourse between men and women. In the English-speaking Caribbean, heterosexual contact accounts about 60% of reported AIDS cases, while in the Latin Caribbean it represents about 50% of the reported AIDS cases. In some Caribbean countries (the Bahamas, Barbados, Dominican Republic, Guyana, Haiti) HIV/AIDS has already spread to the general population. By far the most serious situation is in Haiti, which has the poorest socio-economic and health indicators in the Western Hemisphere, and is least able to control the epidemic. Haiti and the Dominican Republic together account for 85% of the total number of cases in the Caribbean. In other Caribbean countries, while the HIV/AIDS epidemic is largely concentrated among high-risk groups, it is accelerating rapidly and is poised to spread to the rest of the population.

The Challenge. Learning from the experience in Africa, the Caribbean countries need to act now decisively to prevent the further spread of the epidemic. There is a narrow window of opportunity in the region to confront the HIV/AIDS problem that should be taken advantage to address vulnerability in a broader environment where situations of risk occur. Without strong and immediate action, it will prove much more difficult and costly to overcome the results of inaction later on. The proposed program attempts to respond to the urgent challenges posed by following realities, particularly in Haiti, the most affected country in the world outside sub-Saharan Africa (the reported prevalence rate among adults ages 15-49 is 5.17%):

a) **Impact on economic priorities and investment programs.** HIV/AIDS is and will continue to undermine economic and social development because it erodes some of the main determinants of economic growth such as social capital, domestic savings and human capital.

- **Social capital erosion.** Because HIV affects the social structure of local communities, it erodes existing social networks and tradition support mechanisms. One of the most devastating impacts of deaths from adults who are often raising children and are at the prime of their working lives. In the English-speaking Caribbean, AIDS is now the largest cause of death among young men

[1] For purposes of this program, the terms "Caribbean region" or "Caribbean" includes: Antigua and Barbuda, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent, Suriname and Trinidad and Tobago.

between the ages of 15 and 44 years. Mortality from AIDS also disproportionately affects young women: data from the Dominican Republic indicate that 56% of all deaths due to AIDS occur in women between 20 and 34 years of age (Cáceres Uraña, 1998). By the end of 1999, the cumulative number of Caribbean children estimated to have been orphaned by HIV/AIDS at age 14 or younger stood at 83,000 (UNAIDS, 1999). Experience in other regions of the world has demonstrated those deaths and illness due to AIDS among adults has a profoundly negative impact on the welfare of children in the affected households. Frequently, poor health and premature death of adults lead to income and expenditures changes that can have adverse effects on child nutrition and schooling (Confronting AIDS, 1998; Dasgupta et al. 1999). Some families can no longer afford school costs or the children are needed to help out at home. Children's education may also suffer as a result, reducing literacy rates in communities. This would be particularly onerous for poor families given the high attrition of poor students at all grade levels and in a skewed distribution of resources to the detriment of schools in poorer communities (Caribbean Education Sector Strategy 2020, World Bank (WB), 2000).

- **Economic decline**. Eventually, if the prevalence of HIV continues to increase in the Caribbean as it has, per capita economic growth may begin to decline. Increased expenditures for treatment of AIDS and AIDS-related diseases from government budgets and household savings will reduce the capital for more productive investments. As a subregion comprised of small islands developing states and mainland nations with relatively- small populations, HIV/AIDS presents unique challenges and the response to it must consider consequences specific to small country circumstances. First, while trends in African countries have suggested that the economic impact of the HIV epidemic becomes evident after experiencing a national HIV seroprevalence of around 7%, such might not be the case with countries with total populations ranging from 100,000 to the low millions. In these smaller countries, there is not the population size that might somehow absorb a certain level of the burden before it is significantly evidenced by economic impacts. Preliminary assessments by the University of West Indies (UWI) on the expected macroeconomic impact of HIV/AIDS in Jamaica and Trinidad and Tobago revealed contractions in major variables over a 5-year period, such as GDP (declines of 6.4 and 4.2 percent, respectively). The level of investment is estimated to be severely affected as well as incomes had to be redirected from the production of goods and services to finance HIV- related expenditures. These HIV-related illness expenditures rose by 25.3% in Trinidad and Tobago and 35.4% in Jamaica.

- **Human capital losses**. The shock of AIDS to the labor markets is one mechanism through which AIDS might adversely affect economic growth in the Caribbean. At present, the affected age group are those forming the labor force: 70% of AIDS cases in the Caribbean are diagnosed in the 15-44 age group, half in the 25 to 34 age group (which, given the time it takes to progress from HIV infection to a fully diagnosed AIDS case, actually means that most of these infections took place in their teens and early 20s). Because it prevents an increasing share of the population from participating in economic growth, the HIV/AIDS epidemic will increase poverty.

b) Urgency. As differing from a slow-onset disaster such as a drought, where a more thorough preparation of a regular investment project may be preferable, in some countries of the Caribbean, HIV/AIDS is already reversing the gains in life expectancy achieved in previous decades as the result of progress in the fight against communicable diseases and improved social welfare. In Haiti and Guyana, life expectancy is estimated to be 5.7 and 5.2 years less, respectively, than it would have been without AIDS (UNAIDS, 2000). What is ominous for the Caribbean region, however, is that even if all HIV transmission could be halted today, the impact of the illness and deaths of the people already infected will be felt over the next two decades. In the Dominican Republic and Haiti, located in the same island, HIV/AIDS would need to be confronted with close, well-coordinated joint efforts, and with the highest priority. Otherwise, no matter how successful one country can be in stopping

this disease, in the short run it will be afflicted with new cases.

A Regional Framework for Action. Given the historical, social and economic factors that link the Caribbean region, as well its population movements, HIV/AIDS constitutes a regional issue. A purely "national" approach could be ineffective owing to external factors. The proposed program, therefore, would offer support to individual countries within the context of *The Caribbean Regional Strategic Plan of Action 2000-2004* prepared by the Caribbean Community (CARICOM)-led Caribbean Task Force on HIV/AIDS and endorsed by the heads of Government. Additionally, by supporting a program conceived as part of a regional initiative, donors can more easily exercise their preferences and comparative advantages and complement each other. This was evident at the regional HIV/AIDS Conference in September 2000, sponsored by the Government of Barbados, PAHO/WHO, UNAIDS and the WB. Several bilateral donors offered support to regional aspects of the Plan, while the World Bank committed resources at the country level.

The Program. Following the strategy proposed in the study *HIV/AIDS in the Caribbean: Issues and Options,* published in June 2000, the purpose of the Multi-Country HIV/AIDS Program for the Caribbean is to assist the governments of the region to scale up efforts for intervening quickly to prevent the contracting and spreading of the HIV infection among high-risk groups, limit its spread among the general population without stigmatizing high-risk groups, and establish an institutional platform at the country level for long-term sustainability.

In the face of the challenges posed by the HIV/AIDS epidemic, the proposed program will support the Caribbean Governments in building political consensus, public awareness, and experience both domestically and region-wide. It will help them devote additional resources to the prevention and control of HIV/AIDS, care for persons already affected by it, and experiment with institutional arrangements to curb its spread and modify them on the basis of lessons learned over time.

WB assistance would be structured as a horizontal Adaptable Program Lending (APL). Under the APL, individual countries would obtain separate loans and/or credits to finance their own national HIV/AIDS Prevention and Control projects. The respective freestanding national projects would be appraised and readied for approval following provisions for investment lending. The program will treat specific country projects developed within the regional framework as "phases" of a horizontal APL as in the case of the Organization of Eastern Caribbean States (OECS) Emergency Recovery and Disaster Management Program APL and the Multi-Country HIV/AIDS Program for the Africa Region. Countries would be grouped according to their readiness to undertake the initial set of activities aimed at establishing sustainable domestic structures for HIV/AIDS prevention and control. Based on the number of countries likely to participate and their status of readiness, there will be about four "phases" under this APL. The pre-conditions for the countries to participate in the program will serve like the "triggers" in an APL for start of a next phase (see Section B.4 below). The APL will provide the flexibility both for the WB and the borrowers to renew our commitment to the program periodically. The WB would decide not to follow with the subsequent phases (new loans/credits to individual countries) until countries meet the eligibility criteria.

The first two loans would require approval at the time the framework APL is presented to the Board of Directors for approval. Barbados (Annex 13) and the Dominican Republic (Annex 14) are the only two countries to be included in the first phase. The proposed HIV/AIDS project for Barbados is presented as an exception to the Bank's graduation policy based on the strong public goods and externalities rationale for including Barbados in a regional program for the control of a communicable disease (such as HIV/AIDS) and, Barbados' leadership role in these activities in the Eastern Caribbean. The rationale for including Barbados in the APL is more fully explained in greater detail in Annex 13.1 of the Technical Annex for Barbados. Subsequent decisions to proceed with country loans/credits would be made based on

CAS considerations for other countries, degree of readiness of the countries and their ability to meet the eligibility criteria set out in Section B.4. It is expected that all the proposed Caribbean countries would meet the program's eligibility criteria set out in Section B.4 within the next two years. Each would then seek to reach its own project objectives for HIV/AIDS prevention and control within the ensuing five years. The countries, which may participate under the proposed program, are listed in table 1 of Annex 5. Said countries are being assisted by other regional and international organizations such as Caribbean Epidemiology Center (CAREC), CARICOM, Pan American Health Organization (PAHO)/World Health Organization (WHO), and UNAIDS, and have received PHRD Grants financing for the preparation of their own projects.

Rationale for the APL. Starting from the early days of the HIV/AIDS epidemic, Caribbean governments, with international assistance, have established National AIDS Programs linked to the health sector and developed short- and medium-term plans for responding to the epidemic. As a result, throughout the region, there are some country- level successes. The safety of blood supply, for instance, in the vast majority of the countries is due to early intervention. Yet, despite these successes, the national programs still operate on a limited scale, reaching only a small segment of the population. What is needed in most of the Caribbean countries is a comprehensive, multisectoral response that engages government, civil society, and international donors, and serves the entire national population, as the HIV/AIDS epidemic continues unabated in the region. The proposed APL, by visibly committing substantial resources (US$155.0 million), and complementing the activities supported by other donors, would ensure adequate resources to fund the rapid scaling-up of the national programs. Efforts would also be made to identify financing sources for activities to be undertaken at the regional level. Given the urgency of the situation discussed above, as agreed with a Quality Enhanced Group (QER) that was engaged to review the APL proposal, preparation of country projects would give priority to detailing the activities to be included in the first year of the project with subsequent activities for later years to be refined in more detail as part of annual project reviews.

2. <u>Project development objective</u> (see Annex 1)

The overall development objective of the program is to assist the Caribbean countries in: (i) preventing the spread of HIV/AIDS by reducing transmission among the high-risk groups; (ii) improving the access of people living with HIV/AIDS (PLWHA) to care that is effective, affordable, and equitable within the context of government health policy; and (iii) strengthening their institutional capacity to respond to HIV/AIDS in a sustainable way. The development objectives of each individual project would be country-specific and depend on the stage of the epidemic, income levels, and the socioeconomic status of those who are infected.

When aggregated, the outcomes of the national projects would collectively establish the basis for gauging the success of the multi-country program. This would be examined against the epidemiological goals for the region developed by country public health authorities[2], with the support of CAREC, PAHO/WHO and UNAIDS.

3. <u>Key performance indicators</u> (see Annex 1)

Multi-Country Program Performance Indicators. In the short-term, the Multi-Country Program would be considered successful if all countries in the Caribbean had begun an expanded response to HIV/AIDS within the next 20 months. To help achieve this while maintaining standards for quality-at-entry, a country would enter the program when it substantially meets criteria for readiness that have been

[2] Caribbean Cooperation in Health II; *A New Vision for Caribbean Health,* 1997/98. This document provides goals for communicable diseases control, including STIs and HIV/AIDS.

agreed as necessary for successful HIV/AIDS prevention and control (see section B4. below). In the longer-term, the success in actually controlling the spread of HIV will depend on the success of individual country projects. CAREC has developed regional HIV/AIDS prevention and control goals that would help set targets for individual country efforts.

Performance Indicators for Country Projects. Each country project would establish its own targets and progress would be evaluated periodically, relative to its own baseline situation. However, within 5 years covered by a typical project, it might not be possible to observe a significant improvement in some of the impact indicators. Therefore, during the course of project implementation, heavy reliance would be placed on "leading indicators" as surrogates for the longer-term impacts. These would guide year-to-year evaluation and project management decisions. Some of the proposed indicators are listed below:

a) Output indicators:

- Improved identification and interventions (e.g., behavior change interventions, STI treatment) for high-risk groups;
- increase in knowledge of modes of HIV transmission and interventions for the general population;
- enhanced quality, capacity and cost-effectiveness of AIDS care;
- improved institutional capacity in management, information, training and research; and
- Enhanced HIV/AIDS prevention and control efforts in other sectors.

b) Outcome indicators:

- Reduction in risk behavior among high-risk groups (partners, sexual practice, condom use, etc.);
- stabilization of the annual percentage increase of sentinel seroprevalence by project completion; and
- improved functioning (e.g., increased spending in real terms of program components as per annual plans) and effective management of program activities (e.g., involvement of community groups, coverage of high risk groups).

B. Strategic Context

1. Sector-related CAS goals supported by the APL and Participating National Projects

The proposed APL is consistent with the assistance strategy adopted by the Steering Committee of the Caribbean Group for Cooperation in Economic Development (CGCED) during its meeting in June 2000. This strategy is stated in the documents "*Toward A Caribbean Vision 2020: A Regional Perspective on Development Challenges, Opportunities and Strategies for the Next Two Decades*," of June 2000, that serves as the framework for development and assistance programs for the Caribbean, and "*HIV/AIDS in the Caribbean: Issues and Options,*" of June 2000, prepared by the WB in conjunction with CARICOM and UNAIDS.

Participation in the proposed program is also consistent with the CAS for the Eastern Caribbean Sub-region of June 2001 (Report No. 22205-LAC). This CAS identifies the need to promote human development for long-term growth, to be accomplished through health and education programs that

emphasize improved access, equity and quality and the need for regionally coordinated actions on issues when in-country solutions could be significantly disrupted by "off-shore" events. This CAS also outlines the exceptional case to the Bank's graduation policy to permit IBRD financing for the HIV/AIDS prevention and control program in Barbados. Said exceptional case is based primarily on the public goods and externalities rationale for a communicable disease (such as HIV/AIDS) and Barbados' leadership role in these activities in the Eastern Caribbean. In essence, Barbados is the regional hub with advanced economic and social infrastructure providing these services to some of the less equipped countries of the Eastern Caribbean. As indicated in the accompanying CAS, this Barbados proposed operation would be a one time exception and additional IBRD support is not envisaged. The full rationale and context for it is explained in Annex 13.1 of the Technical Annex for the HIV/AIDS Prevention and Control Project for Barbados.

Similar goals as in the Eastern Caribbean Sub-region CAS are also outlined in the CAS for Jamaica (Report No. 21187-JM) of November 2, 2000; Dominican Republic (Report No. 19393-DO) of June 9, 1999, for Haiti (Report No. 15945-HA) of August 13, 1996, and for Trinidad and Tobago (Report No. 14028-TR) of March 7, 1995, as well as in the Guyana Policy Framework Paper, 1998-2000 (Report SecM98-499) of June 18, 1998, and the Belize, Jamaica and Trinidad and Tobago's Medium Term Strategy 2000-2002 prepared for CGCED.

2. Main sector issues and Government strategies

Main Sector Issues. As documented in the Caribbean Regional Strategic Plan of Action for HIV/AIDS and the World Bank report "HIV/AIDS in the Caribbean Issues and Options", in nearly all the Caribbean countries a broad-based response is now needed to contain the spread of HIV/AIDS. The most pressing issues are:

Mobilizing strong political and government commitment and coordinating an expanded multisectoral response. High-level support and strong political commitment is key to the long-term success of any effort. Although some presidents and prime ministers have spoken out publicly on the importance of the epidemic in the Caribbean, there remains the need to obtain highly more visible, sustained political will, and commitment at the highest political level.

Participatory national strategic planning with the full involvement of all of the sectors of society - including the health sector, other sectoral ministries, civil society organizations, and the business sector - remains weak. Failure to see HIV/AIDS as a developmental concern permeates not only governments, but also civil society and the corporate community. As the social, economic and political implications of the evolving epidemic become more visible, the responsibilities of the Ministries of Health must accommodate both technical demands within the health sector as well as promotion and coordination of other sectors.

Many countries are in the process of developing national strategic plans, and some have completed them, but the process needs to be strengthened in most places. National strategic plans should assess the situation and specific issues of each setting, assess the effectiveness of the response to date and, based on this, determine the priorities for action. Strategic planning has not yet been consistently undertaken to determine how best to allocate scarce resources, in particular with regard to cost-effective interventions. A key challenge is the relatively small scale of the interventions that are in place to address the large and complex issues of the epidemic. The effective responses need to be supported and scaled up while new initiatives need to focus on the most critical areas. Given the Caribbean region's social and economic integration at many levels, and challenges presented by differing levels of capacity in some countries, some of these issues can be collectively addressed more efficiently through a strong framework for coordination, rather the simultaneous replication of efforts at each national level.

Policy and program development. Very few Caribbean countries have developed national policies and/or frameworks that address human rights, legal and ethical policy framework for HIV/AIDS. Policy and program development remain weak for a variety of reasons, including lack of reliable data on the size and scope of the epidemic, its causes and consequences, and projections of its future course. Adequate operational and behavioral research is still needed to inform policy making, and the low level of resources allocated to national programs highlights the low level of priority given to date to the epidemic. For much of the Caribbean, national leaders have yet to be really mobilized to openly speak about the epidemic, much less introduce policy and legislative frameworks.

Scaling-up prevention. For lack of political will, lack of openness regarding sexually sensitive issues and lack of targeted interventions, the speed of behavior change and increases in condom use have been outpaced by the rate of the spread of the epidemic. Targeted interventions particularly those geared towards vulnerable, hard-to-reach groups, such as MSM, CSW, mobile populations, young school children and social dropouts, institutional populations such as prisoners, and uniformed groups (police and the military) are needed. More specific issues such as prevention of mother-to-child transmission and blood safety require health infrastructure, technical expertise as well as financial resources. The success of both general and more specific prevention campaigns depends also on an "enabling" policy environment that openly acknowledges both the reality of the epidemic and its underlying social and economic causes and consequences. Specific prevention activities, such as blood safety, the prevention of mother to child transmission, and a realistic allocation of resources to prevention of highly vulnerable groups are technical matters as well as ones of policy and legal frameworks.

The needs to expand care and support. Improving access and quality of care for the growing number of people living with HIV/AIDS in the Caribbean must be a priority. Health services are already struggling to respond to the growing population of persons with HIV/AIDS requiring care, support and treatment. Indeed, although the average progression from HIV infection to AIDS is similar to that observed in other regions, the AIDS case fatality rate[3] in the Caribbean region as a whole is high (63%) indicating clear gaps in the care spectrum. Other problems include insuring health workers' ability to provide timely diagnosis of HIV infection and related conditions. Such diagnosis through counseling, testing, and improved health worker training, provides important opportunities to improve nutrition, psychological support, prevention and treatment of subsequent opportunistic infections in HIV-positive people. Access to knowledge of one's status, and adequate support to deal with it, can also help prevent unwitting transmission of HIV to others. Sometimes this access is limited not by lack of facilities but by fear of stigma and discrimination, as island communities are often perceived as being challenged with greater confidentiality concerns and breaches than larger countries. Therefore, programs aimed at strengthening the capacity of health services must include not only better access to medications, but improved quality and privacy of services. Although some countries are exploring ways in which to improve access to the most advanced treatments, including anti-retroviral (ARV), most governments find the high costs of these treatments prohibitive. Administering ARV drugs also requires testing, laboratory, and tracking infrastructure that is complex and demands a high level of skill and experience on the part of physicians for correct case management, including patient compliance with the treatment regime. Absent this, the use of the drugs raise at yet unknown risks, particularly the development of drug resistance.

Financial issues. The costs of providing a package of preventive, care and support services that would have a significant impact on the epidemic will be high in absolute terms. In many cases, they may be well beyond private means and government budgets. On the basis of a preliminary analysis, the costs of an effective but modest HIV/AIDS prevention and care program could approach US$90 per capita per year in the Caribbean. This would represent as little as a 10% increase in current health care costs in Bahamas

[3] The case fatality rate is the number of deaths from a disease during a defined period of time expressed as a percentage of the total number of people with the disease.

and as much as a 180% increase in Haiti. Financing the costs may require additional public sector-generated resources, and adjustments to budgetary priorities. A major issue, therefore, is to craft an effective but affordable prevention and control strategy.

Government strategies

Health Services Delivery Capacity in the Caribbean Countries. Some of the Caribbean countries have experienced comparably good health status and managed to eliminate many of the basic health problems associated with less-developed countries. Traditionally, the public sector, particularly in the English speaking Caribbean, has been the predominant, if not the only, supplier of health services. The typical system is structured as a network of health centers and at least one hospital, which together mean to function as an integrated system with an appropriate and functional referral process. PAHO/WHO estimates indicate that among Caribbean countries, Bahamas, Barbados, and Trinidad and Tobago have nearly universal primary health care coverage with good quality of services; Belize, Dominica, Grenada, Guyana, Jamaica, and Suriname cover 80-95% of their populations and the Dominican Republic covers between 50-80%. Haiti coverage is low. Annex 3 provides an assessment of health system performance in Caribbean countries using WHO indexes.

Notwithstanding structural and financial limitations, national and regional HIV/AIDS programs have registered a number of accomplishments over the last decade. These include a blood supply that is generally well protected; establishment of primary testing capabilities in all countries and confirmatory testing in some; establishment of referral and reference HIV testing services at CAREC; development of national and regional systems for the surveillance of HIV/AIDS; and awareness among the general population of HIV/AIDS and its modes of transmission, as a result of early and intensive information, education, and communication efforts. The challenge now is to build on theses successes and mount a scaled up response, particularly on HIV prevention.

The Regional Plan of Action on HIV/AIDS. HIV/AIDS is increasingly recognized as a major development problem in the Caribbean. The breadth of the region, its diversity and varying levels of integration, and the multitude of social and economic forces at work in the Caribbean mean that a variety of HIV epidemics are already underway there. As national governments, often with the support of international donors, seek to address its challenges, the importance of coordination at the regional and national levels has been highlighted

Beginning in 1998, the Regional Strategic Plan of Action, though not a substitute for national level action, articulated specific opportunities and challenges common to most of the countries across the region.

The Plan was developed with the input of all regional and international players in the area of health, HIV/AIDS and development (including CARICOM, CAREC, CRN+, UNAIDS and its Cosponsors). It will be implemented by these institutions under the political leadership of CARICOM and caters to the member states of CARICOM, the Dominican Republic and Haiti.

The overall objective of the Plan is to reduce the spread and impact of HIV/AIDS in the Caribbean. Its framework identifies areas for priority action at the regional level, which are focused on promoting a strengthened, effective and coordinated regional response to the epidemic, and supporting expanded multi-sectoral HIV/AIDS programs at the national level. The Plan is based largely on the efforts of different actors to coordinate and prioritize HIV/AIDS work in the Caribbean region. The priority areas correspond to the challenges described in the previous sections, and are as follows:

- Advocacy, policy development and legislation;
- support of people living with HIV/AIDS;

- prevention of HIV transmission, with a focus on young people;
- prevention of HIV transmission among especially vulnerable groups:
    - Men who have sex with men (MSM)
    - Sex workers
    - Prisoners
    - Uniformed populations (military and police)
    - Mobile populations
    - Workplace interventions
- prevention of mother to child transmission of HIV; and
- strengthening national and regional response capability.

The Plan has found wide acceptance in all the Caribbean countries as a set of guiding principles, and is considered to be a sound basis for formulating national strategies and projects to be supported under the proposed WB-financed APL.

3. **Sector issues to be addressed by the project and strategic choices:**

The proposed APL will assist national governments in addressing the issues described above, but government commitment and leadership is the key for success. Countries would be helped supplement national budgets to finance well-designed and cost-effective activities that would otherwise be beyond purely local means. A wider circle of stakeholders often excluded for lack of resources would implement these. The proposed APL would support advocacy and communication for mobilizing political support; scaling up of prevention, care and support activities; and capacity building with the goal of expanding coverage and facilitating access to quality services, particularly among high-risk groups, in a sustainable manner.

4. **Program description and criteria for subsequent loans**

The proposed APL would have the following features:

Over-arching strategic direction. This program is based on a long-term development plan emerging from the regional strategy agreed to by all stakeholders, including the donors. The multi-country program would support individual countries to adapt according to local realities the provisions of the *Regional Strategic Plan of Actions for HIV/AIDS.* As noted above, the Strategic Plan outlines priorities in six areas, which represent a comprehensive response to the epidemic in the Region.

Phased Financing. Country projects would qualify for support under the APL after they have demonstrated satisfactory preparation to implement an expanded HIV/AIDS prevention and control program. As there is a wide variety of country conditions in the Caribbean (i.e., widely differing development levels and implementation capacities), projects would need to adequately reflect the environment in which they would be implemented with scaling and sequencing of project activities, management arrangements, cost-sharing provisions, and risk mitigation measures appropriate to the Borrower's needs and institutional, fiscal and social reality. Consequently, a country with little history of WB projects and relatively weak institutions could be considered equally "eligible" for inclusion in the program as a country with a long history of WB involvement and well-developed institutions, as long as the design of the project is appropriate to country conditions

In addition to the well-accepted standards for quality at entry and the respect for the WB's safeguard, financial management and procurement policies, the following criteria would be used to evaluate the readiness of country projects for negotiation. A country would be considered "eligible" when it meets the following eligibility criteria:

a) a satisfactory national strategic plan showing understanding of the issues and goals for addressing them, actions adapted from best practice and the *Regional Strategic Action Plan* to meet national priorities, evidence of strong public support and a well balanced range of stakeholders;

b) national commitment and leadership, including a well structured project management unit empowered to be proactive, a national leader/champion with sufficient stature to direct the effort, and evidence of current budgetary support for HIV/AIDS and the strong probability of readiness to meet future recurrent budgetary requirements;

c) a satisfactory implementation strategy that included program execution through multiple ministries when the public sector was involved, and through Non-governmental Organizations (NGOs), community groups and civil society organizations;

d) sturdy and sustainable implementation arrangements (financial, legal, procurement, regulatory) must be in place and are acceptable to the WB; and

e) clearly defined institutional arrangements for, and readiness to initiate, monitor the evolution of the HIV/AIDS epidemic and for evaluating project progress and impact.

When countries meet a satisfactory level of readiness on each of these points, the WB would appraise financial support for the country project. The norms for making this evaluation are presented in Annex 5. During project preparation, as with most projects, Borrowers would normally advance on meeting <u>all</u> of these criteria in tandem. Delays would indicate the need for further preparation. Each country in the Caribbean has been awarded a PHRD Grant to assist the country in meeting these eligibility criteria. The Grant aims to help the countries make progress towards satisfying all five criteria. However, each country in the region is starting from a different level in terms of their institutional capacity---in general and specifically for preparing and implementing HIV/AIDS programs. Therefore, the Bank would make an informed judgment of country readiness and relative progress based on the countries' starting point and prevailing circumstances. The WB would seek the advice of key multilateral organizations such as UNAIDS, and regional institutions such as CAREC, CARICOM, PAHO/WHO and the University of the West Indies (UWI) in making a judgment on the readiness to proceed with each country case.

Monitoring, Evaluation and Knowledge Sharing. Regional organizations as CAREC, CARICOM, PAHO/ WHO, and UWI have been monitoring epidemiological trends, including HIV/AIDS, the implementation of related programs, and their impact for several years. Additionally, they have an active program for information sharing among countries through publications, regional and national workshops. Moreover, the Task Force under CARICOM has received a new mandate to implement regional monitoring of HIV/AIDS, actions being taken to control it, and the identification and sharing of successful practices. The Task Force, with the financial support of bilateral organizations such as Canadian International Development Agency (CIDA) and German Technical Cooperation (GTZ), is expected to sponsor regional seminars, workshops, country exchanges, and a publications program as part of its work program. Participating countries would rely heavily on this network for assuring the spread of better practices, and learning, typically associated with APLs.

C. Project Description Summary

1. Project components

Building an effective national response to the HIV/AIDS epidemic would require an enabling environment and the necessary resources to bring proven interventions quickly up to nationwide scale. Country projects under the proposed APL would help to operationalize some elements that are contemplated as part of the Regional Strategic Action Plan (Annex 4), expanding and intensifying the responses rapidly. They would consist of a group of interventions based on the countries' epidemiological and programmatic needs, and well-assessed options for meeting them (Annex 6).

The interventions would be grouped in five broad categories:

a) **Communication and advocacy to increase government's commitment, attention, and funding related to HIV/AIDS and to raise awareness, knowledge and understanding among the general population about HIV/AIDS**, including information, communication and education (IEC) campaigns targeted to policy makers, religious leaders, and the general population.

b) **Scaling up prevention activities at the national and community levels**, including IEC for specific target groups to raise awareness and understanding of HIV/AIDS and STIs transmission and to change high risk behavior, promotion of condom use, voluntary testing and counseling for vulnerable groups of the population, interventions to reduce mother-to-child transmission of HIV, and improved screening and blood transfusion to ensure a safe blood supply.

c) **Scaling up care and support activities at the national and community levels,** including treatment of STIs and opportunistic infections such as tuberculosis, strengthening the availability of and access to essential drugs, training of health personnel, clinical management of HIV/AIDS-related conditions; and support to home and community-based care and support activities. Because of high price and sensitivity of anti-retroviral drugs (e.g., the side effects of ARV chemotherapy have made it difficult to take and viral resistance has developed rapidly to these agents), the proposed program would only support the development of guidelines and the strengthening of infrastructure to make use of these drugs safe, effective and sustainable. The WB would remain open, on a case-by-case basis, to support ARV drugs if intellectual property rights of drug manufactures are respected, and if the health system is assessed to be ready in terms of infrastructure and laboratory capacity, trained personnel, consistency of supplies. Although maintenance of such intellectual property rights can result in high prices for ARV drugs, there is a movement by manufacturers to make special arrangements to reduce such prices in developing country settings (a movement which this proposed APL would take advantage of).

d) **Supporting research and surveillance at the national level**, including baseline surveys of epidemiology, knowledge and behavior, improved HIV sentinel surveillance to monitor the epidemic, analysis for the design and implementation of cost-effective interventions, and public expenditure reviews to track national commitment and funding to combat the HIV/AIDS epidemic.

e) **Capacity building**, including support for program coordination, resource management, and implementation at all levels; establishment of monitoring and impact evaluation systems to enable project management units to monitor performance of project implementation.

Exact costing of the options selected will vary among country projects, owing to choices that are made in terms of the activities themselves and the level of coverage offered to the public.

Resources required to implement these activities could finance civil works, goods, services, and operating cost. The types and quantities of the inputs required would be determined by annual work plans (C4). WB loan/credit proceeds could be used to finance any of these requirements up to levels determined on a country-by-country basis, so as to complement the resources that may be available to the country from other sources. However, owing to the urgent need for countries to launch their projects, WB loans/credits could finance a higher-than-usual percentage of project costs.

Each country project proposed for inclusion in the program would have to justify the country's priority areas of intervention; project components; coverage objectives; input, output and impact indicators; estimated costs and financing sources; financial management and administrative scheme; the monitoring and evaluation system; and project management and implementation arrangements.

2. **Key policy and institutional reforms supported by the project**

Under the proposed APL, country projects would support raising awareness about HIV/AIDS as a multisectoral development issue—not only a health concern. Support would be provided for the development of participatory national strategic HIV/AIDS plans and deconcentrated organizational and managerial arrangements for project implementation to facilitate government work in partnership with persons living with HIV/AIDS, community groups, religious organizations, NGOs, health professionals, and the private sector. Monitoring and impact evaluation mechanisms, as well as support for research and surveillance would enhance countries capacity to manage the epidemic effectively.

3. **Benefits and target population**

Specific target populations are to be decided by each country. In general, however, the benefit of the project would be a reduction in the rate of new HIV infections to the general population but especially within high-risk groups and an increase in the quality and coverage of care for the 300,000-500,000 PLWHAs in the Caribbean region.

Of equal importance, with longer-term benefits, would be the achievement of a more sustained, participatory and multi-sectoral view of the epidemic as a national threat, and the mainstreaming of actions to contain it.

An entire population of a country may be considered the "target" for the project. All groups may be considered as having their own particular need for interventions. Particular focus would be placed however on persons involved in risky behavior (men having sex with men, sex workers, uniformed personnel, prisoners, drug and substance abusers) and youth. The population living with HIV/AIDS is also considered to be a major "target" population.

4. **Institutional and implementation arrangements**

In the past, assistance for HIV/AIDS from regional, bilateral and multilateral agencies to the Caribbean countries has been mostly organized and led by public health officials, through their system structures. The proposed projects within the APL which would involve other sectoral ministries, government agencies and civil society (private sector, local community organizations and NGOs) to scale-up actions on a multi-sectoral basis, would be a major challenge in terms of project planning, coordination, implementation and supervision. The risks of poor coordination and overlap in achieving the program goals are likely to be high considering the institutional capacity of these countries. The proposed projects will, therefore, try to build on organizations with proven operational capability and experience. Also, based on the institutional analysis of the project entities carried out during preparation in each country,

the roles and responsibilities of the key players/agencies would be clarified, detailed operational guidelines would be prepared, and necessary training and technical assistance would be provided.

A typical country project would include the following institutional arrangements:

Project Management. The project will be the primary responsibility of National HIV/AIDS Councils or an on-going AIDS Program. Ideally, this national body would report to the highest office in Government to give the program visibility and national significance. However, in some of the smaller countries, it may be considered better to expand and strengthen the existing AIDS Program within the Ministry of Health, without having to create new structures. This national body will be responsible for the overall strategy, policy and operational guidance for the project. It will consist of representatives from the sector ministries, private sector, civil society groups, universities, including women, youth and organizations of PLWHA.

The Project Coordination Unit (PCU) in the National AIDS Council or Program would be responsible for the day-to-day project implementation. Its establishment, clear definition of functions, and satisfactory staffing would be requirements for country participation in the APL. It will also serve as the Secretariat to the National Council or its equivalent. The PCU will coordinate actions with the relevant ministries and civil society organizations regarding all project activities. It will also be the interface with other regional and international agencies and with the WB on operational matters.

The PCU would be responsible for procurement of works, goods and services under the project, accounting and financial management and monitoring and evaluation. It would also support the National AIDS Council or its equivalent in inviting, facilitating and the initial screening of subproject proposals presented by NGOs and community organizations. Depending on the country capacity, the PCU could contract firms or qualified consultants to assist in establishing financial management and monitoring and evaluation (M&E) systems. The PCU would prepare annual work plans, in conjunction with the sector ministries, define the actions needed to ensure timely project implementation, and prepare quarterly reports for the Council and the WB. The PCU would be headed by a Project Coordinator or Project Director and would include public health, financial management, procurement, and monitoring and evaluation and support staff. The organizational forms and the roles, responsibilities and accountabilities may slightly vary for each country, which would be detailed in their respective country project description and their Operational Manual.

Project Implementation. All public sectors related the respective line ministries and their departments would implement project activities, outlined in the country project. The permanent secretary or equivalent rank in each sector ministry will oversee the operations in their respective Ministry and would be accountable for their project-related activities and results. Ministries, which may have a large component to execute through their departments, may form a project support unit to assist and coordinate operations within their ministry and to work closely with the PCU at the National Council. Other ministries may assign an HIV focal person who would be responsible for this task. The sector ministries in large countries would actively involve and support their provincial or local level offices to implement the project in their local jurisdiction. The line ministries would present their HIV/AIDS plan for each year to the National AIDS Council or its equivalent/PCU. Once approved, financing could follow different paths. For example, in some cases, regular budgets for line ministries may contain earmarked financing for HIV/AIDS prevention and control activities, while in other cases, sets of activities formulated to expand or scale-up ongoing efforts would be financed by the PCU.

The civil society organizations, private sector groups, and NGOs would participate in the project in two ways. When preparing their annual plans, the sector ministries will involve the related civil society groups/private sector agencies in developing proposals and once approved they would implement

together. The civil society organizations, private sector and NGOs could also submit proposals directly to the National Council/PCU. The National Council or equivalent agency, supported by the PCU serving as its Secretariat, would review and endorse these proposals for project funding based on pre-determined criteria. The PCU would assist, facilitate and supervise implementation of project activities within each annual plan. The implementation arrangements of projects would be detailed in the Operations Manual for each country project. The Operational Manual and the subprojects to be funded would require WB approval.

Procurement. Procurement under a country project would be carried out in accordance with the WB's procurement guidelines. Agreements covering procurement methods, thresholds, and other conditionality would be determined for each country according to its capacity and experience with WB procurement. These would be detailed in a procurement annex to each country project proposal and would be appraised.

The activities covered in a typical country project would be implemented on the basis of annual work plans to allow for needed flexibility in adjusting project work to account for in-country experience and the lessons from the implementation by other countries participating in the multi country program. As a result, the following approach to procurement would be adopted:

a) **General procurement arrangements for the country project**:

Procurement Methods. A calendar procurement plan will be prepared along with the annual work plan. The procurement plan for each year would be submitted by each Government to the WB for approval, not later than October of the previous year and would use a pre-defined standard format which would list as a minimum: (i) works, goods and services to be procured during the following calendar or fiscal year, as the case may be; (ii) their value; (iii) the method of procurement; and (iv) the timetable for carrying out the procurement. At the time of approving the annual work plan, the WB would agree on the application of the guidelines to the specific procurement lots expected during the year. If needed, the plan could be revised and re-submitted. A format for a typical plan would be agreed at the negotiation of each country project. The procurement plan for the first year of each country project would be appraised as part of loan preparation.

Country Assessments. Each country project loan agreement would define the appropriate threshold for International Competitive Bidding (ICB), National Competitive Bidding (NCB) or shopping. Thresholds would be set on the basis of the latest Country Procurement and Audit Review or WB assessment of the capacity of the PCU and risks of corruption in that country. The same would apply for the procurement methods for consultants.

Implementing Agency Assessments. The WB would carry out a procurement capacity assessment for each PCU to assess its capacity to use Bank procurement guidelines, procurement risks and recommend ways to reduce the risks. From such an assessment the PCU would be classified in one of three types of risk categories (A, B or C) corresponding to low, average or high risk. The country loan agreement would define thresholds for prior review appropriate to the category. Such thresholds would be defined to minimize prior review as appropriate to the level of risk.

b) As projects would have a strong decentralized implementation, and to help the WB to carry out post-review of procurement actions, consultants would be hired as a cost to the project to carry out annual procurement audits of a sample of contracts, under terms of reference acceptable to the World Bank.

c) For several years, a number of specialized UN and bilateral agencies operating in the Region have supported various country agencies in the procurement of drugs, vaccines, specialized test equipment and supplies, condoms and other materials. Using this type of assistance may be considered as part of

a country project's procurement arrangements when advantageous. It is foreseen the use of UNDP as procurement agent in some countries. For that, UNDP would follow the WB's procurement guidelines under the standard agreement between the WB and UNDP. It is also foreseen the use of PAHO for the supply of vaccines and associated medical inputs for vaccination campaigns. This would be carried out under standard contract agreed with the WB.

d) The Multi-Country Program will present the possibility for selected countries to use loan proceeds to procure antiretroviral drugs for treating HIV infected persons. The decision to include financing for these drugs in any country will be based on a strict medical and financial evaluation of the readiness of the country's infrastructure and capacity to manage ARV treatment in accordance with international best practices. When decided to proceed, the procurement of ARV drugs will be done under direct contracting from the patent-holding manufacturers or their licensees. However, the help of specialized agencies (like UNAIDS) will be sought to profit from the negotiations taking place with manufacturers to introduce as much price reduction as possible.

Financial Management and Flow of Funds. Each country will have a separate loan/credit account with the WB, and each PCU will be responsible for assuring that the country's project establishes and maintains: (i) adequate accounting systems and procedures; (ii) funds flow mechanisms including timely disbursements to its suppliers; and (iii) appropriate arrangements for regular financial audits. These responsibilities will be specified in country loan/credit documents. As most PCUs will have been only recently formed, and will not have established accounting and financial management procedures, they will have the option of contracting with local accounting and financial management firms for these services while building their own capacity for doing so. Draft terms of reference for this service will be furnished to PCUs. Borrowers will be evaluated as to their compliance with WB financial management standards at the preparation and launching stages, as well as on supervision missions during project implementation.

The WB is currently evaluating national accounting and financial management practices for several countries likely to enter the program. These analyses will serve to improve the quality of decision-making with regard to the optimal financial management and disbursement arrangements for each project. Where capacity is substantial, options for allowing greater flexibility in accounting and reporting will be evaluated. For example, where the Borrower is capable of producing timely and accurate quarterly financial reports, the possibility to disburse via Project Management Reports (PMRs) will be considered.

Disbursement Arrangements. Each Borrower will establish its own Special Account in a bank, acceptable to the WB, to receive WB funds. Disbursements will be made on the basis of Statements of Expenditure (SOEs), unless and until: (i) the project unit can produce regular PMRs and (ii) the borrower wishes to use PMRs as a basis for disbursement. For large expenditures, the PCUs could request that the WB's Disbursements Division process a direct payment to the supplier from the loan or credit account.

Internal controls. Controls over inventories of drugs, medical equipment, and other sensitive and/or expensive assets will be especially important for these projects. The WB will assess the control environment of the PCU and implementing agencies during project preparation, and by the auditors in their annual audit. Significant weaknesses identified will require prompt resolution. Although project accounting will in most (or all) cases be on the cash basis, the maintenance of a detailed asset register will be critical for project internal control.

Financial Reporting. Maximum use will be made of a country's existing practices and reporting formats providing that they meet WB standards. For project monitoring purposes, financial reports will be required at least semi-annually. To the extent possible, common reporting formats will be agreed between the government and all financiers, so as to reduce the administrative burden on the PCUs.

Financial Audits. Pre-selection of independent auditors for the life of the country project will be required. An audit report prepared in accordance with WB guidelines will be required to be submitted to the WB four to six months following the end of the project's fiscal year-end. Where disbursement arrangements are more flexible, more frequent audits, or more detailed reviews by WB financial management staff, will be considered.

Country-specific PADs. Will provide more detailed information as to the particular financial management arrangements to be put in place in each country.

Monitoring and Evaluation. A well designed and functioning monitoring and evaluation (M&E) system would be critical for the implementation country projects to provide coordinated feedback to the developers, implementators, and policy decision makers at different levels of the system (Annex 7).

There would be two types of M&E activities in the project:

a) **Monitoring of project implementation**. This is a function of the PCU, which would collect relevant data from line ministries and other implementation agencies and then compile them into semi-annual or quarterly progress reports (as the case may be) focusing on status of physical implementation by component, use of project funds and monitoring indicators using Annex 1 details as the basis. Specific surveys can be conducted to obtain data for this purpose. Annual expenditure reviews would be conducted to assess government commitment to HIV/AIDS prevention and control as measured by budgetary allocations and their distribution by activity.

b) **Impact evaluation**. The aim of evaluation is to find out whether the interventions are effective or the program is having the desired impact. The evaluation will include both quantitative and qualitative aspects and be conducted on a yearly basis. The quantitative aspects will rely on new information systems and surveys implemented as part of the various components of the project, currently existing data sources, and primary evaluative data collection efforts. The goal of the qualitative aspect of the evaluation will be to document perceptions of program managers, staff, patients, and local and national leaders. Qualitative information will be collected using site-visit interviews, focus groups, and respondent surveys.

A baseline survey to collect information on epidemiological aspects, knowledge, attitudes and sexual behavior, coverage and quality of services, and budgetary allocations for HIV/AIDS and related programs will begin during project preparation and early project implementation. A mid-term review will be carried out to assess progress in project implementation and the project design would be adjusted, if needed, including realigning budgets among components and activities. The ex-post evaluation of the overall project will assess if project activities achieved intended results in terms of change in attitudes/behavior, quantity and quality of care for PLWHA, and coverage of the program in the country. The PCU will complete an Implementation Completion Report with inputs from the WB, other donors, and the regional agencies.

Project evaluation would be conducted by an outside agency. Regional agencies such as CAREC and UWI, as well as PAHO/WHO and UNAIDS, have been monitoring the epidemic for several years and assisting countries in this regard. The country projects will draw upon the technical expertise and skills of these institutions to assist in carrying out certain aspects of the baseline survey and M&E of their respective programs.

Program Preparation and Supervision. Program planning, preparation and supervision will be coordinated closely with all the bilateral/multilateral donors and regional agencies that are already active in the region. This will avoid a piece meal approach to providing assistance and help build a common

strategy and program for each of the countries. This is also done with the intention to draw on the expertise of each of the external agencies and avoid duplication of effort and cost. The WB, along with CAREC, PAHO/WHO, and UNAIDS, have been working together to help the governments of Barbados and the Dominican Republic to prepare their national programs and this is expected to be continued in other countries as well. Similarly, supervision would be carried out in close coordination with the donors (See Annex 9 for the Supervision Plan).

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

Regular individual World Bank operations vs. Adaptable Program Lending (APL). All of the Caribbean countries require assistance for operationalizing regional plans and scaling up HIV/AIDS prevention and control efforts. Because some countries such as the Dominican Republic and Barbados, and to a lesser extent Jamaica, St. Kitts and St. Lucia, are advanced in program preparation, while others only have initial plans that would require concerted technical assistance, it was decided that an APL would allow the flexibility for the WB to: (i) respond immediately to the Dominican Republic and Barbados given the window of opportunity that exists in the region for scaling up HIV/AIDS programs at the national level; (ii) not penalize the countries that have prepared projects and taken the required steps; (iii) allow the slower moving countries to come on board at a later stage; (iv) follow through with building capacity for long-term sustainable HIV/AIDS prevention and control; and (v) ensure that the WB is fully responsive to the particular needs of member countries as they arise.

Using the APL will contribute to the regional integration envisioned in the Regional Strategic Plan of Action through the exchange of information and sharing of experience about country-specific projects prepared and implemented according to different stages of the epidemic, income levels, and the socioeconomic status of those who are infected. It would also reduce the cost of preparing and supervising small operations through the involvement of other international donors and regional organizations.

Supplemental loans to existing projects. An alternative that was considered was injecting additional financing, in the form of supplemental loans, to ongoing projects (e.g., in the Dominican Republic and Haiti) for HIV/AIDS prevention and control activities. The importance of the issue and the need to scale up the response at the country level, however, requires additional focus and impetus to facilitate the implementation of priority activities. A separate project allows for the establishment of a broader policy framework and alternative mechanisms to manage resource use and monitor the implementation of HIV/AIDS activities. More specifically, separate HIV/AIDS project would allow the preparation of multisectoral national plans that include the engagement of different governmental institutions and civil society organizations, as well as scaled up efforts to serve the entire population. They would also facilitate advocacy and a communication to mobilize political support at the highest political level needed for mounting effective and sustainable HIV/AIDS prevention and control efforts.

Programmatic lending with disbursements linked to outputs. Project team explored the feasibility of including in the design of the program some tranched transfer of resources based on the achievement of agreed milestones in order to finance expenditures in the Borrower's budget. The issue that was raised (apart from the proposal to tranche an investment loan) is how the WB's procurement and fiduciary policies would apply. However, after careful consultation within the WB, project team was advised that a shift from a transaction-by-transaction approach to a wholesale approach in applying these policies is not viable under current Operational Policies.

2. Major related projects financed by the Bank and/or other development agencies

Sector issue	Project	Latest Supervision (Form 590) Ratings (Bank-financed projects only)	
Bank-financed		**Implementation Progress (IP)**	**Development Objective (DO)**
HIV/AIDS/STI prevention and control	The Bank has committed about US$1 billion worldwide in 80 countries since 1986 for HIV/AIDS prevention and control		
Multi-sector and multi-country lending (US$500 million)	Multi-country AIDS Program for Africa; including Kenya and Ethiopia (approved September 12, 2000). Since approval of the APL, other 5 African countries had projects approved under the MAP, committing a total of $287 million: Cameroon, Eritrea, Gambia, Ghana, and Uganda.	Na	Na
Multi-sector, decentralized implementation of HIV/AIDS prevention and control; broad civil society participation	Brazil AIDS/STD Control Projects I and II (1993 and 1998); India First and Second National AIDS Control Programs (1992 and 1999); Argentina HIV/AIDS Prevention Project (1998); Bangladesh HIV/AIDS Prevention Project (2000)	S	S
Integrating HIV/AIDS with STI and TB control, and health sector reform	Haiti First Health Project (1994) Dominican Republic Provincial Health Services (1998)	U S	U S
Other development agencies	There are currently about 20 HIV/AIDS initiatives supported by bilateral agencies in the Caribbean; 23 regionally supported; 40 supported through UN agencies; and about 21 through UNAIDS		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

3. Lessons learned and reflected in the project design

The design of the proposed APL takes into account scientific and region-specific information on HIV/AIDS, lessons of experience worldwide, and lessons learned from project implementation in the Caribbean.

Key lessons from global experience[4] considered for designing the proposed APL and to be adapted to the national conditions under country projects are:

Setting realistic priorities. To improve the performance of national AIDS control programs, policymakers need to build on a smaller core set of objectives, defined in terms of measurable outcomes, and identify the most cost-effective set of activities and actors to meet them on a national scale.

Build government commitment and strengthen its capacity. Civil society organizations and NGOs have a crucial role in the effective delivery of AIDS prevention and care, particularly to marginalized groups who may actually fear contact with government. However, this does not absolve government of its responsibility to produce those public goods essential to disease control, to coordinate and monitor the response, to ensure that the NGOs receiving public subsidies are fully qualified and evaluated, and to ensure that the objectives are met in a cost-effective way. Strengthening these functions is critical for both limited and expanded responses.

Ensuring behavior change among those with the riskiest behavior. Pilot projects have shown the effectiveness of reducing transmission through behavior change among those most likely to contract and spread HIV and Thailand has shown the effectiveness of this approach on a national scale. Epidemiological models have shown that even in a generalized AIDS epidemic, such as in so many sub-Saharan countries, this strategy is key to lowering prevalence in the whole population.

Ensuring access to diagnosis and treatment of STIs and opportunistic infections, particularly among high-risk population groups. The lowest income countries are extremely constrained in their ability to finance medical care. Although there is no cure for AIDS, there are inexpensive treatments for STIs and opportunistic infections such as TB that are affordable in low-income countries. Making these cost-effective interventions widely available would substantially reduce the risk of HIV infection and improve the quality of life of those with AIDS, at relatively low cost.

Support the development of public goods. The international community has the responsibility for ensuring the production of global public goods--i.e. knowledge and technology that are public goods. These investments would be of enormous benefit to less-developed countries. Under the countries, monitoring and impact evaluation will be emphasized to generate knowledge about the effectiveness of different strategies and activities in countries with different stages of the HIV/AIDS epidemic.

How to scale up. On the basis of accumulated experience with rural development programs and from HIV/AIDS programs, the following insights would be considered: (i) build on available models to achieve behavioral changes: existing projects and programs have had time to develop culturally adapted best practices, and their staffs and volunteers can train all those involved in scaling up; (ii) involve all those who are willing to help: staff and elected officers of local or district governments and services, private firms, persons living with HIV/AIDS, community-based organizations such as churches, producer associations, local chambers of commerce, and NGOs should all be active participants; (iii) rely on

[4] The review of lessons learned from international experience is based on two recent publications:
(a) Ainsworth, M., and Teokul, W. Breaking the silence: setting realistic priorities for AIDS control in less-developed countries. Lancet 2000, 356: 55-60.; and
(b) Binswanger, H.P. Scaling up HIV/AIDS Programs to National Coverage. Science 2000, 288: 2173-2176.

community participation and local coordination: as there are enormous variations in needs and capabilities across communities and districts, only local stakeholders will be able to know these local conditions and to put the required programs in place; (iv) start with existing capacities, and build them via "learning by doing": local programs must build on existing capacities even if they are weak; their improvement becomes one of the goals of the program; (v) focus financing on essential supplemental inputs (e.g., training, materials such as condoms, teaching materials, test kits and drugs for STIs and opportunistic infections); (vi) treat prevention as first priority; (vii) information, education and communication are not sufficient to produce behavior change: intensive and highly participatory approaches are needed; (viii) make funds available locally and don't allocate them to pre-defined categories; (ix) promote accountability: transparent budgeting, disbursement, and accounting procedures are needed to ensure accountability; accountability must first of all be ensured to users of the services, and upwards accountability to government and donors will be strengthened by this as well; and (x) improve fiscal sustainability by additional national and local resource mobilization.

Lessons from the Caribbean, particularly from the St. Lucia Watershed and Environmental Management Project, the Jamaica Emergency Reconstruction Import Loan, and the OECS Emergency Recovery and Disaster Management APL, are: (i) donor coordination in emergency situations is critical; (ii) the importance of clearly defining the responsibilities of implementing agencies (ambiguous roles can lead to significant implementation delays); (iii) flexibility in procurement procedures, particularly for small contracts, allows rapid implementation; and (iv) the need for greater involvement of civil society organizations in decision-making and implementation of the project. The proposed APL has been designed and conceived with active participation of major stakeholders, both local and international, and the responsibilities of implementing agencies will be clearly defined during negotiations. Both financial management and procurement procedures have been made particularly flexible for the APL.

4. Indications of borrower commitment and ownership

Commitment is building regionally and on a country-by-country basis around a coherent Caribbean approach to preventing and controlling HIV/AIDS. Evidence includes:

- strong support by the CARICOM Heads of Governments of the work of the Caribbean Task Force on HIV/AIDS (July 2000 and February 2001), which produced the *Regional Strategic Plan of Action* for HIV/AIDS;

- endorsement of a proposal by the World Bank to assist the Caribbean countries through the proposed APL, at the meeting of the Caribbean Group for Cooperation in Economic Development (CGCED), held at the WB June 12-16, 2000, which involved Prime Ministers, Ministers of Finance and other key decision-makers from member countries, country delegations as well as senior representatives of other international donors; and

- further endorsement of the *Regional Strategic Plan of Actions* and the Bank's assistance strategy at the Regional Conference on HIV/AIDS, September 11-12, 2000, by the Government of Barbados, St. Vincent and the Grenadines and St. Kitts and Nevis, Anguilla, Belize, Dominica, Grenada, Haiti, Jamaica, St Lucia, Trinidad and Tobago, among others.

5. Value added of Bank support in this project

Highlighting HIV/AIDS as a developmental issue. By incorporating HIV/AIDS prevention and control activities for Caribbean countries into its country assistance programs and lending portfolios, WB lending for HIV/AIDS should substantially help to persuade policy makers that HIV/AIDS is not just a health issue but a developmental issue of concern to all sectors in the economy.

Injection of new financial resources. The WB would provide financial backing to countries undertaking an approved HIV/AIDS project in a form that can readily complement and fill gaps in other sources of support (including the national budget). Amounts may be substantial compared to the current budgetary allocations for the health sectors in these countries, providing governments needed "headroom" to both address current needs and to undertake some institutional improvements that may sustain a longer-term HIV/AIDS program. This would also assist governments to consolidate consensus and political ownership in their countries.

HIV/AIDS project experience. The WB is already financing HIV/AIDS-related projects in more than 80 countries and has accumulated vast experience. The lessons and best practices from these experiences are being applied to the program. WB would also provide guidance on all aspects of project implementation, including on procurement and financial management

Bringing in expert advice. Through the proposed program, the WB's project team includes staff working in other regions and countries of the world, PAHO/WHO, UNAIDS and outside experts, to provide practical, operational and state-of-the-art approaches for HIV/AIDS prevention and control.

Donor coordination. The proposed program has been designed and will be implemented in collaboration with other international and regional organizations such as CAREC, CARICOM, PAHO/WHO, UNAIDS and UWI, forging strong regional partnerships. As done during the preparation of the projects in Barbados and the Dominican Republic, join technical assistance and supervision missions will be fielded.

Accelerating ACCESS to HIV Care. Under the proposed program, some of the Caribbean countries may be able to benefit from the Accelerating ACCESS to HIV Care initiative announced in May 2000. This initiative is part of a wide range of efforts being made to increase access to care and treatment of HIV and related illnesses. Accelerating ACCESS was initiated by and currently involves UNAIDS, the WB, UNICEF, UNFPA, and WHO, along with five R&D pharmaceutical companies.

E. Summary Project Analysis: (detailed analyses are given for each country project in the respective country Annexes 13 and 14)

1. <u>Economic</u> [x] Cost Effectiveness Analysis

The spread of HIV infection is the result of private decisions, but public intervention is necessary to reduce the risk in a society as a whole[5]:

- HIV is a communicable disease which inflicts negative externalities on society: a purely private response is therefore likely to fall short of the social optimum;
- markets to insure against premature deaths and HIV are incomplete;
- information regarding HIV transmission is imperfect;
- HIV makes people vulnerable to other infectious diseases, including tuberculosis;
- some individuals cannot control their own risk of HIV infection (e.g., spouses, newborns, victims of rape, accident victims who need a blood transfusion);
- AIDS may increase both the magnitude and depth of poverty; and
- early action is needed to prevent the epidemic from reaching the proportions it has reached in Africa.

[5] World Bank. HIV/AIDS in the Caribbean. Issues and Options. 2001.

The costs of implementing an HIV/AIDS program in the Caribbean were estimated. An all-inclusive program (i.e., one that includes all known surveillance, prevention, and treatment) for HIV/AIDS is beyond the financial capacity of most Caribbean countries. The countries therefore need to select a subset among the possible interventions. It is suggested that countries take the cost-effectiveness of the different set of interventions into account in deciding upon their priorities. Ensuring that the most cost-effective interventions are mandated and/or financed will help the countries to ensure that their limited program resources are put to the best possible use. Among the priority interventions thus identified are those targeted towards reducing the rate of HIV transmission among the high-risk sub-populations specific to any particular country. The cost-effectiveness data that was utilized to order the interventions was obtained from evaluations conducted in other countries. Distortions may arise because cost-effectiveness parameters are sensitive to the stage of the epidemic, among other things. The management information systems (MIS) supported by the projects at national levels will permit the collection of the data required to conduct periodic cost-effectiveness analyses specific to the country situations.

2. **Financial**

A very rough estimation of the cost of a comprehensive HIV/AIDS prevention program was conducted among a panel of epidemiologists and economists from the Caribbean. The purpose of the exercise was to estimate the cost of an HIV/AIDS prevention and treatment package for 23 Caribbean countries under various scenarios. The parameters underlying the base scenario (epidemiological data, coverage assumptions and unit costs) were obtained from the literature and from the aforementioned panel (Annex 8).

The analysis shows that the cost of providing a comprehensive package of prevention and care activities for 100 percent of the relevant populations of the Caribbean would be prohibitively expensive. The comprehensive package (i.e., prevention plus basic care plus highly active antiretroviral therapy (HAART) at $1,000 for 15% of the HIV-infected population) would increase per capita health spending in Haiti, for example, from $18 to $97, which is impossible. However, all countries can afford a package that includes prevention and some basic care. Additionally, if the price of HAART goes down substantially, then a comprehensive package of interventions will be affordable in some countries in the Caribbean.

The fact that the countries cannot afford to finance each and every intervention to combat the spread of the virus means that priorities have to be set. The cost-effectiveness of different types of interventions should serve as one of the principal criteria for setting priorities. Indicative cost-effectiveness parameters for different sets of interventions are proposed.

3. **Technical**

The project is technically sound and well suited to the needs of the Caribbean countries and the stage of their epidemics. It follows international best practices, as recommended by UNAIDS and proposed by the Caribbean Task Force on HIV/AIDS. The proposed program is also fully consistent with the WB's Strategy in the HNP Sector as stated in the Sector Strategy Paper, as it would help achieve three major objectives in the sector: (i) improve health outcomes among the poor, who are at a higher risk of developing HIV/AIDS, and protect other segments of the population from the impoverishing effects of illness and death associated with HIV/AIDS; (ii) enhance the performance of the health care systems by promoting equitable access to preventive, care and support services for HIV/AIDS; and (iii) secure sustainable financing for HIV/AIDS programs.

By supporting well-targeted interventions at the country level to promote behavior change and to improve access to STI treatment among high-risk groups, the proposed program can slow the epidemic

dramatically. These are generally recognized as the most cost-effective interventions to control the spread of HIV/AIDS. By financing inexpensive treatments for opportunistic infections such as tuberculosis, that are affordable in less-developed countries, the program would improve the quality of life and longevity of persons with AIDS. The program would also put emphasis on capacity building to ensure the long-term sustainability of the scaled up effort, including the strengthening of monitoring and evaluation systems to track and assess the effectiveness of the specific interventions being financed.

4. Institutional

Implementing agencies. Because the country projects would be multi-sectoral, participating line ministries would be in charge of implementing their respective activities included in annual implementation plans. Technical assistance would be provided to ministries on an as-needed basis, both on technical and financial and procurement aspects. Projects would require government commitment of staff and resources to strengthen the capacity of line ministries, while the project would finance some equipment and technical assistance.

Project management. For project coordination and management, participating countries would establish PCUs as part of existing institutional arrangements (e.g., National HIV/AIDS Commissions or National HIV/AIDS Programs). Demonstrating this feature would be one of the factors related to the country's admission into the multi-country program.

5. Social

The country projects are expected to have a positive social impact, as different stakeholders at the national and local levels would be involved in their implementation, as they have done during the preparation of national HIV/AIDS programs and action plans. The key social development outcome of the projects would be the prevention of the spread of HIV in the general population by reducing transmission among high-risk groups. However, there are some critical issues related to the achievement of this objective: (i) how to reach high risk groups and promote changes in their behavior, while avoiding stigmatization of these population groups; (ii) how to increase awareness of HIV modes of transmission among the general population, particularly among the youth, women in reproductive ages, and uneducated groups with limited exposure to mass media; and (iii) fear of stigma and discrimination, as island communities are often perceived as being challenged with greater confidentiality concerns and breaches than larger countries. Country projects, with the participation of organizations such as PLWHA, would help address these issues through interventions supporting analysis, public dialogue, and legal and regulatory reform.

6. Environmental assessment Environmental Category [B]

Activities under the proposed APL are not expected to generate any adverse environmental effect as a large part of the program is geared to support prevention activities. Whatever little medical waste generated under the care and support component will be managed using existing guidelines in the countries. The program would also support for updating these guidelines, training for health care workers to manage medical waste following these guidelines, and the possible purchase of equipment for the proper handling and disposal of medical waste in participating facilities. These provisions would be included in the project's Operational Manuals.

7. Participatory approach

To date, there has been an active participation of national and regional agencies, community groups such as PLWHA and the donor community in the development of programs and plans, as well as in the mobilization of political support for a coordinated HIV/AIDS prevention and control program in the Caribbean. The Secretariat of the CARICOM has assumed leadership at a political level, and its Human and Social Development Division has the lead role in developing regional HIV/AIDS initiatives

In June 1998, CARICOM, the EU, and UNAIDS jointly organized a Pan-Caribbean Consultation on HIV/AIDS involving 22 countries and territories, as well as regional and international partners. That meeting underscored the need for a well-coordinated, multi-sectoral expanded response to the HIV/AIDS epidemic in the Caribbean and resulted in the establishment of the Caribbean Task Force on HIV/AIDS, with a formal mandate from the Ministers of Health of the participating countries to coordinate and strengthen the regional response to the HIV/AIDS epidemic. Chaired by the CARICOM Secretariat, members include national experts in key HIV/AIDS programming areas, the Caribbean Network for People Living with HIV/AIDS (CRN+), UNAIDS, CAREC, PAHO/WHO, UNICEF, UNDP, the UWI, the EU, the Caribbean Development Bank, the Inter-American Development Bank (IDB), the WB, the Caribbean Council of Churches, the Association of Caribbean States, the Caribbean Tourism Organization, the Commonwealth Youth Program, the Caribbean News Agency, the Caribbean Congress of Labor, and many other representatives of civil society. Recently, the Caribbean Task Force on HIV/AIDS led a wide consultative process and developed a comprehensive strategic plan for the region. That plan, the *Caribbean Regional Strategic Plan of Action for HIV/AIDS, 1999-2004,* has been discussed at length, and is now one of the substantive bases for the proposed APL.

Supporting much of the consultative process from a technical perspective has been the role of CAREC, a specialized agency affiliated with PAHO/WHO, which has the longest experience responding substantively to the HIV/AIDS epidemic. CAREC's Special Program on STI has for many years encouraged the involvement of multiple sectors in the fight against HIV/AIDS in the English- and Dutch-speaking Caribbean countries. The "Special Program" has been the focus for significant participation of bilateral and regional support; including that from Canada, France, Germany, and the European Union (EU). PLWHA in the Caribbean have had a strong role to play in formulating strategy and programs through CRN+, an organization established in 1996, based in Trinidad and Tobago with as affiliates in 17 countries in the region. Its goals are to share information, build self-help capacity among persons living with HIV/AIDS, and support HIV/AIDS advocacy.

Such a spirit of inclusion and participation would be mirrored in the structure of national oversight and management of the respective country projects.

It is expected that country projects would be launched with considerable public involvement, and that periodic accounting for results would take place, formally in seminars and workshops, and in the regional press. Periodic formal beneficiary assessments would be part of the WB's supervision of the program.

F. Sustainability and Risks

1. Sustainability

Critical to the sustainability of country projects under the proposed APL would be the continuous ownership of this initiative by the various stakeholders, coupled with strong political support and the availability of an adequate flow of financial resources to carry out project activities. In addition, institutional sustainability would be ensured by: (i) strengthening of programs to maintain public awareness of HIV/AIDS; (ii) sustained screening and prevention programs in high risk population groups as an STI; (iii) ability at the country level to manage the risk factors associated with the transmission of HIV as a public health rather than a moral problem; and (iv) effectiveness of programs to limit the spreading of HIV infection to the general population by preventing transmission among high-risk groups.

2. Critical Risks: (reflecting assumptions in the fourth column of Annex 1)

Risk	Rating	Mitigation Measure
From Outputs to Objective		
Decline in political commitment to HIV/AIDS as a national priority	H	Continuing support for inter-country collaboration through regional information exchanges; and dialogue
The project implementing agencies do not have sufficient authority, leadership, and capacity to take leading role in HIV/AIDS prevention and control	S	Adequate legal status and terms of reference for PCU a pre-condition of World Bank lending; careful monitoring of leadership and project management during project startup implementation; technical assistance and training
That civil society organizations are unwilling to be involved and/or lack the capacity to manage the implementation of project activities	S	Careful prescreening of organizations to ensure minimum commitment and capacity
Intervention activities not effective in modifying behavior among high-risk groups to slow down the spread of HIV. HIV/AIDS prevalence rates rise rapidly.	S	The project, by starting to strengthen the HIV/AIDS response capacity in selected priority areas, would begin laying the foundations for a broader-based strategy, including broad awareness and communication campaigns, which would be critical to containing HIV/AIDS at a later stage of the epidemic. Choosing well designed, cost-effective interventions, such as behavior change communication activities, including peer education. Interventions phased and carefully monitored, allowing for modifications and redesign as needed. Service delivery deconcentrated with the maximum use of civil society organizations. Provide technical assistance to civil society organizations. Good M&E to flag emerging issues
Inadequate or lack of multi-sectoral participation	M	Steering Committees overseeing the program and PCU selected to be representative and given visibility; annual work programming transparent

From Components to Outputs		
Controlling the spread of the epidemic by focusing on high-risk groups, such as CSWs, may expose the government to criticism by religious groups and others of supporting immoral behavior.	S	Project will support advocacy and coalition building to sensitize key groups including policy makers, the media, and religious leaders. This will be complemented by carefully designed mass communication campaigns to build support for the project among the wider population as well as to reduce stigma and discrimination against groups at risk and affected by HIV/AIDS.
Inadequate institutional capacity to manage project and perform effectively in each country	S	Capacity building and institutional development as one of the project's key objectives Emphasis on deconcentration and partnerships
Financial resources not accessible in a timely manner, weak procurement management	S	Projects use special accounts for counterpart funds, and World Bank special accounts; simplified public sector procurement within World Bank procurement rules
Timely and predictable access to expert advice and technical support	M	Agreements reached with regional and multilateral support agencies; CARICOM, PAHO/CAREC, UNAIDS for their services; included in annual work plans
Priority given to public accountability and transparency in program management	S	Publication of audit results and achievements; transparency in decision and awards making
Inadequate capacity for planned serological surveillance, behavioral surveys and monitoring and evaluation	M	Technical assistance and partnership between local organizations and international institutions will be provided. M&E plan will include information on instruments for data collection, agencies responsible and a detailed time table
Adequate numbers of qualified sponsors (NGOs, community groups, others) to play roles	S	HIV/AIDS agencies to seek sponsors for important activities; national program to provide for assistance/training to community leadership and NGOs, as needed to formulate and implement "sub-projects"
Overall Risk Rating:	**S**	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

3. Possible Controversial Aspects

Most of the factors that are contributing to the spread of HIV/AIDS involve behavior that may be socially unacceptable, considered to be private, and in some cases illegal. This means that achieving the types of interventions, dialogue and compromises needed to reduce the threat and control the severity of the epidemic will challenge many popular beliefs and social norms, and breed controversy. The political traditions of most Caribbean countries have given them experience in managing controversies of this type, when political leadership has been forthcoming. There is at present a high degree of political commitment to preventing and controlling HIV/AIDS, which is adequate for managing controversies that will undoubtedly arise.

Another controversial aspect relates to the fact that Barbados graduated from IBRD lending in 1993. However, for the reasons stated in Section B.1 of this PAD and in Sections B.1 and D.1 and Annex 13.1 to the Technical Annex for Barbados (see Annex 13 hereto) an exception to the Bank's graduation policy

in this unique case is defensible.

G. Main Loan Conditions (see Country Annexes)

Most of the key conditions needed to minimize the risks to the national projects would be addressed by a country's meeting the eligibility requirements for entering the multi-country program. The particular circumstances facing individual Borrowers would determine the number and type of additional conditions that may be attached to the loan/credit in question. In most cases, standard requirements covering PCU staffing, management arrangements, provisions for procurement and financial management would be sufficient.

Minimum conditions of effectiveness of loan/credits would be: (i) the Borrower has prepared and the WB has approved the Annual Action Plan for the first year; (ii) the Borrower has appointed key PCU staff acceptable to the WB, and established a financial management system satisfactorily to the WB; and (iii) the project's Operations Manual has been adopted by the Borrower.

H. Readiness for Implementation (see Country Annexes)

I. Compliance with Bank Policies

[ ] 1. Except as provided in paragraph 2 below, the program will comply with all applicable World Bank policies.

[x] 2. As mentioned in Section B.1 of this PAD and in Sections B.1 and D.1 and Annex 13.1 to the Technical Annex for Barbados, the proposed loan to Barbados to partially finance the HIV/AIDS Prevention and Control Project is being presented as a one-time exception to the Bank's graduation policy.

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Annex 1

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Project Design Summary

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Sector-Related CAS Goal:	**Sector Indicators:**	**Sector/ Country Reports:**	**From Goal to Bank Mission**
To reduce poverty and promote growth through improving health			
Program Purpose	**Program Phasing**	**Program Reports:**	**From Purpose to Goal**
To reduce the spread of HIV infections and to mitigate its impacts on human, social and economic development in the Region	Projects assisting countries to strengthen their national response to HIV/AIDS will be implemented within 2 years, in 3 or 4 phases (3 countries by June 2001; 5 more by October 2001; 4 more by May 2002; and 3 more by June 2002).	Bi-annual progress reports; reviews by Multilateral and Regional agencies (UNAIDS, PAHO/WHO, CAREC; CARICOM and others)	High and sustained governments' commitment to the fight against HIV/AIDS
Country Project Development Objective	**Outcome/Impact Indicators**	**Project Reports**	**From Objective to Purpose**
Each country:	By project completion (5 years from start date):		
1. To prevent the spread of HIV in the general population by reducing transmission among high-risk groups	By project completion: Improvement in indicators of behavior change: fewer risk sex, increased condom use at last high-risk sex No increase from baseline in HIV prevalence among CSWs Reduction in HIV prevalence among young people aged 15-24 by 25% Reduction in syphilis prevalence among pregnant women aged 15-24 by 25% (A)	Sero- and behavioral surveillance reports for HIV/STI (MOH, CAREC)	National HIV/AIDS leadership empowered to be pro-active; exercising independent decision-making and committed to targeting high-risk groups Cultural barriers to behavior change can be overcome. Informed people can adopt safe practices to protect themselves against HIV infection Surveys are reliable and representative
2. To improve the access of PLWHAs to a basic care package which is cost-effective, affordable, and equitable within the context of the health system	By project completion, 75% of PLWHAs will receive a basic care package of agreed-upon care, prevention and support services which meet such criteria	M&E system, CRN+, MOH	Strengthened capacity of the health system, communities and NGOs to provide services to PLWHAs
3. To increase government commitment and public goods in HIV/AIDS	By project completion, 40% improvement in the operations of National AIDS Program in key function area according to CAREC evaluation criteria [1]	M&E system, using CAREC evaluation criteria	Sustained government commitment to HIV/AIDS activities

[1] These evaluation criteria are being developed by CAREC and will be available by the end of 2001.

Output from Each Component:	Output Indicators:	Project Reports:	From Outputs to Objective
1. Improved identification and targeted interventions for high-risk groups (such as CSWs, MSM, IDU, migrant workers, prisoners, uniformed servicemen)	Completion of mapping of high-risk groups	M&E System, participating NGOs and line ministries	Government and civil society aware of the importance of targeting high-risk groups Active participation of NGOs and communities Stigma and discrimination can be reduced Advocacy for the decriminalization of commercial sex work and homosexuality
	% of the population of such high-risk groups covered by peer education, condom promotion, STI management and VTC	M&E System, participating NGOs and line ministries	Idem
	Number of projects (run by government, NGOs, community-based organizations, etc.) targeting high-risk groups	M&E System	Idem
	% of good answers in HIV knowledge and prevention in general population	M&E System, MOH, CAREC or independent firm contracted to do surveys	Public communication strategies are effective. Awareness results in lasting behavior change
2. Improved access of PLWHA to a basic care package which is cost-effective, affordable, and equitable within the context of the health system	Establishment of a basic care package (including the management of common OIs) which meets such criteria	M&E System, MOH, CAREC	Cost-effective, affordable and equitable treatment and care exist in the context of the current health system
	% of health facilities (public, private, NGOs) with the capacity to offer OIs management for PLWHA	M&E System, MOH, CAREC	Idem
	Establishment of at least one support group for PLWHAs and run by PLWHAs	M&E System, CRN+	Stigma and discrimination can be reduced.
	% of HIV+ women receiving therapy to reduce MTC transmission during pregnancy	M&E System, MOH, CAREC	Adequate capacity of the health system
3. Increased government commitment and public goods in HIV/AIDS	National conferences, policy workshops and study tours for policy makers	M&E System, MOH, CAREC	
	Development of a national *second-generation surveillance system* for HIV	M&E System, MOH, CAREC	Adequate capacity of the health system
	Timely completion of baseline surveys and annual M&E reports at all levels	M&E System	M&E mechanisms are in place
	Evaluation of cost-effectiveness of select pilot intervention(s) on • Reducing HIV transmission in high-risk groups • AIDS treatment and care	MOH in collaboration with UWI, PAHO, CAREC, World Bank, independent firms	

Summarized horizontal diagram for the log frame

Country Project Development Objective	Activities/Inputs	Outputs	Outcomes/Impacts
1. To prevent the spread of HIV in the general population by reducing transmission among high-risk groups	Identify high-risk groups	Completion of mapping high-risk groups	Improvement in knowledge and behavior, reduction in HIV/STI prevalence in both high-risk groups and population
	Target high-risk groups with interventions	Coverage of high-risk groups with such interventions	
2. To improve the access of PLWHAs to a basic care package which is cost-effective, affordable, and equitable within the context of the health system	Identify a basic care package which meets such criteria	Adoption of such a care package	Increased coverage of the basic care package among PLWHAs
	Provide such care package to PWLHAs	% of health facilities with capacity for care, support groups for PLWHAs	
3. To increase government commitment and public goods in HIV/AIDS	Policy dialogue, consensus building	Policy workshops, national conferences	Improvement in the operations of the National AIDS Program according to CAREC evaluation criteria
	Improve surveillance, M&E	A national *second-generation surveillance system*	
	Evaluate cost-effectiveness of treatment and care	Studies conducted	

Annex 2

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

The Spread of HIV/AIDS in the Caribbean

The Caribbean: A Heterogeneous Region

The Caribbean region[1] is an extraordinarily diverse region of about 36 million people (see Box 2-1). It includes English-, Spanish-, French-, and Dutch-speaking nations and territories of varying size. The region's average regional economic growth rate of about 2% over the past decade has been insufficient to generate adequate employment and reduce poverty, and individual countries are at varying stages of development. Some Caribbean countries, including Barbados, the Bahamas, Antigua, and Bermuda, are ranked high according to the U.N. Human Development Index, and most others, with the exception of Haiti, are ranked at a medium level. The region as a whole is undergoing a demographic transition-a process of population change consisting of a gradual evolution from high birth and death rates to low ones. Haiti with high birth and death rates is at the lowest stage of demographic transition, Jamaica, Bahamas and Barbados are at the highest. In some countries, including the Bahamas, the Dominican Republic, and Trinidad and Tobago, the urbanization process is far advanced (more than 60% of the population reside in urban areas); however, in other countries, including Haiti, large segments of the population still live in rural areas. Economic activity in the region varies and includes the export of petroleum in Trinidad and Tobago to heavy reliance on tourism and banana exports in the countries that are part of the OECS.

Available data suggest that the HIV/AIDS epidemic is spreading alarmingly in the Caribbean region. CARICOM estimates that more cases of HIV/AIDS were reported in the Caribbean between 1995 and 1998 than had been reported since the beginning of the epidemic in the early 1980s. Perhaps not surprisingly, given the region's heterogeneity, the epidemics in the Caribbean have different driving forces and transmission routes. Different countries have also varied in their responses to HIV/AIDS. As a result, the Caribbean region as a whole might be considered to have not a single HIV/AIDS epidemic, but a "mosaic" of epidemics (Confronting AIDS, 1998):

- **Haiti, Bahamas, Barbados, the Dominican Republic, and Guyana** have generalized epidemics, meaning that HIV has spread far beyond the original subpopulations with high-risk behavior,[2] and 5% or more of women attending prenatal clinics are infected. Better reporting system in Barbados and Bahamas are contributing to a better understanding of the magnitude of the epidemic.

- **Jamaica and Trinidad and Tobago** have concentrated HIV/AIDS epidemics, meaning that their national epidemics are still affecting primarily population groups practicing high-risk behaviors (among whom infection rates exceed 5%) but are set to spread more widely in the rest of the population.

- **Other countries in the Caribbean** either have insufficient information to be classified or have nascent epidemics, meaning HIV/AIDS prevalence is still low (less than 5%—even among people presumed to practice high-risk behavior).

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[1] The fact that non member countries or non eligible Bank member countries are mentioned in this annex, it does not imply that these countries will participate in the proposed APL.

[2] High-risk behaviour is defined as engaging in unprotected (i.e., without a condom) sexual intercourse with many partners or sharing of unsterilized needles or other injecting equipment.

Box 2-1. Overview of the Caribbean Region

Definitions of the territorial scope of the Caribbean vary. Probably the "social/cultural" definition of the "wider" Caribbean region is most relevant as it pertains to the HIV/AIDS epidemic within the region. The "wider" Caribbean region includes the following:

1. The sovereign-state members of the Caribbean Community (CARICOM), including both island-nations (Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago) and the mainland countries of Belize in Central America, and Guyana and Suriname in South America.
2. Spanish-speaking Cuba and the Dominican Republic.
3. The semiautonomous states of the Kingdom of the Netherlands (Aruba and the Netherlands Antilles islands of Bonaire, Curacao, Saint Marten, Statia, and Saba).
4. The British-dependent territories of Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Montserrat, and the Turks and Caicos Islands.
5. The U.S. commonwealth of Puerto Rico and territory of the U.S. Virgin Islands.
6. The territories of the Republic of France consisting of French Guyana, St. Marten, Guadeloupe, and Martinique.

The Caribbean is a multiethnic region with many cultural differences. There are English-speaking countries (e.g., Trinidad and Tobago), Spanish-speaking countries (e.g., the Dominican Republic), French-speaking countries (e.g., Haiti), and Dutch-speaking countries (e.g., Suriname). The majority of the population is of African descent, but there are also people of European, Hispanic, and Asian ancestry (e.g., East Indians in Trinidad and Tobago and Guyana).

The mainland states of Belize, Guyana, and Suriname, which by virtue of language and cultural heritage, form part of the Caribbean region, are much larger in land mass than the island states of the Caribbean: Belize (29,963 km^2, population 215,000), Guyana (219,470 km^2, population 813,000), and Suriname (163,820 km^2, population 437,000). The island states of the Caribbean vary in size and population from Anguilla (91 km^2 and 8,000 inhabitants) to Jamaica 11,424 km^2 and a population of 2,447,000.

Historically, the Caribbean region has been strongly influenced by Europe and the United States. Many of the English-speaking Caribbean countries have modeled their educational system, the legal system and the political system on the United Kingdom. The countries of the English-speaking Caribbean have a combined population of around 6.7 million scattered over the vast Caribbean Sea, whose farthest points span about 3,500 kilometers between the coasts of Belize and Guyana. The Bahamas and the Dominican Republic are economically reliant on the United States. France and Holland also have strong links with some of the non-English speaking countries, for example Martinique and Curacao. Therefore, there has been much migration from these countries to the Caribbean. The Caribbean is also a major tourist destination, attracting visitors from many parts of the world. Similarly, over the past 40 years, for economic reasons, many Caribbean citizens have migrated primarily to the United States, Canada, and the United Kingdom. There is also much business travel within and outside the Caribbean.

The geographic, political, cultural, and linguistic diversity of the Caribbean region underscores both the complexities in understanding the patterns of HIV contagion and successful responses. Given that human movement throughout the Caribbean and between it and other geographic areas has been the basic foundation of this region's existence since its formative days of "triangular trade" of slavery and colonization, it is clear that an appropriate response to the HIV/AIDS epidemics must recognize the contributing factor of its geopolitical heterogeneity and the complete disregard by HIV of geopolitical boundaries.

Source: PAHO/WHO, 1997.

HIV/AIDS Epidemiological Patterns and Trends in the Caribbean

Official statistics on the prevalence and incidence of HIV/AIDS cases in the Caribbean are presented below. It is important to recognize, however, that these statistics reflect a high level of underreporting of such cases.

Prevalence of HIV/AIDS in the Caribbean[3]

In 1999, about 360,000 persons were reported to be living with HIV/AIDS in the Caribbean region (see Table 2-1). According to UNAIDS, underreporting varies between 30% and 75%. The prevalence of HIV among adults ages 15-49 in the Caribbean region is 2%. *The Caribbean region currently has the highest prevalence of HIV of any region of the world other than the AIDS-ravaged sub-Saharan Africa,* where the prevalence of HIV among adults ages 15 to 49 is reported to be 8.0%.

As discussed further below, the primary mode of HIV transmission among adults in the Caribbean region is sexual intercourse between men and women. For that reason, the percentage of women with HIV/AIDS is rising. As of 1999, about 35% of the adults affected with HIV in the Caribbean region were women. Children under age 14 currently account for only a small part of the known HIV-infected population in the Caribbean region as a whole, but the pediatric share is growing. By late 1996, there had been 6,911 cases of HIV/AIDS diagnosed in children under age 14 in Latin America and the Caribbean. Most young children (about 75%) are infected by their HIV-infected mothers during pregnancy, delivery, or breast-feeding.

In some Caribbean countries, even though the numbers of children involved are still fairly small, pediatric cases account for a significant portion of the HIV/AIDS population. In fact, the data available as of 1995 showed that *certain countries in the Caribbean were among the countries with the highest percentage of pediatric HIV/AIDS cases in the Americas:* 18.2% of HIV/AIDS cases in the British Virgin Islands occurred among children, 8% in French Guyana, 8.8% in Antigua and Barbuda, 8.4% in the Bahamas, and 7.2% in Trinidad and Tobago (Health Conditions in the Americas, PAHO/WHO, 1998).

None of the Caribbean countries and territories has been spared from HIV/AIDS. It is important to note, however, that officially reported HIV/AIDS cases and estimates disguise a wide variation in prevalence among the countries in the region. S*ome Caribbean countries have the highest prevalence of HIV/AIDS among adults in Latin American and the Caribbean* (see Table 2-2). The most affected countries are Haiti, the Bahamas, Barbados, and Guyana, with an HIV prevalence rate among adults that ranges between about 2% and 5%. *Haiti, with an HIV prevalence rate of 5.17%, is the most affected country in the world outside of sub-Saharan Africa.* Cuba, on the other hand, has one of the lowest rates in the Americas (.02%). In terms of numbers of HIV/AIDS cases in the Caribbean, two countries stand out. *Haiti and the Dominican Republic, taken together, account for 85% of the total number of cases in the Caribbean.*

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[3] Prevalence is a commonly used epidemiological term that refers to the percentage of people suffering from an illness or condition at a given time. Prevalence rates are typically expressed as a percentage of the total population. Thus, the prevalence of HIV is defined as the percentage of the total population that is infected with HIV, including both HIV-positive individuals who have not yet developed AIDS and individuals whose HIV infection has developed into AIDS. From a public health point of view, HIV prevalence is important because it provides a measure of the population's general risk of contracting AIDS. The higher the prevalence of HIV, the higher the risk of contracting AIDS.

Table 2-1. World HIV/AIDS Statistics by Region, December 1999

Region	Epidemic started	Adults & children living with HIV/AIDS	Adults & children newly infected with HIV	Adult prevalence rate (*)	Percent of HIV-positive adults who are women	Main mode(s) of transmission (#) for adults living with HIV/AIDS
Sub-Saharan Africa	**Late '70s**	**23.3 million**	**3.8 million**	**8.0%**	**55%**	**Hetero**
North Africa & Middle East	Late '80s	220,000	19,000	0.13%	20%	IDU, Hetero
South & South-East Asia	Late '80s	6 million	1.3 million	0.69%	30%	Hetero
East Asia & Pacific	Late '80s	530,000	120,000	0.068%	15%	IDU, Hetero MSM
Latin America	**Late '70s**	**1.3 million**	**150,000**	**0.57%**	**20%**	**MSM, IDU, Hetero**
Caribbean	**Late '70s Early '80s**	**360,000**	**57,000**	**1.96%**	**35%**	**Hetero, MSM**
Eastern Europe & Central Asia	Early '90s	360,000	95,000	0.14%	20%	IDU, MSM
Western Europe	Late '70s early '80s	520,000	30,000	0.25%	20%	MSM, IDU
North America	Late '70s Early '80s	920,000	44,000	0.56%	20%	MSM, IDU, Hetero
Australia & New Zealand	Late '70s Early '80s	12,000	500	0.1%	10%	MSM, IDU
TOTAL		**33.6 million**	**5.6 million**	**1.1%**	**46%**	

* The percentage of adults ages 15 to 49 living with HIV/AIDS in 1999, based on 1998 population numbers.

KEY: Hetero (heterosexual transmission of HIV); MSM (sexual transmission of HIV among men who have sex with men); IDU (transmission of HIV through injecting drug use).

Source: UNAIDS, 1999.

According to UNAIDS, which has estimated the number of HIV/AIDS cases taking into account such underreporting, several factors contribute to an underestimation of the size and scope of the HIV/AIDS problem in the Caribbean:

- A lack of a standardized case definition in the region as a whole, which makes consistent diagnosis and uniform reporting difficult;
- few and outdated sentinel surveillance studies to determine HIV seroprevalence[4] over time;
- a lack of national policies in the Caribbean regarding testing and reporting of HIV;
- limited or no access to voluntary, confidential HIV counseling and testing; and

[4] Seroprevalence: the prevalence of an infection in a given population as detected in blood serum.

- underreporting, late reporting, or no reporting of cases.
- Residents' fear of being tested for HIV, given that a positive test result may lead to marginalization or exclusion from society and the workplace.
- Residents' traveling abroad to be tested because of concerns about confidentiality.

Adjusting official statistics to account for underreporting, UNAIDS has estimated that more than 500,000 people in the Caribbean region (as opposed to the 360,000 officially reported) may currently be infected with HIV.

Table 2.2. HIV/AIDS Prevalence Rates Among Adults (Ages 15-49) in Countries in Latin America and the Caribbean, December 1997

Rank	Country	HIV/AIDS Prevalence Rate (%)
1	Haiti	5.17
2	Bahamas	3.77
3	Barbados	2.89
4	Guyana	2.13
5	Belize	1.89
	Dominican Republic	1.89
6	Honduras	1.46
7	Suriname	1.17
8	Jamaica	0.99
9	Trinidad & Tobago	0.94
10	Argentina	0.69
	Venezuela	0.69
11	Brazil	0.63
12	Panama	0.61
13	El Salvador	0.58
14	Peru	0.56
15	Costa Rica	0.55
16	Guatemala	0.52
17	Colombia	0.36
18	Mexico	0.35
19	Uruguay	0.33
20	Ecuador	0.28
21	Chile	0.20
22	Nicaragua	0.19
23	Paragua	0.13
24	Bolivia	0.07
25	Cuba	0.02

Note: Adult rates (%) are derived from the number of adults (15-49 years) living with HIV/AIDS at the end of 1997 divided by the 1997 adult population.

Source: UNAIDS, Report on the Global HIV/AIDS Epidemic, June 1998, PAHO/WHO, 2000

Incidence of AIDS in the Caribbean[5]

The first AIDS case in the Caribbean is traced back to the 1970s. By the end of 1985, all of the Caribbean countries had reported at least one AIDS case. Since then, the reported number of new AIDS cases per million populations has been climbing every year. Currently, *the Caribbean region has the highest incidence of reported AIDS cases in the Americas, and the trend is not encouraging* (see Figure 2-1).

AIDS incidence rates have been increasing significantly in the English-speaking Caribbean, which together constitutes the majority of the member countries of CARICOM. In the English-speaking Caribbean countries, the AIDS incidence rate rose from 142.3 AIDS cases per million in 1991 to 246.2 per million in 1996. In the Latin Caribbean countries, although Cuba remains with a low AIDS incidence rate, data from Haiti and the Dominican Republic show a similar upward trend. If Puerto Rico is included in the Latin Caribbean figures, the observed trend becomes more pronounced.

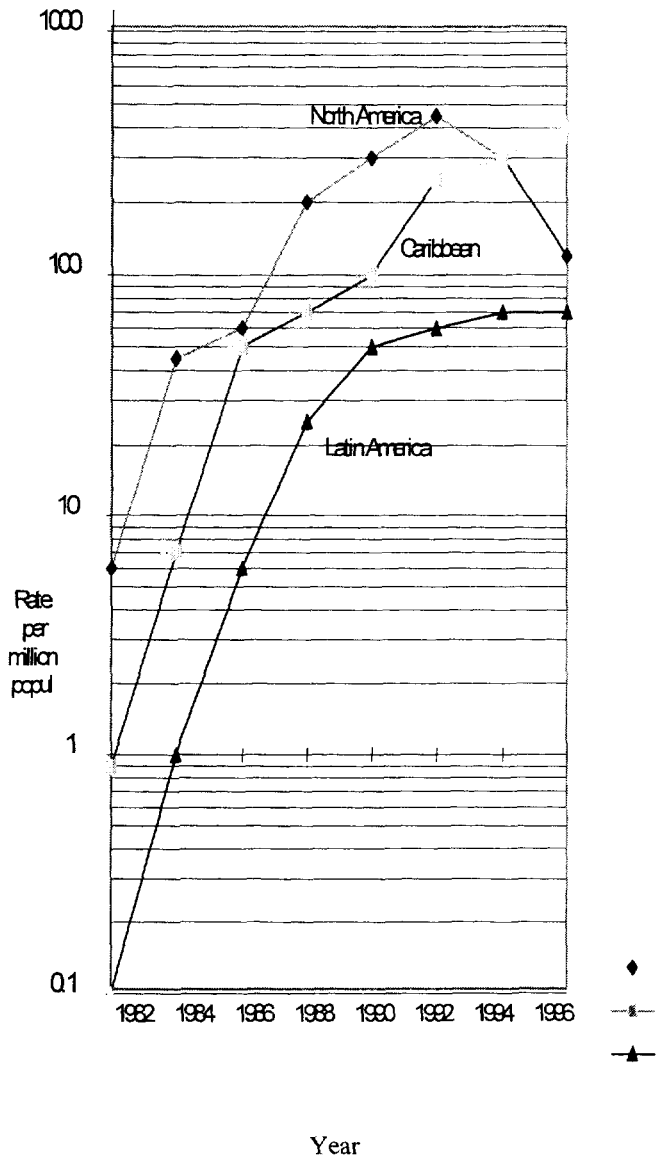
[5] Incidence, in contrast to prevalence, is defined as the number of *new* cases of a disease occurring in the population during a specified period of time. Thus, the incidence of AIDS is often presented as the number of new cases of AIDS diagnosed during a given year per million populations. Many years typically lapse between the time an individual is infected with HIV and the time he or she develops full-blown AIDS. For that reason, AIDS incidence rates reflect rates of HIV infection from years before. Absent widespread screening for HIV, most cases of HIV/AIDS are only detected when individuals develop and begin to exhibit symptoms of AIDS. For this reason, statistics on the incidence of AIDS cases may be thought of as only the "tip of the iceberg," because many people who are infected with HIV in the population have not yet developed visible signs of AIDS.

The growing importance of the HIV/AIDS epidemic in most countries of the Caribbean can be better appreciated if one compares the incidence figures in these countries with the steady downward trend in AIDS incidence rates that has been observed in North America (Canada and the United States) since 1992—from 280.9 AIDS cases per million in 1992 to 126.9 per million in 1996, in large part due to improved access to medical care.

Official AIDS incidence rates among the Caribbean Epidemiology Center (CAREC) member countries[6] have steadily increased since the 1980s (see Figure 2-2). CAREC reports that the cumulative number of officially reported AIDS cases in CAREC countries increased from 9,978 at the end of 1996 to 14,380 in 1998. In terms of cumulative AIDS cases per 100,000 population in CAREC countries as of 1996, the country with the highest number was the Bahamas, with 146.6 AIDS cases per 100,000 population; next highest were Bermuda (66.0), Barbados (50.3), Trinidad and Tobago (33.4), and Jamaica (22.3).

The HIV/AIDS epidemic has been moving into younger and younger population groups. About 83% of AIDS cases are diagnosed in people between the ages of 15 and 54, and almost half of these cases are diagnosed in people ages 25 to 34. These figures suggest, given an estimated average incubation period of eight to 10 years from HIV infection to the development of AIDS, that about half of new HIV infections are occurring among young people ages 15 to 24. The affected age groups are those forming the labor force. Among men, the majority of AIDS cases are in the 30-34 and 25-29 age cohort; among women, the majority of cases are in the 25-29 year-old age bracket, followed by the 30-34 year age group (PAHO/WHO, 1998).

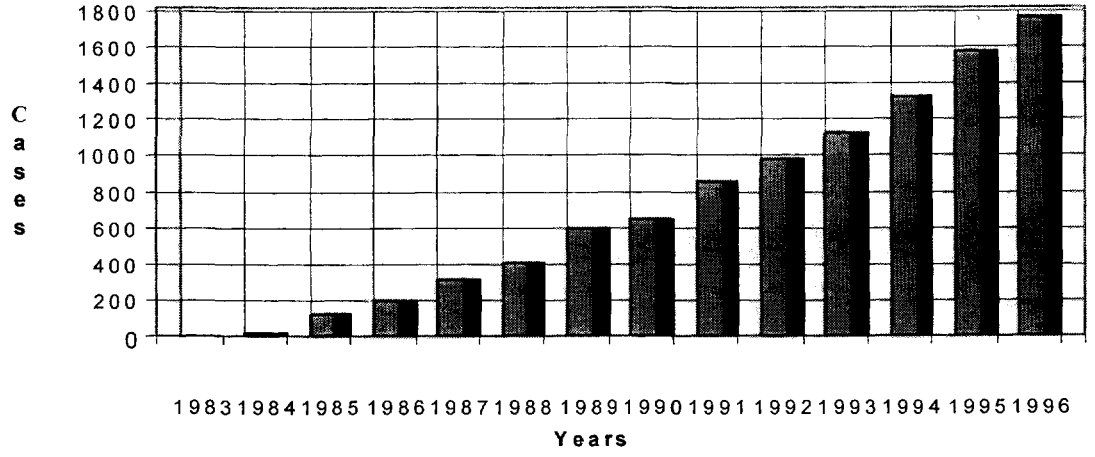
Figure 2-1. AIDS Incidence Rates in North America, Latin America, and the Caribbean, 1982-1996



Source: PAHO/WHO, 1998

[6] PAHO/WHO reporting of HIV/AIDS statistics for the Caribbean region is usually broken down into two categories: *CAREC countries* (Anguilla, Antigua and Barbuda, Bahamas, Barbados, Bermuda, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, and Suriname); and the *Latin Caribbean group* (Cuba, Dominican Republic, and Haiti).

Figure 2-2. Annual Incidence of Reported AIDS Cases in CAREC Member Countries



Source: PAHO/WHO 1997.

Modes of HIV Transmission in the Caribbean

In Latin America and the Caribbean, *unprotected sexual contact is the main transmission mechanism for HIV/AIDS.* More than half of all the AIDS cases that have occurred in the Caribbean region to date were the result of reported unprotected sexual intercourse between men and women. In the English-speaking Caribbean, heterosexual contact accounts about 60% of reported AIDS cases (see Figure 2-3), while in the Latin Caribbean it represents about 50% of the reported AIDS cases. The following factors have a large influence on the rate of sexual transmission of HIV and other STDs (Confronting AIDS, 1998):

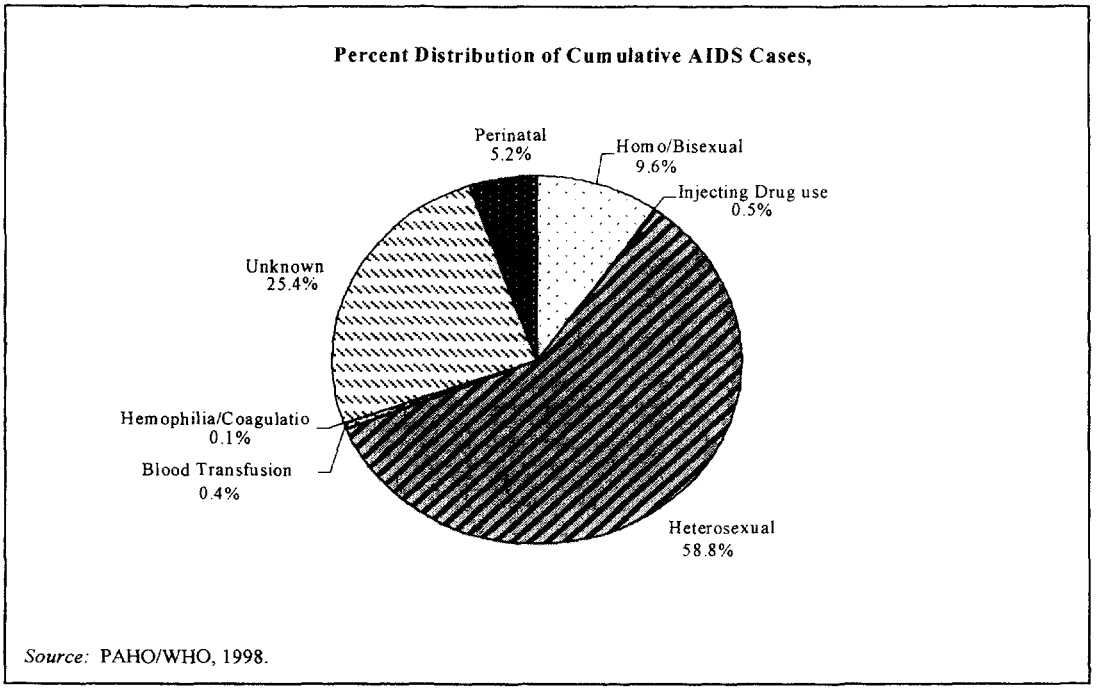
- The longer a person remains infectious;
- the more frequent a person has sexual contacts; and
- the more new sexual partners contacted.

Other modes of HIV transmission in the Caribbean region, as discussed further below, are homosexual/bisexual unprotected sexual relations; the use of contaminated needles by intravenous drug users; blood-borne transmission; and, increasingly, MTCT. The percentage of AIDS cases due to MTCT of HIV in the Caribbean is now the highest in the Americas.

Heterosexual Transmission of HIV

Sex between men and women has quickly outpaced HIV transmission by other means. Heterosexual transmission has been the main route of HIV transmission since 1986. Women are more vulnerable to HIV than men for biological reasons (i.e., their anatomy makes them more vulnerable than men), as well as for social and cultural norms (i.e., machismo; male-female power relations whereby many women have little or no power to negotiate safer sex practices with their male partners). About 35% of the adults living with HIV/AIDS in the Caribbean region are women.

Figure 2-3. Distribution of Cumulative AIDS Cases, by Mode of Transmission, in the English-speaking Caribbean, 1998



Source: PAHO/WHO, 1998.

Currently, *the Caribbean region has one of the highest rates of new AIDS cases among women in the Americas.* The male-to-female ratio for reported HIV infection cases has been declining in both the Caribbean and Latin America in the 1990s. In the early part of the decade, the ratios were 4.9:1 in Latin America and 2:1 in the Caribbean, whereas in 1996, they were 3.2:1 and 1.7:1, respectively. According to PAHO/WHO, the declining male-to-female ratio of HIV infections reflects the growing "feminization" of the HIV/AIDS epidemic in these regions.

In Haiti, the ratio of male-to-female HIV infections is almost 1:1 (i.e., almost evenly split between genders), and the HIV/AIDS epidemic has spread broadly to 8% of pregnant women—as a result, there is significant MTCT of HIV in that country. Similarly, in Guyana, nearly 7% of women attending prenatal clinics were infected with HIV as of 1992. In the Dominican Republic, more than 70% of AIDS cases are attributed to heterosexual transmission; there, the male-to-female ratio of cases now stands at 2:1 and is declining. The prevalence of HIV among pregnant women is 2.8% nationwide in that country, and in some areas it has reached 8%. The male-to-female ratio of HIV infections in other countries, including Dominica, Barbados, Antigua, and Trinidad and Tobago, ranges between 3.6:1 and 2.4:1.

Men-Who-Have-Sex-with-Men Transmission of HIV

Reported homosexual and bisexual transmission of HIV is relatively low in the Caribbean, accounting for about 10% of AIDS cases, but MSM transmission is nonetheless considered an important mode of HIV transmission. Given discrimination against homosexuals and bisexuals in the Caribbean it is quite likely that the reported data underestimate the true percentage of AIDS cases attributable to MSM transmission of HIV.

According to CAREC, approximately 20% of AIDS cases among men in the English-speaking Caribbean are reported to be due to sexual contact with other men, whereas 22% of cases of cases among men are

reported as "mode of transmission: unknown." Of the 22%, it is assumed that most are probably through male-to-male sex.

Injecting-Drug-Use Transmission of HIV

In most Caribbean countries, the transmission of HIV by injecting drug use is reported to be minimal, ranging from 0% to 2% of AIDS cases. Bermuda is the exception, where injecting-drug-use transmission represents 43% of total reported AIDS cases. Puerto Rico, reflected in United States statistics, represents another Caribbean community heavily affected by injecting drug use. Crack-cocaine drug use has been shown to be associated with higher risk of HIV infection in the Bahamas, Trinidad and Tobago, and Jamaica. Among crack-cocaine users, HIV seroprevalence can be as high as 42% in Bahamas and Trinidad and Tobago (CAREC, 1999).

Mother-to-Child and Blood-Borne Transmission of HIV

The percentage of AIDS cases where children were infected by HIV-positive mothers is higher in the Caribbean region than in any other part of the Americas. Recent estimates indicate that following the increase in the number of AIDS cases among women, mother-to-child or vertical transmission now accounts for 6% of all reported AIDS cases in CAREC countries. MTCT is more likely to happen depending on the stage of the disease that the woman is in, the viral load and procedures carried out during birth. The transmission of HIV through blood or blood product account for less than 3% of AIDS cases in the Caribbean.

Populations at High Risk of HIV Infection in the Caribbean

Populations at high-risk are young people who engage in unprotected sexual intercourse, and men who engage in sexual intercourse with other men. The newborns of HIV-infected women are another group at high risk.

Many countries in the Caribbean have set up surveillance systems to track the spread of HIV through their populations. The specific type of surveillance necessary follows the general pattern of infection in a given country. Sentinel surveillance of population groups in the Caribbean have primarily included CSW, people attending STD clinics, and pregnant women. These groups are discussed below.

Commercial Sex Workers

CSWs are defined as women or men who provide sex for material gain. In the Caribbean, as noted by CARICOM (2000), commercial sex work is widespread and increasing throughout the countries. It is linked to tourism and to other economic endeavors such as mining, migrant farming and informal sector hawking. Economic hardship is the primary motivating factor for sex work.

Prevalence among sex workers has been rising over the course of the epidemic. The problem is aggravated by the absence of any regulation in the sex trade industry and the marginalized status of the trade, implying that social and health services are rarely responsive to the particular needs of CSW (CARICOM, 2000). In Haiti, 42% to 53% of this population group in the largest urban areas is infected; in the Dominican Republic, the figures varied between 5% and 6% in 1994-95 (PAHO/WHO, 1998). The epidemic has also infected significant numbers of CSW in Guyana, Jamaica, and Trinidad and Tobago. In Guyana, a survey of CSW found a seroprevalence of 25% in 1993. In Jamaica, HIV prevalence among CSW in Kingston was 11% in 1995, but was higher in Montego Bay at 22%. Surveys of commercial sex workers in Trinidad and Tobago have also found high rates of HIV infection (EU, 1998).

Attendees of Clinics for Treating STDs

STDs are common in the Caribbean (PAHO/WHO, 1996). Studies in both industrial and developing countries indicate that people with current or past STDs are two to nine times more likely to be infected with HIV (Confronting AIDS, 1998). HIV infection rates are high among STD clinic attendees in several Caribbean countries, reflecting the close interaction between HIV/AIDS infection and STDs. In Jamaica, HIV prevalence among STD clinic attendees rose from 0.25% in 1986 to 3.1% in 1990 and 6.3% in 1997. Among STD clinic "repeaters," HIV prevalence was higher; 10% in 1990 and 9.3% in 1993. In Guyana, HIV prevalence among STD clinic attendees was as high as 13.1% in 1992 and 6.6% among women and 21.0% among men in 1995. In Trinidad and Tobago and the Bahamas, HIV prevalence among STD clinic attendees peaked at 13.6% in 1991/92 and declined to 6-7% in 1995/96. Among Haitian migrant workers living in the bateyes, or sugarcane plantations, of the Dominican Republic in 1995, there was high prevalence of STDs, including 5.7% for HIV (PAHO/WHO, 1998).

Pregnant Women

HIV prevalence among pregnant women has been monitored in several countries through sentinel surveillance. CAREC (1999) estimated that in 1997 there was an HIV prevalence rate of 1-2% among pregnant women in the Caribbean.

Haiti has the highest prevalence of HIV among women receiving prenatal care services in the Latin Caribbean (ranging from 8% to 9% between 1986 and 1993 in urban areas and from 3% to 4% in rural areas between 1986 and 1990). In the Dominican Republic the figures ranged from 1% in 1991 to 4%-8% in 1998. In Cuba there is no sign of infection among this population (PAHO/WHO, 1998).

In the English-speaking Caribbean, the prevalence of HIV infection among women receiving prenatal care services is less than 1% in the Bahamas, Grenada, the Cayman Islands, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago (PAHO/WHO, 1998). In Jamaica, HIV seroprevalence among prenatal clinic attendees increased from 1.4 per 1,000 in 1989 to 9.5 in 1997. In Barbados, HIV seroprevalence varied between 8 and 12 per 1,000 between 1992 and 1996. In Guyana, a survey of pregnant women in 1992 found an HIV infection prevalence of 7%. In the Bahamas, countrywide HIV screening of pregnant women was introduced on a voluntary basis. HIV prevalence among pregnant women was highest in 1993 at 4.8% and declined to 4.2% in 1994 and 3.6% in 1995.

Mortality Due to AIDS in the Caribbean

During the last two decades, there were 6,566 AIDS deaths reported in the region, representing 1.4% of total AIDS deaths in the Americas (PAHO/WHO, 1998). The actual number of deaths due to AIDS in the Caribbean is probably higher than the officially reported number (given the probability of underreporting or inaccurate diagnosis of cause of death).

The AIDS case fatality rate[7] in the Caribbean region as a whole is high, 63% in 1996. *In the English-speaking Caribbean, AIDS is now the largest cause of death among young men between the ages of 15 and 44.* Recent research in the Dominican Republic shows that AIDS is the most common cause of death among women in their reproductive ages in the geographic area studied, the National District of Santo Domingo, which encompasses about 30% of the country's population. About 12% of all deaths among the women of childbearing age were found to be caused by AIDS in that region; the next most common cause of death was violence. Unfortunately, mortality from AIDS disproportionately affects young

[7] The case fatality rate is the number of deaths from a disease during a defined period of time expressed as a percentage of the total number of people with the disease.

women: 56% of all deaths due to AIDS occur in individuals between 20 and 34 years of age (Cáceres Uraña, 1998).

One of the most devastating impacts of deaths from HIV/AIDS is on the children of parents who are victims of the disease. HIV/AIDS most frequently strikes adults who are often raising children and are at the prime of their working lives. By the end of 1999, *the cumulative number of Caribbean children estimated to have been orphaned by HIV/AIDS at age 14 or younger stood at 83,000* (UNAIDS, 1999). Experience in other regions of the world has demonstrated that deaths and illness due to AIDS among adults has a profoundly negative impact on the welfare of children in the affected households. Frequently, poor health and premature death of adults lead to income and expenditures changes that can have adverse effects on child nutrition and schooling (Confronting AIDS, 1998; Dasgupta et al. 1999). Some families can no longer afford school costs or the children are needed to help out at home. Children's education may also suffer as a result, reducing literacy rates in communities. This would be particularly onerous for poor families given the already stratified educational system in the Caribbean that is reflected in higher attrition of poor students at all grade levels that becomes deeper and wider at each successive level, and in a skewed distribution of resources to the detriment of schools in poorer communities (Caribbean Education Sector Strategy 2020, WB, 2000).

According to UNAIDS (2000), AIDS case fatality rates have remained at a constant high in the Caribbean due to several factors:

- Late diagnosis of HIV infection and related conditions;
- lack of policies, skills, and resources in preventing HIV MTCT in many countries;
- lack of accessibility to ARV drugs use to treat HIV-positive individuals in countries such as the United States;
- lack of access to basic medicines to combat opportunistic infections; and
- lack or denial of services to HIV/AIDS patients in some countries.

In some countries of the Caribbean, HIV/AIDS has pushed back or is starting to reverse the gains in life expectancy achieved in previous decades as the result of progress in the fight against communicable diseases. In Haiti and Guyana, life expectancy is estimated to be 5.7 and 5.2 years less, respectively, than it would have been without AIDS (UNAIDS, 2000). *What is ominous for the Caribbean region, however, is that even if all HIV transmission could be halted today, the impact of the illness and deaths of the people already infected will be felt over the next two decades.*

Socioeconomic Impacts of AIDS in the Caribbean

HIV has a long latency period, so some of the social and economic consequences of the HIV/AIDS epidemic may not be felt immediately. Eventually, however, if the prevalence of HIV continues to increase in the Caribbean as it has been, per capita economic growth may begin to decline. Increased expenditures for treatment of AIDS and AIDS-related diseases from government budgets and household savings will reduce the capital for more productive investments.

Preliminary efforts have been made to project the expected macroeconomic impact of HIV/AIDS within Caribbean countries by the years 2005 and 2020. A macroeconomic impact study of Jamaica and Trinidad and Tobago revealed contractions in major variables, such as the GDP (declines of 6.4 and 4.2 percent, respectively). The level of investment was also severely affected as incomes had to be redirected

from the production of goods and services to finance HIV- related expenditures. These HIV-related illness expenditures rose by 25.3% in Trinidad and Tobago and 35.4% in Jamaica. Even using low case scenario data, impacts upon several key industries were evidenced, the service sector categories were more greatly affected than employment in agriculture or manufacturing (Camara at al, 1997).

The emergence of AIDS as a major health problem places a tremendous burden on the health care systems of the Caribbean countries. Assessments conducted by the University of the West Indies (UNAIDS, 1998) suggest that HIV/AIDS may have important fiscal consequences in the Caribbean, as national health budgets are increasingly taxed by the costs of care for HIV-infected people (e.g., the biggest burden to the health care system is that for managing the opportunistic infections, such as tuberculosis, chronic and severe diarrhea, and other complications, that all put a burden on the bed capacity of hospitals and outpatient departments). The case management of HIV or AIDS through the prophylactic administration of an antiretroviral drug like zidovudine (AZT), that costs more than US$3,000 per year, would represent more than three times the national per capita income in many Caribbean countries. AIDS drains scarce skills and resources needed for addressing other health priorities such as childhood diseases or malaria.

HIV/AIDS has considerable potential to cause a negative impact on economic sectors such as agriculture, tourism, mining, lumber, finance, and trade as a result of lost productivity of economically active adults with HIV/AIDS and premature death. The shock of AIDS to the labor markets is one mechanism through which AIDS might adversely affect economic growth in the Caribbean. At present, the affected age groups (83% of AIDS cases in the Caribbean are in the age group 15-54 years) are those forming the labor force. A survey of people living with HIV/AIDS in the Caribbean indicates that most of them were already unemployed due in some cases to workplace attitudes (Wint, 2000).

As noted in a United Nations Security Council meeting convened in early January 2000, the first time to take up a health issue, HIV/AIDS has grown beyond a health epidemic to become a threat to global security and stability. In a similar fashion, the United States government in April 2000 formally designated the disease as a threat to U.S. national security because the epidemic could undo decades of development work in the world. These concerns are highly relevant for the Caribbean because its HIV/AIDS epidemic could create significant externalities beyond the region (e.g., according to recent health data, the fastest growing epidemic within Canada is amongst Canadians from the Caribbean, mainly Haitian in Montreal; the second highest urban HIV seroprevalence in the United States is found in San Juan, Puerto Rico). The high-profile international attention to this issue implies that Caribbean governments cannot deny or ignore it anymore.

The Task Ahead

The forces driving the HIV/AIDS epidemic and the implications of the epidemic in the Caribbean are inextricably linked to the region's economic, social, and cultural dynamics. Caribbean AIDS experts have put forth a number of specific challenges to addressing the problem of HIV/AIDS in the region, including the following:

- A large discrepancy between cultural, moral, and religious taboos and actual sexual practices in Caribbean countries;
- a lack of information and HIV/AIDS prevention programs targeted to groups most at risk (e.g., young people, CSW, MSM, migrants);
- low approval rate of condom use among men and women, coupled with the church opposition to condom use;

- stigmatization of and discrimination against persons living with HIV/AIDS, which contribute to HIV transmission by discouraging the use of HIV testing and other services;

- low use of health care facilities for managing HIV/AIDS and other STDs, both in the public and the private sectors, due in part to concerns about confidentiality and the lack of access to effective HIV/AIDS therapies; and

- the lack of ARV drugs for most HIV-infected people and people with AIDS in the Caribbean.

Caribbean governments and their partners have taken several actions to combat the HIV/AIDS epidemic, but these actions have not yet turned the epidemic around. It is important for Caribbean governments, with the support of their development partners, to act decisively now before the epidemic reaches the levels it has in sub-Saharan Africa. A key challenge will be putting more effective HIV/AID prevention programs into place. As governments operate with resource constraints and fixed budgets, the call for greater actions in health protection and promotion and disease prevention cannot ignore their cost and how these services will be paid for. The WB's *1993 World Development Report* (WB, 1993) recommends that developing countries use an approach for setting priorities that involves comparing the likely costs and impacts of different preventive and curative interventions. This approach is an important resource allocation tool because cost-effective interventions such as greater use of condoms, cost as little as U$8 per infection averted, whereas the treatment of opportunistic infections associated with AIDS and anti-HIV treatment, which does not cure AIDS, costs thousands of dollars per year per patient.

Annex 3

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Health System Performance in Caribbean Countries, WHO indexes, estimates for 1997

Country	Performance on Health Level (Dale)			
	Rank	Uncertainty Level	Index	Uncertainty Level
Jamaica	8	3-12	0.956	0.928–0.986
Belize	34	25-48	0.853	0.821-0.884
Cuba	36	32-42	0.849	0.830-0.866
St. Vincent & the Grenadines	38	28-52	0.845	0.812-0.876
Dominican Rep.	42	33-54	0.834	0.806-0.863
Grenada	49	37-63	0.819	0.789-0.850
Saint Lucia	54	43-69	0.809	0.781-0.837
Dominica	59	45-73	0.804	0.774-0.833
Trinidad & Tobago	79	70-84	0.767	0.750-0.780
Barbados	87	77-92	0.749	0.730-0.770
Guyana	104	92-115	0.704	0.672-0.738
St.Kitts & St.Nevis	122	114-127	0.650	0.621-0.679
Antigua & Bermuda	123	115-131	0.641	0.606-0.678
Bahamas	137	127-142	0.593	0.564-0.624
Haiti	139	134-143	0.580	0.561-0.599

Source: WHO, The World Health Report 2000, Health Systems: Improving Performance

The index of performance on the level of health reports how efficiently health systems translate expenditure into health as measured by disability – adjusted life expectancy (DALE). Performance on the level of health is defined as the ratio between achieved levels of health and levels of health that could be achieved by the most efficient health system. More specifically, the numerator of the ratio is the difference between observed DALE in a country and the DALE that would be observed in the absence of a functioning modern health system given the other non-health system determinants that influence health, which are represented by education. The denominator of the ratio is the difference between the maximum possible DALE that could have been achieved for the observed levels of health expenditure per capita in each country and the DALE in the absence of a functioning health system. Econometric methods have been used to estimate the maximum DALE for a given level of health expenditure and other non-health system factors using frontier production analysis. The relationship between life expectancy and human capital at the turn of the century was used to estimate the minimum DALE that would have been expected in each country (at current levels of educational attainment) in the absence of an effective health system. The table provides uncertainty intervals for both the absolute value of performance and the rank of each country.

Annex 4

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Caribbean Regional Strategic Plan of Action for HIV/AIDS Prepared by the CARICOM-led Task Force, Priority Areas and Strategic Actions

The overall intention of the Plan is to reduce the spread and impact of HIV/AIDS in the Caribbean. Its framework identifies areas for priority action at the regional level, which are focused on promoting a strengthened, effective and coordinated regional response to the epidemic, and supporting expanded multi-sectoral HIV/AIDS programs at the national level. The Regional Strategic Plan is based largely on the efforts of these groups to coordinate and prioritize HIV/AIDS work in the Caribbean region. The priority areas are as follows:

- Advocacy, policy development and legislation;
- support of people living with HIV/AIDS;
- prevention of HIV transmission, with a focus on young people;
- prevention of HIV transmission among especially vulnerable groups: -
  - Men who have sex with men (MSM)
  - Sex workers
  - Prisoners
  - Uniformed populations (military and police)
  - Mobile populations
  - Workplace interventions
- prevention of mother to child transmission of HIV; and
- strengthening national and regional response capability.

Specific actions under these broad categories include:

Priority 1. Advocacy, policy development and legislation

- Promote the incorporation of human rights and non-discrimination practices in policy and legislation, in accordance with international guidelines, best practice and commitments;
- mobilize regional opinion leaders on HIV/human rights issues;
- promote awareness at multisectoral level on HIV and human rights issues;
- ensure that national level policy decisions reflect international standards/best practice/consistency with international guidelines;
- increase participation of PLWHAs in policy dialogue;

- expand analysis of the impact of the epidemic on key social and economic sectors;
- identify opportunities for regional participation in international vaccine efforts; and
- ensure inclusion of HIV/AIDS issues in regional health sector reform activities (at national and regional level).

Priority Area 2. Care and Support for People Living with HIV/AIDS

- Promote the active formation and participation of networks of people living with HIV/AIDS in program and policy design, implementation and evaluation (GIPA);
- develop and promote improved understanding of quality of care issues;
- improve access to basic medication (for the prevention and treatment of opportunistic infections);
- improve access to antiretrovirals;
- ensure that regional standards for clinical management and care for STI/HIV/AIDS are being met;
- improve understanding & opportunities for regional bulk procurement of test kits and drugs, condoms, etc; and
- strengthen and extend counseling and diagnostic facilities.

Priority Area 3. Prevention of HIV Transmission, with a focus on young people

- To ensure general access to reliable and accurate information about HIV/AIDS;
- to ensure recognition of gender issues within all prevention campaigns;
- to ensure that prevention messages are integrated into as many general advocacy opportunities as possible;
- to improve and support the implementation of Health and Family Life Education Programs;
- to integrate HIV and STI issues into adolescent programs including reproductive health programs;
- to ensure the availability and accessibility of condoms to youth;
- to advocate for the provision of youth-oriented health services and facilities;
- to promote and support innovative peer counseling models for youth, parents and teachers; and
- to ensure the access of out of school youth to HIV/AIDS prevention and services.

Priority Area 4. Prevention of HIV transmission among especially vulnerable groups

Men Who Have Sex with Men (MSM)

- Support development of national and regional networks of MSM Egos and partners addressing HIV

prevention and care;

- Strengthen understanding of role of MSM and female partners of MSM in regional epidemiology of HIV/STIs and to use information in appropriate prevention and care strategies;

- ensure access to best practice information and adaptation of lessons learned into regionally appropriate use; and

- ensure access to best practice information and adaptation of lessons learned into regionally appropriate use.

Sex Workers

- Strengthen understanding of role of sex workers in regional epidemiology of HIV/STIs, and to use information in appropriate prevention and care strategies;

- support development of regional networks of NGOs addressing HIV prevention and care needs of CSW; and

- strengthen understanding of role of substance abuse and drug use in regional epidemiology of HIV/STIs, and to use information in appropriate prevention and care strategies.

Prisoners

- To ensure that HIV/STI policies and appropriate prevention strategies and services are available and implemented in the prison system.

Uniformed Populations

- To ensure that HIV/STI prevention and care needs of uniformed populations are recognized and addressed with appropriate services.

Mobile Populations

- To identify and address policy issues affecting mobile populations at regional level (testing, immigration requirements, employment, insurance, etc); and

- to identify opportunities within tourism sector for HIV prevention.

General Workplace Interventions

- To mobilize and support key employers at regional and national level to assess HIV/AIDS in their workplaces and to introduce appropriate prevention and support programs for employees.

Priority Area 5. Prevention of Mother to Child Transmission

- To develop regional policy and operational guidelines;

- to identify and support field training sites/models; and

- to strengthen primary prevention among women.

Priority 6. Strengthen planning and managerial capacity for programs at the national and regional levels

- To build analytical and management capacity in key regional institutions such as CARICOM, CAREC, UNAIDS, UWI, CRN+ and others
- To expand and improve the quality of information available to program managers and policy makers on the course, causes and consequences of the epidemic at national and regional levels;
- to promote information exchange, coordination, and formation of strategic alliances in the region;
- to inform and mobilize policy makers at highest levels with more comprehensive information on the course, consequences and costs of the epidemic;
- to ensure participation of key economic and social sectors in national and regional dialogue on HIV/AIDS; and
- to increase quality and coverage of HIV/AIDS issues in the media.

Annex 5

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Criteria for Country Participation

Rationale

To have maximum impact on reducing the spread and cost of HIV/AIDS in the Caribbean, it is critical that all qualifying countries begin implementing their own country HIV/AIDS Prevention and Control Projects within the next 24-30 months. Achieving this is one of the development objectives of the Multi-Country HIV/AIDS Prevention and Control Program.

Most countries have begun formulating concepts and strategies for expanded responses to the epidemic, with assistance from such agencies as CAREC, PAHO/WHO, and UNAIDS, as well as bilateral donors. The WB will also support this effort through the PHRD Grants provided by the Government of Japan. Many are following the recommendations of the Strategic Plan of Action for HIV/AIDS, developed by the CARICOM-led Task Force on HIV/AIDS and approved by CARICOM Heads of Government, July 2000. A common problem, however, is that lack of operational plans and sufficient financing is a significant constraint to implementing these responses. Part of the WB's value added in the effort to prevent the spread of the epidemic and control its effects is to support the development of implementable programs and to provide incremental resources to finance country projects that are compatible with the framework established for the WB's Multi Country HIV/AIDS Prevention and Control Program.

For countries to make optimal use of the WB's resources, they should be in a position to absorb the assistance rapidly and cost-effectively soon after is it made available. This would strengthen the public credibility and accountability of country projects. Also before beginning its project, a country should have built the lessons of international experience into its own project. To provide the incentive for this to occur, a country project would be considered *eligible* for financing under the Multi-Country Program only when it met criteria that experience has shown necessary for project success. These would be treated as **conditions for negotiations** of the proposed country project (this method mirrors the use of "triggers" in a one-country APL to initiate the appraisal and negotiation of subsequent loans within a national program) and necessary conditions for approval. The final decision to borrow and lend would also depend on other traditional considerations affecting Borrower-WB transactions (including an agreed CAS; creditworthiness considerations, manifested demand by a borrower, etc).

Eligibility Criteria

Country projects would be prepared and appraised following normal WB procedures, assuring that quality-at-entry norms apply and that Safeguard policies and standards for maintaining financial management and procurement discipline are observed. The operational design of each project would account for the factors normally considered in formulating detailed project components and phasing of project activities. It would be important that all projects correctly reflect the environment in which they would be implemented with scaling and phasing of project activities, management arrangements, cost-sharing provisions, risk mitigation requirements, among others, appropriate to the borrower's current situation. Consequently, a program in a country with little history of Bank projects and relatively weak institutions could be considered equally "eligible" for inclusion in the program as one in a country with long histories and well-developed institutions, as long as the project design was appropriate for the situation. Both could, in principle, meet the criteria considered relevant for initiating a successful

HIV/AIDS program.

The following are the criteria for entering into negotiations of a country loan, and the standards that would be used to apply them:

1. Preparation of a National HIV/AIDS Strategy and Program:

Advanced: An eligible country would have an approved national strategic plan showing understanding of the issues and goals for addressing them, actions adapted from best practice and the *Regional Strategic Action Plan* to meet national priorities, evidence of strong public support and a well balanced range of stakeholders. It would have identified HIV/AIDS prevention or treatment activities that could be scaled up; have included financing for HIV/AIDS programs in the National Budget; prepared and included in its strategic target levels of key indicators such as AIDS-related mortality, prevalence among high risk groups and the general population, and other leading indicators of future reductions; included both treatment and prevention goals in program plans; and be conducting ongoing public dialogue and/or involvement.

Moderate: As for "Advanced" but missing some key elements in the plans and without reliable budget allocations.

Low: Many key aspects missing, especially public dialogue and establishment of goals, requiring significant additional identification of implementable actions and direction.

2. Readiness of National Leadership:

Advanced: An eligible country would have national commitment and leadership, including a well structured project management unit empowered to be proactive, a national leader/champion with sufficient stature to direct the effort, and evidence of current budgetary support for HIV/AIDS and the strong probability of readiness to meet future recurrent budgetary requirements; a sufficient key appointments would have been made to begin operations and budget transfers would have begun to initiate multi-sectoral action;

Moderate: Leadership concepts and design would have been accepted in principle, and some key persons would be involved in leadership roles; budget transfer mechanisms decided but not implemented; national commitment equivocal

Low: Concepts under discussion; key persons not associated regularly, low public awareness and little public commitment.

3. Programming for Multi-sectoral Implementation:

Advanced: A satisfactory implementation strategy would include program execution through multiple ministries when the public sector is involved and through NGOs, community groups and civil society organizations; a minimum amount of such activity would be underway and when relevant, past performance of "de-concentrated" implementation is being used to guide practice.

Moderate: Policy embraces decentralized implementation but important shortcomings in preparedness and practice remain.

Low: Policy is not clear on multi-sectoral implementation.

4. **Use of Sustainable Business Arrangements**:

Advanced: An eligible country would have put in place sturdy and sustainable implementation arrangements (financial, procurement, regulatory); including as needed, legal frameworks that permit implementation through "de-concentrated arrangements "; and financial management and procurement arrangements that are acceptable to the WB.

Moderate: Agreement reached in principle on concepts but without actual frameworks and/or practice being in place.

Low: Policy not decided and/or under discussion.

5. **Status of Monitoring and Evaluation**:

Advanced: An eligible country would have clearly defined its institutional arrangements for, and be ready to initiate the monitoring the evolution of the HIV/AIDS epidemic and for evaluating program progress and impact;

Moderate: Sketchy baseline information; limited experience with monitoring public health as a regular practice; structures for behavioral and social monitoring not sufficiently developed for HIV/AIDS.

Low: No discernable capacity.

During project preparation, as with most projects, borrowers would normally advance on meeting all of these criteria in tandem. Each country in the Caribbean has been awarded a PHRD Grant to assist the country in meeting these eligibility criteria, assuming that countries are currently satisfying any two of the five eligibility criteria. The Grant aims to help the countries make progress towards satisfying all five criteria. However, each country in the region is starting from a different level in terms of their institutional capacity---in general and specifically for preparing and implementing HIV/AIDS programs. This would make it difficult for each of them to meet a common absolute standard and still be eligible for the program in a timely manner. Therefore, the Bank would make an informed judgment of country readiness and relative progress based on the countries' starting point and prevailing circumstances.

Initial Application of the Criteria

Table 1 gives a preliminary assessment of country readiness according to the criteria, judged from the situation at the time of presenting the Multi-Country Program for WB approval. All countries currently benefit from support through various agencies as well as financing through PHRD grants, to accelerate preparation of their country projects.

Table 1.Caribbean Multi Country HIV/AIDS Prevention and Control Program Country Readiness to Negotiate Financing

Country	Preparation of National HIV/AIDS Strategy and Program	Readiness of National Leadership	Programmed for Multi Sectoral Implementation	Use of Sustainable Business Arrangements	Status of HIV/AIDS M&E	Overall Readiness to Negotiate as of 4/01
Antigua and Barbuda	L	L	L	L	L	L
Barbados	A	A	A-	A-	M	A-
Belize	A	M	M	L	L	M
Dominica	L	L	L	L	L	L
Dominican Republic	A	A	A	A	M	A-
Grenada	M	M	L	L	L	L+
Guyana	M	L	L	M	L	L+
Haiti	L	L	L	L	L	L
Jamaica	A	M	A	M	A	M
St. Kitts and Nevis	M	M	M	M	L	M
St. Lucia	L	L	L	L	L	L+
St. Vincent	L	L	L	L	L	L
Suriname	L	Unknown	unknown	unknown	unknown	unknown
Trinidad and Tobago	M	L	L	L	L	L

A- Advanced; M-Moderate; L-Low

Annex 6

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Operational Guidelines for Scaling up HIV/AIDS Interventions at the Country Level

This annex provides general operational guidelines for activities within the components of the project. Table 1, which summarizes such activities, is an extension of Annex 1. Although the guidelines discussed here are somewhat arbitrary and not country-specific, they strive to capture the current body of evidence of what works in HIV/AIDS programming and aim to provide a framework to prioritize HIV/AIDS activities. Task Team Leaders (TTLs) might find this framework useful to identify priority actions when supporting client countries in the Caribbean region to scale up their national responses to HIV/AIDS.

While the guidelines, in principle, can be applicable to all Caribbean countries, activities need to be tailored to fit the specific situation and needs of each country in order to be more effective. For a country, choosing an appropriate mix of prevention and care activities for scaling up can be a complicated task. There exist various interventions targeting different population groups and of varying levels of effectiveness and cost-effectiveness. In the presence of financial and capacity constraints, it is advisable to focus on a core set of the most effective interventions, which can lead to the largest effect on the overall epidemic in a sustainable way. This set of interventions, once implemented, will provide the foundation for further expansion to include other types of HIV/AIDS activities. In countries with a low HIV prevalence, prioritizing effective preventive interventions will have the greatest impact. On the other hands, countries with a generalized epidemic need to address the need for treatment and care along side with scaling up prevention activities.

1. Prevent the spread of HIV in the general population by reducing transmission among high-risk groups

High-risk groups such as commercial sex workers (CSWs) and their clients, men who have sex with men (MSM) and injecting drug users (IDUs) are the most likely to contract and spread HIV. Preventing transmission among them is the most efficient way to constraint the spread of HIV in the general population, even when the epidemic has become generalized. Therefore, ensuring sustained behavior change in high-risk groups needs to be a high-priority for any national HIV/AIDS program. Caribbean countries should target them with a core set of prevention interventions, which are already shown to be both effective and feasible:

- Behavior change communications (e.g. peer education) that move targeted audiences from awareness of HIV/AIDS to risk-reducing behavior; and

- making condoms, the treatment of STIs, and voluntary counseling and testing for HIV available and affordable.

Such activities need to be brought up to the national scale in order to have a significant impact. The first step is to identify the high-risk groups, their behaviors, problems and needs with a participatory mapping exercise. On this basis, prevention interventions can be provided to them. However, high-risk groups are often the most marginalized and stigmatized populations and thus very difficult to reach. Criminalization of commercial sex work and homosexuality in the Caribbean confounds this problem. In many countries, NGOs and community-based organizations have been shown to be effective in reaching out to those high-risk groups and facilitating behavior change among them. For this reason, such organizations should

receive direct financial and technical support to reach out to high-risk groups at the local level reach, where the public sector is often less effective. This is one of the most important lessons of the first two decades of the fight against HIV/AIDS.

HIV-infected individuals, who are in a unique position to stop the spread of HIV, should also receive prevention services as a standard of care in clinical settings without stigma and discrimination. Other interventions such as ensuring a safe blood supply and reducing MTCT of HIV also have important benefits. However, their impact on the overall epidemic is much smaller than that of sustained behavior change in high-risk groups, as HIV spreads in the population mostly by sexual transmission.

2. **Improve access of PLWHAs to a basic care package, which is cost-effective, affordable, and equitable within the context of the health system**

Although a cure is not yet available for AIDS, people who are already infected still need access to treatment and palliative care. This need is especially relevant in those Caribbean countries with a generalized epidemic. Strategies should be mounted by such countries to:

- Identify a basic package of treatment, care and support which is cost-effective, affordable, and equitable within the context of the health system; and
- make such services available to PLWHAs.

The treatment of HIV/AIDS is a continuum, which starts with the management of common opportunistic infections, including TB. Providing access to cost-effective treatments of common opportunistic infections should be the first priority in scaling up care activities. This would create a basis on which other treatments such as ARV can be considered and implemented on a suitable scale contingent on the capacity of each individual country. Community and home-based care for people with HIV/AIDS should also be provided. Those alternatives to traditional hospital care are especially relevant in countries with a generalized epidemic with the purpose to reduce the burden on the health system.

3. **Increase government commitment and public goods in HIV/AIDS**

As demonstrated in countries where significant achievements in HIV/AIDS prevention and mitigation have been made, government commitment is an important determinant in the fight against the epidemic. Governments play a crucial role because they are in a unique position to:

- Create an enabling environment for an intensified response to HIV/AIDS;
- mobilize and coordinate the efforts from all sectors of the society (NGOs, community organizations, private sector, etc.) as well as from external partners; and
- provide public goods in prevention, care and mitigation activities.

a) **Increase government commitment to HIV/AIDS**. It is important not only to increase government overall commitment to HIV/AIDS, but also to improve their commitment to interventions most likely to have an impact. Despite their potential big impact on the epidemic, prevention interventions for high-risk groups tend to have very weak constituency and many governments have been reluctant to make targeting high-risk groups a high priority on their HIV/AIDS agenda,

Increased government commitment to could be achieved through advocacy and policy dialogue. Policy workshops, national conferences and study tours for policy makers can be organized to build consensus on what really works in HIV/AIDS. Additional support can be mobilized by having the

Caribbean Task Force on HIV/AIDS, the UN Theme Groups on AIDS address the government and the civil society on the epidemic.

Efforts help countries improve their legal and regulatory frameworks can be part of this policy dialogue: in specific cases, issues such as human rights, discrimination against PLWHA at the work place, absence of clear regulations on privacy and confidentiality of HIV testing need to be addressed. A review of HIV/AIDS-related legal and regulatory framework can be conducted to provide the basis for discussion and negotiation with the governments.

b) **Increase public goods in HIV/AIDS**. Country-specific information on the patterns of HIV infection, sexual behavior, cost effectiveness of interventions and programs are important public goods, which help policy makers to make sensible decisions in HIV/AIDS programming. For this reason, the project should aim to:

- Establish/strengthen a national *second generation surveillance system* for HIV/AIDS which monitors both risk behavior and HIV infections;

- implement a good monitoring and evaluation (M&E) system to track the national HIV/AIDS response and evaluate its impact on the epidemic. Operational issues in monitoring and evaluation of the national AIDS program are discussed in details in Annex 7; and

- evaluate the cost-effectiveness of select pilot intervention(s) in reducing HIV transmission in high-risk groups and in AIDS treatment and care. The experimental framework (case-control) can be used, especially for prevention interventions. Such studies can be conducted for similar interventions across different countries or for different interventions across/within similar countries. This will provide the basis for the region to learn from the project as it goes through different phrases in the APL design.

Components of a National HIV/AIDS Program by the Stage of the Epidemic

Country Project Development Objective	Stage of the epidemic	Activities	Possible partners
1. To prevent the spread of HIV in the general population by reducing transmission among high-risk groups	All stages	Identify high-risk groups by carrying out a participatory mapping high-risk groups Target high-risk groups with prevention interventions *Making condom widely available and affordable* • Provide affordable male and female condoms though accessible outlets • Popularize condom through condom promotion and social marketing campaigns • Promote 100% condom usage in commercial sex *STI management program* • Provide timely, proper diagnosis and treatment for STI patients and their sexual contacts based on clinical protocols • Provide STI patients with advice on condom use and refer them to HIV testing and counseling • Educate people how to avoid STIs, to recognize common STI symptoms and to seek treatment *Behavior change communications* • Focus on changing behavior, not just raising awareness • Aim at high risk groups (through peer education), also for youths and general public (mass media) *Voluntary Testing and Counseling* • Establish/strengthen highly-accessible centers offering anonymous VTC service (testing, pre-test counseling and post-test counseling) • Create demand for VTC: publicize the existence of VTC services, increase referral service from other programs (such as STI)	• NGOs, community-based organizations • National AIDS Program • MOH • Relevant line ministries: Tourism, Labor (CSWs, migrant workers), Defense (uniformed personnel)
2. To improve the access of PLWHA to a basic package of care which is cost-effective, affordable, and equitable within the context of the health system	All stages	• Establish a national strategy for a basic package of care for PLWHA which includes the management of common OIs and meets the criteria of cost-effectiveness, affordability and equity within the context of the health system • Develop clinical guidelines for OI management	• National AIDS Program • MOH • CAREC • PAHO • UNAIDS • World Bank

	Concentrated and generalized	**Improve access of PLWHA to such a basic package of care** • Improve the capacity of health facilities to deliver such care • Ensure reliable procurement, stock management, distribution of cost-effective drugs for OI treatment and palliative care • Train medical personnel in the care of HIV-related conditions • Strengthen linkages with TB programs	Idem
	Generalized	*Diversify care options for PLWHA* • Provide community care and home-based care beside hospital care • Provide staffs, communities and families with support and skills for care	• Communities • NGOs, the Church • Families
To increase government commitment and public goods in HIV/AIDS	All stages	*Increase government commitment through policy dialogue* • Policy workshops, national conferences, study tours for policy makers • Focus the dialogue on what works in HIV/AIDS, not just on advocacy • Mobilize the support of Caribbean Task Force, UN theme groups, CARICOM • Review, research and negotiate to improve legal and regulatory framework	• National AIDS Program • MOH • CAREC • PAHO • UNAIDS • World Bank
		Increase public goods in HIV/AIDS • Strengthen sero- and behavioral surveillance ⇒ Expand sentinel sites ⇒ Implement a *second generation HIV surveillance* system as recommended by UNAIDS • Build/strengthen the M&E system based on existing data collection efforts • Conduct studies on: ⇒ Cost-effectiveness of prevention, ⇒ Cost-effectiveness of treatment and care (especially in countries facing a generalized epidemic)	• National AIDS Program • MOH • CAREC • PAHO • UNAIDS • World Bank • UWI

Note: Stages of the epidemic
Low: less than 5% in any high-risk group
Concentrated: more than 5% in one high-risk group, less than 5% in the general population
Generalized: more than 5% in the general population

Annex 7

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Project Monitoring and Evaluation

Sustained monitoring and evaluation (M&E) is a crucial component of the intensified response to HIV/AIDS. A good M&E system involves routine tracking a range of measures to capture the program's performance in the more immediate terms and its impact in the longer term. The monitoring of process and outcome indicators identifies strengths and weaknesses in different areas of program implementation. Such information can be used to steer and improve the program in the short term. The evaluation of impact indicators provides valuable information on the overall effectiveness of the program in the long term. Another function of evaluation is to investigate the cost-effectiveness of specific intervention(s), which will provide lessons for the program as it moves through different phrases of the APL structure as well as contribute to evaluate the project as a whole.

The role of M&E in a HIV/AIDS program is amplified by the fact that HIV/AIDS is relatively new and can be unpredictable, and the epidemic and its impacts continue to shift among sub-population groups. This calls for a good M&E system, which has strong linkages with behavioral and epidemiological surveillance.

The M&E unit

A country program will support the establishment of an M&E unit within the Project Country Unit (PCU). It is important for the M&E sub-unit to be in place from the very beginning of the project. This unit needs not be built from scratch as it can be formulated based on the existing monitoring and evaluation capacities in the country

It is likely that the M&E unit itself will not take over the responsibility of conducting behavioral and epidemiological surveillance. Instead, it will work closely with the National AIDS Program (or the equivalent) and various international and regional agencies such as UNAIDS, PAHO/CAREC and UWI to establish or strengthen/expand the surveillance system in the country. UNAIDS and WHO has issued *Guidelines for Second Generation HIV Surveillance* (Geneva, May 2000) which gives comprehensive technical guidance in this subject.

Especially, each project will rely heavily on regional agencies such as CAREC and UWI for the evaluation component of M&E.

Selection of appropriate indicators

As a country project has a broad range of prevention and care activities, it is important to define a set of appropriate indicators for the monitoring and evaluation of such interventions. The M&E unit should be able to follow up the performance of each program component through tracking (i) inputs being channeled into the program *(input indicators)*, (ii) products created by the program *(output indicators)*, (iii) positive short-term effects *(outcome indicators)*, and (iv) positive longer-term impacts of the program *(impact indicators)*. Given the principal goal of the program is to curb the spread of HIV infections, the success of the program should be measured by a reduction in HIV/AIDS incidence rate in the country. However, within the first couple of years, the long-term impacts of the program might not be able to manifest themselves. In that case, outcome indicators (such as an increase in the adoption of safe sex behavior as shown by behavioral surveillance) can be used to gauge trends toward longer-term impacts.

It is important to choose indicators, which are relevant to the local epidemic, and feasible to measure. This approach will enable a sustained M&E effort. UNAIDS has published *"National AIDS Programs: a Guide to Monitoring and Evaluation"* (June 2000) which provides excellent guidance on what indicators to choose and how to tailor M&E to the country situation.

Annex 1 proposes a list of key indicators within the logical framework. They includes:

Outputs

- Completion of a mapping exercise of high-risk groups;
- number of projects targeting high-risk groups;
- establishment of a basic care package for PLWHA;
- development of a national *second-generation surveillance system* for HIV; and
- evaluation of cost-effectiveness of select pilot intervention(s).

Outcomes

- Coverage of prevention interventions among high-risk groups;
- coverage of the basic care package among PLWHA;
- improvement in policy indicators; and
- indicators of improved knowledge in HIV and behavior change.

Impacts

- HIV prevalence among young people aged 15-24;
- HIV prevalence among high-risk groups (CSWs); and
- Syphilis prevalence among pregnant women aged 15-24.

However, it is up to each country program to choose its own set of indicators and therefore data collection instruments. The choice of indicators should be driven by:

- the objectives, goals, and activities which constitute the national HIV/AIDS program;
- the stage of the epidemic; and
- available resources and capacity for data collection.

Additional indicators to the suggested core set can be considered, for example:

- % of STI patients properly diagnosed and treated;
- availability and quality of condoms;

- % of health centers which offers VTC services;
- % of pregnant women counseled and tested for HIV;
- % of transfused blood units tested for HIV; and
- % of HIV+ women receiving therapy to reduce MTC transmission during pregnancy.

(Details on these indicators can be found in the above-mentioned UNAIDS publication)

It is advisable to focus on a core set of indicators, which is feasible to monitor over time.

The indicators should be prioritized to reflect the priorities of the program. Once the indicators are decided upon, efforts should be made by the M&E unit to collect their baseline values at the earliest. Surveys might be required to obtain those values, which are used as benchmarks against which progress of the program will be tracked.

Monitoring

Existing data collection system should be taken into account. The M&E unit will rely on formal links with other partners with the expertise for generation of information and analysis. These include the Ministry of Health, relevant line Ministries, the National Statistical Office, academic institutions and other regional entities such as PAHO/CAREC. Based on this network, the unit will develop a data collecting system to monitor the program indicators. It can also contract universities, independent firms or international agencies to conduct specific surveys for the purpose of monitoring and evaluation.

Evaluation

Evaluation aims to answer the question "Does the intervention(s) really have an impact on the epidemic"? It is the most valuable way to learn what works and what do not work. In order to address this question, well-designed studies need to be carried out. Common types of studies to evaluate the effectiveness of HIV/AIDS intervention(s) include:

- Randomized control trials (RCT);
- prospective cohort studies;
- repeated cross-sectional surveys in intervention and comparison groups;
- prospective cohort studies without a comparison group; and
- repeated cross-sectional surveys without a comparison group.

All these studies need to be followed and evaluated over time, so they would have to be implemented early in the projects. CAREC and UWI are the regional agencies with the capacity to carry them out. Such studies can also provide information on the cost-effectiveness of interventions, which in turn can help reconfigure the program if necessary. For this reason, the result of an evaluation study should be available at the mid-term review.

M&E schedule

A timely reporting schedule should be determined and incorporated into the work plan of the M&E unit. For example, every six months, the unit will compile and consolidate data related to input indicators (i.e. expenditures and disbursements data) into an implementation report. Every year, an annual implementation progress report will be prepared and submitted to the National AIDS council and International Bank for Reconstruction and Development (IBRD). A mid-term independent performance evaluation of the program will also be conducted. The preparation of this mid-term report will involve the M&E unit, representatives of NGOs, community organizations, as well as key external partners such as UNAIDS and PAHO. This report includes: (i) changes in effort and context, or the evolution of the program (ii) an operational audit of the program (iii) the assessment toward outcomes and early indications of trends towards longer impact, with a focus on the most vulnerable groups (iv) information on effectiveness and cost-effectiveness of intervention(s) if an evaluation study has been conducted. The information generated by the mid-term evaluation will be used to improve the implementation of the program. Other specific independent reviews of condom and drugs quality, surveillance, and management could be done during the implementation period of the project if necessary.

Annex 8

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Economic and Financial Assessment

In this annex[1], an attempt is made at estimating the costs of a comprehensive HIV/AIDS control program for the Caribbean. Estimates of the economic benefits of tackling the HIV/AIDS epidemic are separately derived from the recent literature on the subject. The cost and benefit analyses provide a basis from which to draw policy recommendations for HIV/AIDS programs in the Caribbean. The exercise can vastly be improved upon as access to more recent and reliable data become available and more sophisticated epidemiological models are developed.

Costing an HIV/AIDS prevention and control program for the Caribbean

A very rough estimation of the cost of a comprehensive HIV/AIDS prevention program was conducted among a team of epidemiologists and economists from the Caribbean[2]. The purpose of the exercise was to estimate the cost of an HIV/AIDS prevention and treatment package for 23 Caribbean countries[3] under various scenarios. The model structure was loosely based on a simulation model being developed by the World Bank[4] and the parameters underlying the base scenario were obtained from the literature and from the aforementioned panel of experts.

Model and Main Assumptions

Interventions

An exhaustive list of the principal interventions to prevent the transmission of the HIV virus and to mitigate the impact of HIV/AIDS on persons and communities was drawn. The list is a summary of the typical interventions supported by HIV/AIDS programs around the world. No attempt was made to choose among these activities a priori; it was felt that the best strategy would be to prioritize these activities in a second phase (and therefore trim down the list) according to the specific financial and implementation constraints encountered on a country-by-country basis. Ideally, this would be done with additional information from a cost-effectiveness analysis that would help to rank the interventions.

A first set of indirect interventions includes surveillance, research, monitoring and evaluation, advocacy, and enhancing regional and national institutional capacity to carry out the programs. A second set of preventive interventions includes those activities that have strong spillover benefits to society as a whole

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[1] The fact that non member countries or non eligible Bank member countries are mentioned in this annex, it does not imply that these countries will participate in the proposed APL.

[2] The team of epidemiologists, public health specialists and economists from UNAIDS, PAHO, CAREC, CARICOM, the World Bank and the Health Economics Unit at the University of West Indies collegially decided upon epidemiological, cost and coverage parameters during a two-day workshop held in Trinidad and Tobago (August 17 – 18, 2000). The estimates would need to be validated in the country-specific analyses.

[3] The countries were loosely grouped according their geographic, cultural and economic proximity. Group 1: Anguilla, Antigua & Barbuda, British Virgin Islands, Dominica, Grenada, Montserrat, St. Kitts, St. Lucia, St. Vincent. Group 2: Bahamas, Bermuda, Cayman, Turks & Caicos. Group 3: Haiti, Dominican Republic. Group 4: Netherlands Antilles, Aruba, Guyana, Suriname. Group 5: Barbados, Belize, Jamaica, Trinidad & Tobago. Group 6: Cuba

[4] Bonnel R., et al., 'The Cost of Scaling-Up HIV/AIDS Programs to a National Level for Sub-Saharan Africa,' Working Paper, World Bank, April 2000.

in preventing HIV infections and thus reducing the spread of the disease. They include public awareness campaigns, programs aimed at preventing the spread from high-risk groups such as prostitutes and intravenous drug users into the general population, screening, ensuring safe blood supply, fostering behavior change, increasing access to condoms and preventing the transmission from infected mothers to their babies. The third set of interventions includes various aspects of care and financial assistance for persons or relatives of persons living with HIV/AIDS. These interventions are palliative (prevention of opportunistic infections, counseling, home-based care, anti-retroviral therapy) since there is no cure for AIDS. We also include in this set of activities support to orphans of AIDS patients.

Unit costs assumptions

Unit costs were then estimated for each of these activities. The costs were for the most part taken from the simulation exercise that is being undertaken in Sub-Saharan Africa[5] and from the consensus view of the panel of experts[6]. The information derives from the literature and from the direct experience of the team of experts with HIV/AIDS programs in developing world settings. Some of the costs are expressed as the sum of a fixed and of a variable component. The fixed component represents the cost below which the intervention cannot be conducted meaningfully, while the variable component (expressed as a multiplier of per capita public spending in health) is an implicit recognition of the budget constraints affecting each country[7]. The analyses conducted at country level utilize more realistic cost estimates than are utilized here.

Table 1. Illustrative Annual Cost Assumptions

Intervention	Cost per...	Low Cost Scenario	High Cost Scenario
Overhead Activities	Capita	$0.10 - $0.50	$0.10 - $0.50
Targeted Interventions for CSW	CSW	$16	$21
Syndromic Management of STI	Case	$13	$16
Treatment of Opportunistic Infections	Case	$210 + three times public spending in health	$2,100
Home-based Care	Case	$500	$1,200
Anti-Retroviral Therapy (HAART)	Case	$7,000[8]	$10,000

Population and epidemiological information

Estimates for the model parameters were collected or extrapolated from the latest published sources or generated by the panel of experts who participated in the simulation exercise. The main variables used by the model are: population, HIV prevalence, birth rates, access to health services, use of ante-natal care services, ante-natal care HIV prevalence, percentage of sexually active population reporting non-regular partnerships, annual incidence of treatable STIs, proportion of STIs that are symptomatic, average annual number of commercial sex acts/sex worker, prevalence of syphilis among women, cumulative number of orphans, HIV prevalence rates among high-risk groups (prisoners, MSM, CSW, military), migrant and tourist populations, and public spending per capita in health.

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[5] See footnote 3.

[6] See footnote 1.

[7] This contradicts, at the margin, the earlier claim that budget constraints are factored only later in the simulation exercise. This peculiar way of expressing certain costs parameters is no more than an attempt at achieving compromise between divergent expert opinions.

[8] Since the cost of providing HAART is likely to drop to $1,000 per patient per year during the lifetime of the project, additional simulations were carried out to reflect this possibility. Brazil currently provides ARV drugs at a cost of $400 per patient per year and India provides the drugs for $700 per patient per year. Both countries produce the drugs locally, invoking an emergency situation to avoid patent protection issues.

Program coverage assumptions

The final set of model inputs was the coverage assumptions. For nearly all the interventions contemplated, it was assumed that 100 percent of the relevant population was targeted (e.g., all CSW, all HIV-infected mothers, all youngsters in school, etc). There were two main departures from the universal coverage assumption: it was assumed that only 20 percent of AIDS patients would benefit from home-based care, and that only 15 percent[9] of HIV patients would benefit from HAART, the three- and four-drug combinations against HIV. A 100-percent coverage was deemed improbable for these two interventions if only because the health system cannot reach all patients and because the take up of home-based care is partly predicated on client behavior. The cost estimates derived from the model are extremely sensitive to the coverage assumptions. Note that the implicit assumption here is that scaling up is achieved immediately – a more realistic costing scenario would involve gradual scaling up over a period of a few years.

Main Results

Using the assumptions discussed in the previous sections, the following results were derived:

Table 2. Low Cost Package

Program	Total Cost with HAART at $7,000 for 15% of HIV-infected population (US$ million)	Percent of Total	Total Cost with HAART at $1,000 for 15% of HIV-infected population (US$ million)	Percent of Total	Total Cost without HAART (US$ million)	Percent of Total
"Indirect activities"	51.1	4%	51.1	7%	51.1	9%
Public Awareness and Prevention	162.1	12%	162.1	23%	162.1	28%
Basic Care	362.2	26%	362.2	52%	362.2	63%
HAART	828.1	59%	118.3	17%	0.0	0%
Total	1,403.5	100%	693.7	100%	575.4[10]	100%

The cost of providing a comprehensive package of prevention and care activities for the relevant populations the Caribbean would therefore be prohibitively expensive at about US$1.4 billion. Tables 3a and 3b below show how these costs would translate into per capita terms for a few countries and compares the estimated HIV/AIDS program costs with current overall per capita spending on health.

[9] In the successful Brazil program, only 15 percent of the infected population are on anti-retroviral access despite 100% access.

[10] Of which $358 million for Haiti and the Dominican Republic, $67 million for Cuba and $150 million for the rest of the Caribbean.

Table 3a. Per Capita Costs (US$)

Country	Per capita health spending	Preventive Program	Plus Basic Care Program	Plus HAART at $1,000	Plus HAART at $7,000
Bahamas	$785	$8	$69	$81	$119
Haiti	$18	$6	$18	$33	$79
Dominican Republic	$91	$4	$15	$55	106
Guyana	$45	$6	$22	$36	$81
Jamaica	$149	$4	$15	$22	$40
Trinidad & Tobago	$197	$4	$16	$23	$41

Table 3b. Program Costs as a Percentage of Current Health Spending

Country	Preventive Program	Preventive Plus Basic Care Program	Preventive Plus Basic Care Plus HAART at $1,000	Preventive Plus Basic Care Plus HAART at $7,000
Bahamas	1%	9%	10%	15%
Haiti	33%	100%	183%	439%
Dominican Republic	4%	16%	60%	116%
Guyana	13%	49%	80%	180%
Jamaica	3%	10%	15%	27%
Trinidad & Tobago	2%	8%	12%	21%

Implementing a comprehensive package of interventions (prevention, basic care, and HAART for 15% of the HIV-infected population at current prices) would bump up the current overall spending in health from 15 percent in the Bahamas, all the way to more than a 400 percent in Haiti. The HAART costs are probably overstated because efforts are being made to reduce the cost of anti-retroviral drugs. If the cost of providing HAART falls to $1,000 per patient per year, then a comprehensive package of interventions (prevention and care including HAART) would imply a 10% increase in health spending in the Bahamas and a 183% increase in Haiti. This is still out of the reach of many countries, but its gradual implementation is affordable in some of the countries. For example, in the case of Barbados, the provision of an exhaustive package of interventions (with HAART at $1,000) would add 7% to the current health spending. Even the prevention program would be costly for Haiti, at 33% of existing expenditures. For all other countries, the cost of a prevention program would be manageable.

Note that the interventions in this simulation were included irrespective of their cost-effectiveness: in that sense the package is not an ideal one. It is clear that at country level, only segments of the prevention and care package would be selected and implemented. The cost estimates generated by this exercise are best seen as upper limits for HIV/AIDS programs. The spread of the disease can probably be reversed through preventive programs with the addition of some of the highest priority basic care activities, and these interventions are feasible everywhere (with the possible exception of Haiti).

Potential benefits[11] from checking the spread of HIV/AIDS in the Caribbean

The benefits traditionally associated with HIV/AIDS programs are: (i) that they contribute to reducing productivity losses due to HIV/AIDS-related disability and premature mortality; and (ii) that they contribute to reducing the need for expensive care. These measures ignore the demand for such programs from the general population to reduce the risk of getting the infection, creating a safer environment, and so on. The benefits calculated here do no include these possibly substantial 'consumption' benefits.

The table below summarizes the main parameters of the HIV/AIDS epidemics in a few Caribbean countries.

Table 4. Current incidence, prevalence and AIDS deaths in some Caribbean countries

	Population 1999	Estimated number of people living with HIV/AIDS, end 1999[12]	Estimated AIDS deaths in 1999[13]	HIV/AIDS Incidence per 1,000,000[14]
Belize	235,000	2,400	170	173.5
Dominican Republic	8,361,000	130,000	4,900	51.5
Guyana	855,000	15,000	900	171.8
Jamaica	2,561,000	9,900	650	211.6
Barbados	269,000	1,800	130	498.1
Trinidad & Tobago	1,288,000	7,800	530	317.7
Haiti	8,090,000	210,000	23,000	119.3

Using data from the above table (and assuming a constant ratio of AIDS deaths to people living with HIV/AIDS as well as a constant incidence rate), the number of new infections and the number of new AIDS deaths can be extrapolated. The table below shows the cumulative number of new infections and AIDS deaths over a five-year period if incidence and case-fatality parameters do not change. Note that the results presented are from a simple linear[15] extrapolation, not from modeling the path of the epidemic. The unchecked epidemic's potential for harm is clear from these figures.

Table 5. Projected cumulative new infections and AIDS deaths for 2000-2005

	Cumulative number of new infections	Cumulative number of AIDS deaths
Belize	204	765
Dominican Republic	2,153	22,878
Guyana	734	4,207
Jamaica	2,710	3,184
Barbados	670	653
Trinidad and Tobago	2,046	2,573
Haiti	4,826	93,368
Total	**13,342**	**127,627**

At least one attempt has been made to value the economic benefits associated with checking the spread of the disease or, conversely, to value the economic cost associated with not stemming the epidemic. This

[11] The benefits considered in this section are exclusive of externalities.
[12] UNAIDS/WHO
[13] Idem
[14] UWI
[15] A linear extrapolation probably contributes to underestimate the impact of the epidemic and therefore the benefits of stemming the epidemic.

study[16] was conducted by the University of West Indies and suggests that economic losses due to HIV/AIDS would amount to about five percent of GDP in Jamaica and Trinidad and Tobago by year 2005. The estimated GDP loss is driven by the number of HIV/AIDS cases and the average loss of income/output associated with those cases. The study forecasts the economic impact of HIV/AIDS by modeling the impact on five blocks: output, labor supply, employment, savings and investment, and spending on HIV/AIDS treatment. An increase in HIV/AIDS-related deaths and morbidity adversely affects labor supply causing wages to increase. Raising wages and decreasing labor supply translate into lower levels of employment. The increase in expenditure associated with increased HIV/AIDS incidence diverts funds away from productive savings, which in turn affects the levels of investment that can be achieved. Depressed levels of labor and capital affect the levels of output from the various sectors and therefore overall GDP.

Table 6 below summarizes the macroeconomic impact of the HIV/AIDS epidemic in Jamaica and Trinidad and Tobago according to these studies.

Table 6. Macroeconomic Impact of HIV on Key Variables and Sectors in Trinidad and Tobago and Jamaica by 2005[17]

Impact Variables	Trinidad and Tobago	Jamaica
Gross Domestic Product	-4.2%	-6.4%
Savings	-10.3%	-23.5%
Investment	-15.6%	-17.4%
Employment in Agriculture	-3.5%	-5.2%
Employment in Manufacturing	-4.6%	-4.1%
Employment in Services	-6.7%	-8.2%
Labor Supply	-5.2%	-7.3%
HIV/AIDS Expenditure	+25.3%	+35.4%

The same study suggests the losses to the economies of the English-speaking Caribbean could reach a level around $2 billion per year. In other words, stopping HIV/AIDS transmission for that sub-region yields a benefit of $2 billion per year.

This estimated impact is much higher than those predicted by studies in other parts of the world. The difference is partly due to the underlying behavioral model which seems to have biased the projection rate upwards: the projected prevalence rates are five times higher than the official figures for the corresponding years. An econometric study[18] conducted for African countries gives far lower estimates for the impact on growth and GDP. Thus, for a "typical" sub-Saharan African country with a prevalence rate of 20 percent (i.e., around ten times higher than in the Caribbean), the rate of growth of GDP would be 2.6 percentage points less each year. For countries with a prevalence rate of about 2%, the expected impact on the rate of growth of per capita GDP would be of the order of –0.2% per year. Another paper[19] indicates that the impact of HIV/AIDS on per capita income in the medium run (15-20 years) in Southern Africa, where the average adult HIV prevalence rate was 19.1% in 1999, varies from 3.1 percent in South Africa to 4.9 percent in Botswana. Extrapolating from these studies would suggest that AIDS would have

[16] 'HIV/AIDS in the Caribbean: Economic Issues – Impact and Investment Response,' Working Paper. Health Economics Unit, University of West Indies, St. Augustine, 2000 and 'Modelling the Macroeconomic Impact of HIV/AIDS in the English-Speaking Caribbean: the Case of Trinidad and Tobago and Jamaica,' Working Paper, CAREC/UWI/PAHO/WHO, 2000.

[17] 'Modelling and Projecting HIV/AIDS and its Economic Impact in the Caribbean, CAREC/UWI, 2000.

[18] R. Bonnel (2000) 'HIV/AIDS: Does it increase or decrease growth in Africa?', ACTAfrica, World Bank (draft).

[19] M. Haacker (2001) 'The Economic Consequences of HIV/AIDS in Southern Africa, IMF (draft).

little net macroeconomic impact[20] at the current levels of prevalence in the Caribbean. While the net macroeconomic impact is expected to be small, the effect on the health sector and on the poor is expected to be substantial in the severely affected countries. One of the ways in which AIDS is likely to exacerbate poverty is the increase in the number of children who lose one or more parents.

Setting Priorities

The earlier sections indicated that an all-inclusive HIV/AIDS program is out of reach for almost all-Caribbean countries (see tables 3a and 3b above). In order to generate the highest possible benefits in terms of averted infections and reduced mortality, a subset of interventions must be chosen from the menu of possible initiatives. Once it has been decided that public intervention is justified for HIV/AIDS (on the basis of market failure arguments), then information about cost-effectiveness can help the policy-maker determine which interventions to prioritize to achieve maximum impact.

Maximum impact is achieved by giving financing priority to those interventions with the highest cost-effectiveness. The current consensus seems to be that the most cost-effective interventions are those targeted towards CSWs (peer education) and other high-risk groups (MSM and high-risk heterosexual men), the management of sexually transmitted infections, and the use of anti-retrovirals to prevent MTCT.

In all these cases, groups with a high HIV reproductive rate are reached at low costs. The HIV reproductive rate itself hinges on the amount of time a person remains infectious, the risk of transmission per sexual contact[21] and the rate of acquisition of new partners (high among CSWs for example). Therefore, all other things being equal, preventing infection in someone with a high rate of partner change and with risky sexual contacts will indirectly avert many more infections than preventing infection in someone with low-risk behavior[22]. This "multiplier" effect is at the root of the cost-effectiveness of the interventions targeted towards specific population groups. The cost-effectiveness of such population-based initiatives such as mass media education and education programs for the youth remain to be established. Typically such programs have low effectiveness but also can be designed to have very low costs, leading to very high cost-effectiveness. Achieving cost-effectiveness therefore crucially hinges on the design of these programs. The cost-effectiveness of HAART also has to be further researched; it is estimated at between $720 and $2,355 per DALY saved for the Brazil HIV/AIDS program.

The table below, adapted from Jha et al. (2001)[23] summarizes ranges of values from the literature relating to the cost-effectiveness of some of the most frequent interventions in HIV/AIDS prevention and treatment.

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[20] 'Confronting AIDS: Public Priorities in a Global Epidemic' (1997) estimates that a generalized epidemic (defined as a situation where HIV has spread far beyond the original sub-populations with high-risk behavior and where prevalence among women attendig urban antenatal clinics is 5 percent or more) would reduce GDP by as much as half a percentage point per year.

[21] The probability of transmission of HIV-1 infection per 100 exposures is 0.1-0.2 for male-to-female unprotected vaginal sex; 0.033-0.1 for female-to-male unprotected vaginal sex; 0.5-3.0 for male-to-male unprotected anal sex; and 13-48 for mother-to-child transmission (source: 'Confronting AIDS').

[22] This effect is illustrated in a dramatic way in 'Confronting AIDS.' Raising condom use to 80 percent among a population of 500 sex workers, eighty percent of whom are infected and who have 4 partners a day averts 10,000 infections per year, whereas raising condom use to the same level among 500 low-income men of whom 10% are infected and who have 4 partners per year averts 88 infections. If the cost of raising condom use is the same in both cases, targeting sex workers proves to be significantly more cost-effective than low-income men.

[23] Jha, P., et al. (2001) 'The evidence base for interventions to prevent HIV infection in low and middle-income countries.' Background paper of the Commission on Macroeconomics and Health, the World Health Organization.

Table 7. Cost-effectiveness of different types of interventions

	Sex worker interventions	STI management	Voluntary counseling and testing	Anti-retrovirals in pregnancy	IEC to change risky behavior[24]	Anti-retrovirals[25]
Cost per HIV infection averted	$8-12	$218	$249-346	$276	$1,324	--
Cost per DALY saved	$0.35-0.52	$9.45	$12.77-17.78	$10.51	$66.2	$720-$2,355

Individual country programs would maximize the number of infections averted and the number of DALYs saved if they were to ensure that the most cost-effective interventions obtain sufficient attention and financing. Countries that propose to finance HAART should particularly be attentive to making sure that preventive interventions that are known to be cost-effective are not crowded out in the process. Targeting some of the high-risk groups may be more costly and more difficult to achieve in countries where such practices are illegal (such as homosexuality and commercial sex work in the Caribbean), but this should only mean that Governments should seek innovative ways (for example through NGOs or peer education) to reach these populations because of the compelling epidemiological and economic reasons described above. Those countries that are particularly resource-constrained - such as Haiti where even a program purely focused on prevention would increase per capita spending on health by 33 percent - should be particularly attentive to prioritizing the most cost-effective interventions such as sex worker interventions and STI management.

The information about cost-effectiveness, in combination with epidemiological data, could also provide countries with a rough guide as to how much they should aim to spend to prevent the spread of the epidemic. It has to be noted, however, that cost-effectiveness ratios are highly population-specific and depend, among other things, on the scale of the activity and the stage of the epidemic. The information provided in the table above should therefore be used with caution and modulated for the country situation, as preventing HIV infection is inseparable from care and support for those affected by HIV/AIDS. Prevention of infection and amelioration of the impact of the epidemic will have to go hand in hand. The proposed project will enable countries to generate data on the alternative ways of lowering HIV in specific country contexts so that resources are channeled to their best possible use.

[24] UNAIDS
[25] UNAIDS: Brazil Program

Annex 9

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Supervision Plan

The supervision of this project would be a major challenge considering the small size of many countries, widely differing development levels and implementation capacities, the multi-sectoral approach, limited country/sector experience with the WB, and logistical difficulties. Supervision will be planned in a way to make to make it both cost-effective and efficient so that the WB can be actively and continually involved during the implementation phase to help achieve the project goals. The supervision plan outlined here provides an overall strategy, the co-ordination arrangements with other donors, likely costs, and the staffing composition.

Supervision Objectives and Strategy:

The objectives of the supervision program for this APL would be to:

a) ensure that implementation agencies and the PCU implement the project with due diligence to achieve the program development objectives;

b) identify problems promptly as they arise during implementation and help the implementing agencies resolve them;

c) adapt the project to lessons learned during implementation and other relevant changes in order to enhance the prospects of achieving the agreed project objectives; and

d) facilitate collaboration among donors supporting HIV/AIDS programs in the Caribbean.

Each country project would be established with clear benchmark and performance criteria to permit a high degree of self-supervision of input use and results. The management information systems planned for procurement, financial management and M&E will capture routine data and information in a systematic way to help guide the project team in suitably executing the project. The PCU through its periodic semi-annual or quarterly reports, as the case may be, and annual progress reports, including the audited accounts, will help provide the WB an overview of project implementation status on a regular basis. The PCU staff will play a major role in overseeing and supporting the operations of the sector ministries and the local communities. The technical and administrative staff in the PCU in which members of the National AIDs Council/equivalent agency will also participate, if necessary, will undertake periodic field visits.

WB supervision would be carried out in close coordination with all donors and the regional agencies active in the region. This would include joint supervision missions and full exchange of progress reports and supervision mission reports of donors from their independent missions. To strengthen the countries' institutional capabilities and increase the cost-effectiveness of WB supervision, the project will engage the regional and local agencies to help carry out project supervision. The specialized regional agencies that have technical expertise and experience in the area such as CAREC, PAHO/WHO, UNAIDS are expected to take the lead in providing technical guidance to help implement the country project. The WB has agreed to establish a memorandum of understanding with the most active of these agencies (CAREC, PAHO/WHO, UNAIDS) to formalize the collaboration.

To get the project off to a good start and to assure quality implementation, the WB will be actively involved with at least two to three supervision missions a year, at least in the early years. However, the intensity of Bank supervision for each country will depend on its implementation capacity, experience with Bank projects and stage of project implementation. As such, countries like Barbados, Dominican Republic and Jamaica, which are entering the program in the earlier phases of the APL, are likely to need less support than those countries coming in the subsequent phases. The supervision missions will be combined for a cluster of countries or largely done by calling several countries together which would help in considerable cross-fertilization of implementation experience among the countries and learning from each other. This process will also result in substantial cost savings of supervising a program of this size since we can eliminate a number of repetitious tasks in each country.

The main elements of the project supervision would be as follows:

- The PCUs will institute a process of systematic supervision of the project and the subprojects. They will meet with the implementing agencies and the NGOs, local communities involved in the project and submit a periodic report to the Bank team of project progress;

- continuous technical advice will be provided to the project teams, based on their need, by the regional agencies;

- supervision during the first year would concentrate on project launch activities and formal and informal training in supervision techniques. During the second and third year it would gradually shift toward program management;

- there will be two joint supervisions with other donors - - one will coincide with the discussion of the annual work plan; and the other to focus on technical aspects of the project. During the technical supervision mission, workshops will be held to discuss selected topics bringing together all the countries in the region. In these workshops, countries would report on their experience with specific elements of the project. The workshop would normally be held for about three days in one of the countries that has some notable achievements under the support of the Task Force. External experts will also be invited in these workshops to update on current international developments and experiences; and

- as part of the plan to pool donor efforts, it is envisaged that supervision of and technical support for the country projects will be shared with each donor having primary responsibility for specific areas. They are:

  CAREC: Surveillance
  PAHO: prevention, care, treatment, and health systems development
  UNAIDS: prevention, care, and treatment:
  WB: economic and epidemiological assessments, overall project management, procurement, financial management, safeguards, NGO involvement

The Mid-Term Project Review. The mid-term review will be carried out in partnership with other partners (CAREC, PAHO/WHO, UNAIDS), to assess the program's progress and overall impact on the spread and treatment of HIV/AIDS in the region (according to outcome/impact indicators agreed with individual countries). The main purpose of the mid-term review will be to determine if there are any major problems or issues in the project, which necessitate rethinking the original project design. The review would synthesize lessons learned and could lead to any necessary adjustment in the program and/or country projects to improve their effectiveness, and the reallocation of financial resources among project components. At that time, a decision would be made concerning the form and substance of the Bank's continuing support for HIV/AIDS prevention and control in the Region.

Composition of Missions. The supervision missions will include as appropriate at the time, specialists in the following areas: public health, general management, training, IEC, surveillance, medical waste management, procurement, financial management and NGOs participation. Most of the technical experts related to public health and HIV/AIDS will be provided by other donor agencies. Matching the special skills and expertise of supervision members with particular problems facing the projects will be critical.

Supervision Cost. As part of the World Bank's annual work program agreements (WPA), a supervision plan with detailed supervision costs will be prepared for all the countries in the program. Each country would be rated as "high" or "low" risk in terms of financial management, procurement, safeguards, and implementation capacity. Those countries, which are considered low risk in any of these areas, will need relatively less supervision and may be clustered together for supervision missions. The others may need individual attention and support. The average cost of supervision for a project in the Latin America and Caribbean Region about US$65,000. There will be some economies of scale in overseeing this operation in several countries by involving donors and combining missions. Considering that Dominican Republic, Barbados and Jamaica are the countries that are likely to have their loans effective by next year, the Bank's supervision budget for the next fiscal year combining these three countries is likely to be about US$130,000.

Supervision outputs/outcome. On the basis of project monitoring and evaluation, the supervision missions would be geared to ensure that implementation of the projects is progressing as planned and to anticipate or detect any problems (e.g., adequacy of supplies, appropriateness of training). These missions would also focus on determining the degree of progress in meeting set goals or project performance on the basis on evaluation of inputs (human and capital resources available for project implementation) and project operation variables (who is to do what, where, when and how), as well on assessments of impacts and outcomes that may include changes in knowledge, attitudes, behavior, risk factors, disease and disability.

Annex 10

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Donor Roles and Responsibilities

Donor Agencies	Roles and Responsibilities
UNAIDS	(1) Mobilize political support with government and partners in the region; (2) assist each country in doing a situation analysis as part of project preparation; (3) help prepare country projects for World Bank financing, including formulation of country specific prevention and education programs, based on international best practices; (3) Facilitate involvement of other UN partners; (4) Facilitate exchanges of experiences and the sharing of international and regional best practices; (5) support capacity building of project agencies; (6) support capacity building among NGOs and civil society involved in the project; (7) supervise project implementation; and (8) provide technical guidance for M&E
CAREC	(1) Help countries establish a surveillance and HIV AIDS tracking System; (2) Provide skills building for surveillance; (3) Extend technical support to build skills at national level to develop databases on health information; (4) Extend training to health personnel; (5) Provide Lab services, including for CD4 count and viral load testing; (6) PCR testing for PMTCT; (7) Baseline work to collect epidemiological data; (8) Technical data collection for performance indicators; (9) Direct technical support in solving specific problems; and (10) Project supervision
PAHO/WHO	(1) TA for preparing the country program from a public health perspective (2) Assist in the formulation of country-specific prevention programs (such as interventions in vulnerable population, behavioral change, condom logistics, blood safety, prevention of mother to child transmission); (3) TA for improving the managerial capacity and program effectiveness of the country programs; (4) Surveillance and situation analysis (HIV, STI, molecular epidemiology and behavioral surveillance); (5) Strengthen health care services by training health care personnel, building lab capacity and integrating care at all levels of the health care services and in the community; and (6) TA and training on all aspects of prevention and control of STIs
World Bank	(1) Advocacy for AIDS with government and regional partners; (2) Share best practices from other World Bank projects when developing country projects; (3) Provide financial backing and "head room" for national budgets to facilitate scaling up of HIV/AID prevention and control program, and guidance on all aspects of project implementation, including on procurement and financial management; (4) Facilitate learning and sharing of experiences among the countries in the Region
CIDA/EU/Other Bilateral organizations	(1) Support for HIV prevention efforts; (2) Strengthen STD diagnostic and HIV testing capabilities; (3) Support through CAREC for blood safety, prevention of HVI via condoms and STD control and use of mass media; and (4) assistance to CARICOM states to respond to issues relating to AIDS and population mobility; and strengthen the institutional response to HIV/AIDS
USAID	(1) Support for HIV/AIDS education and information in the region; (2) Assist national programs for HIV/AIDS in Dominican Republic, Haiti and Jamaica, including support for NGOs and private sector; and (3) Condom social marketing, voluntary counseling and testing for HIV for Haiti

Annex 11

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Project Processing Budget and Schedule

Project Schedule	**Planned** (At final PCD stage)	**Actual**
Time taken to prepare the project (months)	6 months	
First Bank mission (identification)		
Dominican Republic	09/2000	09/2000
Barbados	02/2001	02/2001
Appraisal mission departure		
Dominican Republic	03/2001	
Barbados	04/2001	
Negotiations		
Dominican Republic	04/2001	
Barbados	04/2001	
Planned Date of Effectiveness		
Dominican Republic	10/2001	
Barbados	10/2001	

Prepared by: Governments of the Caribbean Region

Preparation assistance: PHRD Japanese Trust Funds No. TF026623, TF026626, TF026627, TF026628, TF026629, TF026631, TF026632, TF026633, TF026634, TF026636, TF026637, TF026638.

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Participants at a special meeting convened by Ms. Orsalia Kalantzopoulos on November 30, 2000 provided advice and guidance. Participants included: Armando Araujo, LCOPR; Maria Lucy Giraldo, LCSHD; Paul Bermingham, OCSFM; Douglas Arnold, LCOAA; Yolanda Tayler, OCSPR; John Hegarty, ELSCS; Edward Daoud, LOAEL; Robert Crown, Consultant, LCSHD; Joelle Dehasse, LCC3C; and V.S. Krishnakumar, AFTK.

QER. The panel met on February 16, 2001 and discussed the program proposal with the task team, the country team as well as with other staff. The panel provided a report with its main findings and recommendations soon after completion of the review. Panel members included:

Panel Chair: Richard Skolnik

Institutional Issues/Africa Experience: Alexandre Abrantes

Financial Management: Robert O'Leary

Procurement: Armando Araujo

Community Participation: Marion Bernard-Amos/ Ty Rose

Technical Quality: Chris Walker

Economic/Financial Analysis & M&E: Martha Ainshworth

HIV/AIDS Specialist: Fernando Zacarías (PAHO/WHO)

HIV/AIDS Specialist: Luiz Loures (UNAIDS)

Comments and advice were also provided by Rene Ruivivar, OPCPS, Suzanne Morris, LOADR; Douglas Arnold, LCOAA, and Ferenc Molnar and Reynaldo Pastor, LEGOP.

Annex 12

Multi-Country HIV/AIDS Prevention and Control
Adaptable Lending Program (APL) for the Caribbean Region

Documents in the Project File*

Caribbean Region: Multi Country HIV/AIDS Prevention and Control Program

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***Including electronic files.**

BARBADOS

HIV/AIDS PREVENTION AND CONTROL PROJECT

TECHNICAL ANNEX

TO THE FIRST PHASE OF THE US$155.0 MILLION
MULTI-COUNTRY HIV/AIDS PREVENTION AND CONTROL
ADAPTABLE PROGRAM LENDING (APL) FOR THE CARIBBEAN REGION

June 5, 2001

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 2001)

Currency Unit = Barbadian Dollar (BBD)
US$1.0 = BBD$1.99

FISCAL YEAR

ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
APL	Adaptable Program Lending
ART	Anti-retroviral therapy
ARV	Anti-retroviral drugs
AZT	Azido-deoxy thymidine
BDS	Barbados Drug Service
CAREC	Caribbean Epidemiology Center
CARICOM	Caribbean Community and Common Market
CAS	Country Assistance Strategy
CBO	Community-Based Organization
CCHI	Caribbean Cooperation in Health Initiatives
CDC	Centers for Disease Control
CDRC	Chronic Disease Research Center
CGCED	Caribbean Group for Cooperation in Economic Development
CHA	Caribbean Hotel Association
CRM+	Caribbean Network of People Living with HIV/AIDS
CSOs	Civil Society Organizations
CSW	Commercial Sex Worker
GDP	Gross Domestic Product
GOB	Government of Barbados
HAART	Highly Active Anti-retroviral Therapy
HIV	Human Immune-deficiency Virus
ICB	International Competitive Bidding
IEC	Information, Education and Communication
KAP	Knowledge, Attitude and Practice
LAN	Local Area Networks
MH	Ministry of Health
MSM	Men who have Sex with Men
MTCT	Mother to Child Transmission
NACA	National Advisory Committee on AIDS
NACHA	National Commission of HIV/AIDS
NCB	National Competitive Bidding
NGOs	Non-governmental Organizations
OECS	Organization of Eastern Caribbean States
OI	Opportunistic Infections
OPM	Office of the Prime Minister

PAHO	Pan American Health Organization
PCU	Project Coordination Unit
PCD	Project Concept Document
PLWHA	People Living with HIV/AIDS
PMR	Project Management Report
QEH	Queen Elizabeth Hospital
RPA	Regional Procurement Advisor
SA	Special Account
SOE	Statement of Expenditures
STI	Sexually Transmitted Infections
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDCP	United Nations Drug Control Program
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UWI	University of the West Indies
WB	The World Bank
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Vice President:	David De Ferranti
Country Manager/Director:	Orsalia Kalantzopoulos
Sector Director:	Xavier Coll
Sector Manager:	Charles Griffin
Sector Leader:	William Experton
Team Leader:	Patricio Marquez

Barbados: HIV/AIDS Prevention and Control Project

CONTENTS

Annexes

BARBADOS
HIV/AIDS Prevention and Control Project

Project Appraisal Document

Latin America and the Caribbean Regional Office
Caribbean Country Management Unit
Human Development Sector Management Unit (LCSHD)

Date: June 5, 2001	Team Leader: Patricio Márquez
Country Manager/Director: Orsalia Kalantzopoulos	Sector Manager/Director: Xavier Coll
Project ID: P071505	Sector: Multi-sector
Lending Instrument: Specific Investment Loan	Theme(s): HIV/AIDS
	Poverty Targeted Intervention: [x] Yes [ ] No

Project Financing Data [X] **Loan** [ ] **Credit** [ ] **Guarantee** [ ] **Other [Specify]**

For Loans/Credits/Others:

Total Bank Financing: : US$ 15.15 million (including 1% front-end fee to be financed out of the loan proceeds

Proposed terms: Fixed-spread loan (FSL) terms, with a repayment schedule linked to actual disbursements

Grace period (years): 3 years for each Disbursed Amount
Years to maturity: 10.5 years for each Disbursed Amount
Commitment fee: 0.85% on undisbursed balances for the first four years, beginning 60 days after the loan agreement is signed, and 0.75% thereafter
Service charge:
Front-end fee on Bank loan: 1% of the loan amount

Financing plan: [] To be defined

Source	Local	Foreign	Total
Government	8.5		8.50
IBRD	2.6	12.55	15.15
Total	11.1	12.55	23.65

Borrower: Government of Barbados
Responsible agency: Office of the Prime Minister

Estimated disbursements (Bank FY/US$M):

FY	2002	2003	2004	2005	2006	2007
Annual	3.05	1.60	3.10	3.70	2.70	1.0
Cumulative	3.05	4.65	7.75	11.45	14.15	15.15

Project implementation period: Five years
Expected effectiveness date: Sept./Oct., 2001 Expected closing date: December 31, 2006
Implementing agency: National Commission on HIV/AIDS; Office of the Director
Contact person: Senator Philip C. Goddard
Address: Ministry of Health, Jemmot's Lane, St. Michaels, Barbados
Tel: (246) 426-4669 Fax: (246) 426-5570 E-mail: Pgoddard@caribnet.net

A. Project Development Objective

1. **Project development objective**: (see Annex 13.2)

Barbados has a window of opportunity to prevent the spread of the Human Immune-deficiency virus (HIV)/ Acquired Immune Deficiency Syndrome (AIDS) epidemic, as its Government is now publicly committed to support vigorous action immediately. The Government of Barbados has established a National Commission on HIV/AIDS (NACHA) under the Prime Minister's Office with a mandate to implement a broad-gauged program to limit the further spread of the epidemic into the general population, by preventing HIV infection among vulnerable and high-risk groups, without stigmatizing them, and treating infected persons. The Barbados Parliament approved increased budgetary allocations for line Ministries' HIV/AIDS activities at the beginning of April 2001.

The proposed HIV/AIDS Prevention and Control Project would assist the Government of Barbados to:

- reduce the rate of new HIV reported cases;
- increase the life expectancy of persons living with HIV/AIDS (PLWA);
- improve quality of life for PLWA; and
- build sustainable institutional arrangements for managing the HIV/AIDS epidemic.

2. **Key performance indicators**: (see Annex 13.2)

Key performance indicators for monitoring progress would be:

- annual percentage of HIV new reported cases (Number of positive HIV tests/total HIV tests preformed in Barbados plus HIV positive cases diagnosed elsewhere and reported;
- mortality rates attributed to AIDS;
- life expectancy of PLWA
- changes in high-risk sexual behavior and attitudes, as measured by changes in condom use, age at first sexual encounter for men and women, and reporting of unsafe sex practices;
- percent of HIV/AIDS cases due to mother-to-child transmission;
- percent transmission through blood transfusion; and
- quantitative and qualitative changes in quality of life for PLWAs.

The project would also expect to build sustainable institutions to continue managing the response to the HIV/AIDS epidemic in the post project period. However, evidence of success of this effort would not be available within the project period. Therefore, institution building performance would be evaluated as "work in progress" against various processes and other leading indicators of future sustainability, such as the quality of project administration, achieved levels of participation in HIV/AIDS prevention and treatment activities, and growing non-discriminatory social attitudes and perceptions of the epidemic and its victims.

Barbados has been monitoring the evolution of the HIV/AIDS epidemic with externally provided assistance. Available studies covering selected populations would be used to establish base-line indicators similar to the ones described above, for future comparisons. The project would support improving the in-country HIV/AIDS surveillance, monitoring and evaluation system in-country and the selection of indicators to monitor and evaluate project implementation. The project would also assist line Ministries to establish their "micro" level indicators for their own programs as part of the institutional development component. Throughout the development of its surveillance system, Barbados would conform to the needs for developing data compatible to regional research efforts established under such programs as the Caribbean Cooperation in Health initiatives (CCH II) led by the Caribbean Community and Common Market (CARICOM) and Caribbean Epidemiology Center (CAREC).

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project (see Annexes 13.1and 13.2)

Document number: 22205-LAC Proposed date of CAS discussion: June 28, 2001

The Country Assistance Strategy for the Eastern Caribbean Sub-region is scheduled for Board discussion at the same time as this project. This CAS highlights HIV/AIDS prevention and control as a key policy issue and an urgent area of intervention for the Eastern Caribbean. Even though Barbados graduated from IBRD lending in 1993, Barbados is being included in the Eastern Caribbean Regional APL for HIV/AIDS Prevention and Control as an exceptional case to the World Bank's graduation policy due to the following reasons (Annex 13.1 explains these in greater detail and also documents why alternative financing sources for this program are not available to Barbados on reasonable terms):

- **Public goods and externalities**: Barbados is both a regional hub with significant population movements across the Caribbean, as well as a popular destination for tourists from all over the world. Effective containment of an infectious disease such as HIV/AIDS requires that the entire region be part of the prevention and control measures and excluding any country would undermine the success of the program region-wide.
- **Leadership**: Barbados has traditionally been a regional leader, and has been particularly active in providing a leadership role in shaping the sub-regional program for HIV/AIDS prevention and control. Its inclusion in this program is key to strengthening the chances of success for projects not only in the other Eastern Caribbean countries but also throughout the Caribbean region.
- **Health infrastructure**: While health care service delivery in the OECS is generally adequate, all countries in the sub-region still experience shortcomings. Barbados has a much stronger health infrastructure, used by many neighboring countries. Its inclusion in the Bank's HIV/AIDS program will allow it to play a broader and more effective sub-regional role.
- **Transferable development lessons**: Barbados is a front-line participant in the UNAIDS Accelerated Access Initiative. Its experience in promoting HIV/AIDS treatment through anti-retroviral therapies will provide valuable models for integrating such treatment into general public health, not only in the Eastern Caribbean region but also in developing countries more generally.

The special circumstances of the public goods and externalities aspects of the HIV/AIDS prevention and control program and Barbados' leadership role in the highly inter-related economies of the Eastern Caribbean form a unique and compelling case for including Barbados in the regional HIV/AIDS program. In essence, Barbados is the regional hub with advanced economic and social infrastructure providing these services to some of the less equipped countries of the Eastern Caribbean. As indicated in the accompanying CAS, this Barbados proposed operation would be a one time exception and additional IBRD support is not envisaged.

2. Main sector issues and Government strategy

The Problem

The first case of HIV/AIDS was detected in Barbados in 1984. At that time, as was the situation in most of the world, HIV/AIDS was viewed first more as a consequence of risky personal behavior, than a public health issue. The epidemic was also thought to have been confined to men who have sex with men and not the general population. Efforts to manage and control the epidemic were focused on medical and key public health issues such as the protection of blood bank supplies. The number of reported HIV cases continued to rise particularly among the general population 15-49 years of age, and the most economically active 25- to 49-year-olds.

As of June 2000, the total cumulative HIV positive persons were 2,415 of which 1,252 have been diagnosed with having AIDS, including 45 children under the age of 15. These figures are, however, conservative. It is estimated that the 2,415 persons testing positive represents only one-fifth of the infected population. Given that HIV and sexually transmitted infections (STI) testing is not mandatory in Barbados, it is possible that persons feeling that they are high-risk individuals may seek diagnosis/treatment overseas or do not seek diagnosis and treatment, thus remaining unaware of their HIV status.

In 1988, the National Advisory Committee on AIDS (NACA) was formed and in 1995 committed itself fully to a program designed to transfer ownership of the challenge of HIV/AIDS from government to the individual citizen, Ministries other than Health, non-governmental organizations (NGOs), civil society organizations (CSOs) and people living with HIV/AIDS (PLWAs)—the "multisectoral" approach. A summary of some of its main activities is contained in Annex 13.9. The Government of Barbados recognized that the epidemic had social and economic dimensions in addition to its medical and public health aspects. In addition to continuing clinical and public health actions, incremental efforts were devoted to prevention education campaigns, designed to inform and influence particular target groups. Among the more notable were those aimed at:

- Primary schools (age group 5-11 years) in three age groups 5-6 years; 7-8 years; and 9-11 years, with age-appropriate education;
- commercial sex workers as a voluntary activity;
- teenage peer counselors sponsored by corporate Barbados (for example: The Barbados Light & Power Company Ltd. and Texaco);
- school principals in primary and secondary schools; guidance counselors and selected teachers; and
- religious leaders grouped under the Barbados Christian Council, the Barbados Evangelical Associations and other religious groups.

Despite numerous HIV/AIDS prevention educational campaigns designed to reach particular target groups, it is clear that these interventions have not impacted significantly on the incidence rate. Furthermore, it is unclear whether the educational messages designed to reach particular target groups have been effective in motivating behavioural changes, as research and evaluation have not been systematically performed.

The socio-economic impact of HIV/AIDS in Barbados is of critical importance since the infection rates continues to increase among the economically productive age group 25-49 years, and hence a high mortality rate within this age group is expected which presents a serious challenge to Barbados' social and economic development. Deaths in this age group impoverish both family and country. Many of the individuals in this age group are parents. Sometimes both the mother and father in a family die. Grandparents and children are left without support, thus increasing demands on social welfare services. Similarly, the epidemic could eventually undermine the capacity to govern in Barbados, as essential resources, public services in health, education, and social services become weakened. Small countries such as Barbados cannot afford the kind of long-term losses that other countries in sub-Saharan Africa have undergone so far due to HIV/AIDS. Small impacts on key sectors that significantly contribute to the growth of gross domestic product (GDP) would produce an enormous crippling effect on the country's economy.

The Issues

In most respects, Barbadians enjoy a good state of health, and are being well served by the national health delivery system. Life expectancy for males is about 73 years of age, and females about 77 years. Literacy is among the highest in the Caribbean (95%), availability of safe piped water is universally available (94% served at home, and the remainder through public stand pipes). The five leading causes of death have been cardiovascular disease (about 19%), malignant neoplasms (17%), cerebrovascular disease (14%); diabetes (10%); and other diseases of the circulatory system (4%). Births to adolescent mothers, and STIs have generally been declining. Health services have been provided by public facilities, centered at the Queen Elizabeth Hospital (QEH) (with 547 beds, providing 24 hour acute care services, and wide range of specialized preventive and curative services), and eight associated polyclinics (Annex 13.2B). An additional 100 private physicians practice on the island. Laboratories in two public and four private facilities provide capacity for conducting about five tests per person per year, and have been sufficient to date for general health support. The Barbados blood bank has routinely screened blood supplies for HIV, Hepatitis B and C, Syphilis and HLTV1. The system is supported by the Barbados Drug Service (BDS) which has been designated a WHO Collaborating Center, and controls the importation and distribution of essential drugs.

However, since 1995, the Ministry of Health through the AIDS Management Team (within the Department of Medicine at the QEH) and committed volunteers, have attempted to address the needs of HIV/AIDS infected and affected individuals, working with non-earmarked and inadequate resources. By 2000, the AIDS Management Team

was monitoring the viral loads and CD4 counts and providing counseling to about 350 persons (30% of all HIV infected persons) and only about 15 confirmed cases of AIDS were being actively treated with Antiretroviral therapy (ART), supported through private means. The lack of sufficient political awareness of the magnitude of the problem has meant that multisectoral efforts have not received adequate human or financial resources. Moreover, the NACA was essentially "advisory" and its operations highly dependent on the initiatives and resourcefulness of its leadership and membership, not a sustaining institutional framework.

As a result, it has been difficult to plan strategically and the response to HIV/AIDS in Barbados has been reactive rather than proactive. The programs instituted for prevention and control, in particular, have not been sufficiently broad-based to address the full range of socio-economic, cultural, and behavioural aspects of the disease. The program has not given fully integrated attention to the spread of sexually transmitted infections (STIs) as part of the HIV prevention and control focus. Lastly, insufficient attention has been paid to the application of research and information to decision making; lessons learned or best practices have not always informed policy development; and the issues of discrimination and stigma were not adequately addressed. The previous programs seemed not to have adequately taken account of impact of external factors on local conditions.

Limited Impact of Past Efforts

Notwithstanding the numerous efforts made to combat this disease, its spread has continued. In 2000, there were approximately 70% more HIV infected persons than predicted in 1990, and the number of new infections is growing relative to that in the Organization of Eastern Caribbean States (OECS) countries. To date, the overall national response has been confined to the health sector with limited support from international and national resources. The current approach with a predominant health focus to respond to the epidemic, can no longer serve to promote a broad based expanded response to the epidemic. A proactive response with a multisectoral approach, has to be launched if there is to be a reversal in the current trend of this epidemic.

Barbados' Strategic Plan—Towards a Multisectoral and Proactive Approach

In response to the above problems, the Government of Barbados has issued a strategic plan for the restructuring of its national HIV/AIDS program. Barbados' Cabinet approved a ***Comprehensive Program for the Management, Prevention and Control of HIV/AIDS, 2001-2006*** (the Program), in November 2000 to be managed under a new National Commission for HIV/AIDS (NACHA), supported by an executive office with a full-time paid staff. The challenge for the government is to do the following:

- become proactive in managing the epidemic rather than being reactive to it;
- broaden the effective scope of the activities undertaken to be truly multisectoral;
- address treatment and care as well as prevention as a continuum;
- generate more collaboration and partnership among national institutions;
- involve the private sector more fully in the management of the epidemic;
- establish accountability for results; and
- progressively mainstream and then sustain management efforts both institutionally and financially.

Barbados' strategic plan for HIV/AIDS draws on elements of the Caribbean Regional Strategic Plan of Action formulated by the CARICOM-led *Regional Task Force on HIV/AIDS*, and approved by CARICOM Heads of Government in July 2000. The strategy includes the following elements:

- Restructuring the system for managing STI/HIV/AIDS as a national priority, giving it a high level of political commitment and setting a high level of national accountability;
- institutionalizing this system to effectively manage a short and medium term program of action, and to be sustainable in the long term;
- developing and implementing appropriate public policies to address HIV/AIDS issues such as work place discrimination;

- strengthening existing health services in major areas as well as social support for people affected by HIV/AIDS;
- further enhancing understanding and changing attitudes and behavior that affect HIV transmission; and
- establishing a comprehensive and operational research agenda.

The plan also includes two strategic thrusts that make it unique at this moment.

a) **Regional leadership**. Barbados has established a leadership role in the Caribbean, particularly among the OECS countries[1] which have smaller populations and fewer economic resources. Barbados assumed an early leadership role through its sponsorship of region-wide collaboration and advocacy at the political level for an expanded response to the HIV/AIDS epidemic in September 2000, and subsequently in January 2001. Barbados has also played the role of a regional advocate with the major manufacturers and suppliers of anti-retroviral drugs for a change in manufacturers' drug pricing and marketing strategies in the region. It has been confirmed by independent sources that this has been effective in changing the approach that these companies may take when establishing commercial contracts in the region. Finally, while designing its program to serve the needs of its own population, Barbados is positioning its investments in treatment and care facilities and technical capacity to be an anchor for the expansion of services to smaller countries with little or no capability to make similar investments. To this end, Barbados recently established an electronic link with Caribbean countries including Haiti with a view to exchange information.

b) **Introduction of anti-retroviral therapy (ART)**. Private physicians send HIV/AIDS patients to the AIDS Management Team at the QEH. This Team has been treating about 15 confirmed cases of AIDS in Barbados, with the triple therapy drug regime. These are privately financed treatments relying in part on laboratory facilities off-island. The Government of Barbados (GOB) has concluded, however, that ART is an integral part of a comprehensive prevention, treatment and care package and has decided to extend ART to all residents of the country as a matter of public policy and in the exercise of its responsibility for public health. The GOB' policy includes:

   - Preserving the physician's prerogative to prescribe the actual therapies needed by patients;
   - importing only branded and registered drugs to respect intellectual property rights;
   - building the physical and human infrastructure that will allow for rapid and specialized review and treatment of cases in-country, as well as monitoring cases throughout treatment;
   - developing protocols for testing and treatment and an integrated system involving home, community as well as facility-based care; and
   - procuring anti-retroviral drugs (ARV) through transparent price competition in cases where there are competing patent-holding manufacturers and their licensees (the BDS has developed a world-recognized system for efficient and transparent procurement of drugs to serve the needs of the island, and has been designated by WHO as a "Collaborating Center for Drug Supply Management" in the region), or through direct contracting from the sole patent-holder or licensee.

The GOB expects to phase in the provision of ART concurrent with the development of facilities and experience among an expanded staff over the next 24 months. Barbados has been receiving advice from internationally respected sources concerning the criteria for infrastructure and staff performance it should meet before undertaking a rapid scale-up of the ART services. These criteria are given in Annex 13.11, and would be used by the Bank as a basis for its decision to finance ARV drugs and laboratory reagents in quantities needed to facilitate this expansion of service.

Implementation through the Multi-country Program

[1] Grenada, Antigua and Barbuda, Dominica, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines

As part of its implementation strategy, Barbados has requested the financial assistance of the World Bank (WB) under the Multi-Country HIV/AIDS Prevention and Control Adaptable Program Lending (APL). It has substantially met the following basic criteria for participating in this program:

a) **Preparation of a national HIV/AIDS strategy**. The GOB has approved a coherent multisector program for addressing its HIV/AIDS issues. New budgetary resources were made available to support the initial steps in implementing the program during 2000-2001 through special appropriations. Funds have been included in the 2001-2002 budget year for the continuation of the program.

b) **Readiness of national leadership**. The GOB established the National Commission on HIV/AIDS (NACHA) whose Chairman is under the Office of the Prime Minister. Appointments of key executives were made prior to the negotiation of the project.

c) **Programming for multisectoral implementation**. The operational plan for the GOB's strategy will involve the active participation of several line Ministries (including Health) which have already received additional earmarked resources for this purpose. In addition, community groups are to be involved via their association with Ministries as well as directly managing project activities. Barbados has a tradition of involving larger and better organized CSOs in the implementation of its policies, through funding for activities such as family planning, health education, cancer research, and social and community transformation. Over 50 such health organizations are currently active in Barbados. It would extend this tradition by assisting new community-based organizations to develop.

d) **Use of sustainable business arrangements**. The project will be executed through an Office established in the Office of the Prime Minister which will give it a firm institutional base. The Project Coordination Unit (PCU) will use tested and simplified administration-wide financial management and procurement methods that have been assessed by the Bank. While the emphasis is on building institutional experience, GOB may out-source administrative services that might be needed to launch project implementation quickly. The project could also contract with qualified civil society organizations who could scale up ongoing promotion, treatment and care services effectively to achieve short term impacts in addition to strengthening already mainstreamed services. Lastly, while the BDS has an excellent record in maintaining adequate supplies of essential drugs in the country, the Ministry of Health is also seeking government approval for establishing modified procurement systems for expanded imports of ARV drugs to support the development of the Highly Active Anti-Retroviral Therapy (HAART) program, and is developing a protocol for ARV distribution to patients.

e) **Status of monitoring and evaluation:** The information system supporting current patient case notification has been highly reliable for AIDS surveillance in Barbados. With project support, improvement would be made to allow the system to provide information on both medical and socio-behavioral aspects of the epidemic (second generation monitoring).

As a result, Barbados is considered to be ready to begin project implementation soon after appraisal and approval of the proposed loan.

3. Sector issues to be addressed by the project and strategic choices

Barbados experience in managing the HIV/AIDS epidemic has been more reactive than proactive. Preventive interventions have been limited in number and coverage of target groups, and with unknown effectiveness, except for the successful HIV/AIDS mother-to-child prevention and the blood safety programs. Scaling up treatment with anti-retroviral drugs requires a sophisticated infrastructure in terms of laboratory testing, treatment facilities, patient compliance and follow-up and trained personnel, which is limited in Barbados today. Efforts in bringing together multiple actors, both public and private have been of little effect.

The project will concentrate on the following:

- Introducing and scaling up cost-effective preventive programs and treatment efforts, that have been successful in other countries and in Barbados—in particular, strengthening and expanding the prevention and control of STIs;
- establishing a staged implementation approach to ensure adequate lessons from experience leading to better informed public and private stakeholders and decisions on scaling up prevention and treatment services;

- building sustainable and proactive institutions to implement Government of Barbados's current and future HIV/AIDS management programs; and
- ensuring Government leadership at the highest level and multi-sectoral participation through various line Ministries.

The project would be open to efforts to scale up or introduce initiatives or actions that hold promise for managing the epidemic (guided by past experience in other countries), rather than focusing on a pre-selected narrow set of options. It would be prepared to evaluate the usefulness of such activities during implementation and either continue or abandon activities on this basis. Combined private/public sector implementation would be sought, since NGOs play a central role in effectively reaching high risk groups. Given the newness of some preventative programs in Barbados and the complexity of scaling up ART, a phased approach to project implementation has been chosen.

C. Project Description Summary

1. **Project components** (see Annex 13.3 for a detailed description and Annex 13.5 for a detailed cost breakdown)

The project is part of the WB Multi-Country HIV/AIDS Prevention and Control APL and would finance significant parts of the GOB's Program. The project would scale up ongoing HIV/AIDS prevention initiatives, while allowing the government to embark on new treatment and care initiatives. In the recent past, Barbados has benefited from technical assistance from the European Union, the German Government (GTZ), Pan American Health Organization (PAHO) /World Health Organization, United Nations Educational, Scientific and Cultural Organization (UNESCO), and Joint United Nations Program on HIV/AIDS (UNAIDS), for the implementation of HIV/AIDS program initiatives which made important contributions to the country's fight against the epidemic. The project would, as appropriate, complement, reinforce, and operationalize these early initiatives. The project's activities would grow and evolve over the implementation period. Each of the project/program components to be financed is discussed below.

Component #1: Prevention and Control of HIV/AIDS Transmission—US$5.7 million

A full review of ongoing and immediately planned prevention activities (workshop February 21-23, 2001 conducted with the different Ministries of Barbados), has been the basis for eight Ministries and the Government Information Services to formulate enhanced work plans incorporating best practices and options. Eight Ministries and the Office of Government Information Services would each establish HIV/AIDS Coordination Units, responsible for designing and managing implementation of specific interventions according to target populations.

- Target populations identified for prevention interventions are the following:
- Adolescents (both genders) in and out of school;
- pregnant women;
- sex workers and "beach boys";
- men who have sex with men;
- persons with STIs;
- uniformed personnel;
- hard-to-reach individuals and groups;
- health workers;
- hotel, motel and tourism personnel; and
- people with HIV/AIDS.

During the first year of project implementation, each Ministry would start implementing at least two core national program interventions: information, education and communication (IEC), specifically addressed to behavioral change and condom distribution among different target groups. As part of their implementation activities, Ministries

may contract technical assistance and NGOs to assist in reaching beyond traditional constituencies or hard-to-address populations to advance their respective prevention programs.

The following prevention programs would be developed through the different Ministries (see Annex 13.2), under NACHA coordination, monitoring and evaluation:

Information Education and Communication: This program aims at maintaining people's *awareness* of HIV/AIDS risks and protection measures, promotion of *behavior changes* for safe sex practices and risk reduction, and *advocacy* among public and private leaders on human rights protection, abolition of discrimination practices and learning to live with PLWHAs. The Government Information Services would be an important facilitator of mass media use (radio, TV, press, open letters, etc.) for implementing IEC.

Condom Distribution: Use of social marketing, peer groups, vending machines, and other strategies to make condoms available and accessible to all segments of the adolescent and adult population; visible access to condoms in hotels, motels, restaurants, entertainment and other public places. Each Ministry would choose the best strategy to make condoms available and accessible to its clients (target populations).

Prevention and Control of STIs: The MH would strengthen the STIs prevention and control program through its network of polyclinics. The project would finance the pre-packed STI therapy for implementing the syndromic management approach, which has been highly successful in many countries. This program would be implemented by the MOH, and other Ministries would promote it among their target populations.

Prevention of HIV/AIDS Mother to Child transmission: The project would support the MH to continue the implementation of its successful HIV/AIDS preventive program. Other Ministries would promote the use of services offered through this program among pregnant women.

Control of Laboratories and Blood Supply: This is another successful effort of the GOB over the years, as reflected in less than 1% HIV cases due to blood transfusions. The QEH has maintained high standards for laboratory quality control and blood bank screening for infectious diseases including HIV. The project would support the continuation of this preventive program under the Ministry of Health responsibility.

Component #2: Diagnosis, Treatment, and Care for HIV/AIDS—US$14.3 million

The project would scale up the diagnosis, treatment and care for HIV/AIDS patients, as part of the GOB's commitment to meet patients' clinical and emotional needs, reduce opportunistic infections, reduce work disability, and improve quality of life. Under this component, the project would support scaling up the following interventions:

- Voluntary testing and counseling;
- laboratory strengthening;
- pharmacy strengthening;
- community and home care; and
- facilities for opportunistic infections (OIs) treatment and ART for patients with AIDS.

The project would support the implementation of following sub-components:

Strengthening Voluntary Counselling and Confidential HIV Testing: The project would support: (i) upgrading eight polyclinics for counselling and testing, a new AIDS Reference Unit (see below), where a counseling clinic would be set up; (ii) training of 50 HIV/AIDS counsellors of which, eight would be located at the upgraded polyclinics, two at the counseling clinic of the AIDS Reference Unit, and the remaining 40 located at other Ministries and community organizations involved in HIV/AIDS prevention programs.

Strengthening Laboratory Capacity: Provision of ART has significant repercussions on laboratory capacity for testing and follow up of patients under treatment. The Government has made arrangements with providers for installing equipment (flow cytometer for CD4, and a viral load rented machine and reagents for viral load testing), and training four to five laboratory technicians for performing the tests. Also, supplementary investments in

remodeling space, laboratory technicians, equipment and reagents will be provided by the project to strengthen present lab capacity for early diagnosis of opportunistic infections.

Pharmacy Strengthening: At present the BDS makes available seven out of 11 manufactured anti-retroviral drugs. The project would support Barbados' discussions with UNAIDS to seek agreements with providers for lowering cost ARV drugs through the UNAIDS Accelerated Access to Drugs Initiative and help to finance said drugs. In order to provide a supportive environment for the utilization of ARV, the project would upgrade some aspects of current pharmacy services: space would be provided for a satellite pharmacy in the AIDS Reference Centre outside Queen Elizabeth Hospital, to facilitate swift dispensing practices, increase patient compliance, improve patient education and permit better tracking and accountability within the pharmacy service. In addition, a program to monitor drug quality, safety and efficacy would be instituted to ensure that reduced drug cost does not imply reduced quality.

Strengthening Infrastructure for Community Health Services: In addition to upgrading the eight polyclinics, the project would provide training for a core of 40 health workers from the eight polyclinics and NGO volunteers on the WHO model of Continuum AIDS Care. Particular attention would be given to education on the importance of compliance *vis a vis* resistance, meaning of CD4 and viral load counts.

Expanding the Infrastructure for OI Treatment and Introduction of ART: The project would support: (i) the refurbishing and remodeling of the old nursing building for establishing the HIV/AIDS Reference Unit, a state-of-the-art site for clinical treatment and patient monitoring, strengthening laboratory capabilities (see above), improving pharmacy services (see above) upgrading in-house information management technology for improved HIV/AIDS surveillance. The project would also support civil works for providing additional space and facilities for the enhancement of treatment and care. Civil works for adapting these facilities for care and treatment of HIV/AIDS patients will be ready by the end of 2001, except the site for the HIV/AIDS Reference Center, which would be started later this year. Finally, although introducing ART will not substantially increase the volume and types of medical waste, GOB will, in the first two project years, provide technical assistance for reviewing the legal framework governing medical waste handling and disposal, upgrade the coding for handling of medical waste of different types and sources, updating the manual for the handling and disposal of medical waste at the QEH, training of personnel for the proper handling and disposal of medical waste, and if deemed necessary, financing for the repairing or the replacement of the incinerator at the QEH. In addition, the loan would finance a study to assess improved alternatives for medical waste disposal in Barbados, and said study shall include the carrying out of a fully consultative environmental assessment of any alternatives the study might recommend. Such alternatives may be carried out only in compliance with the environmental mitigation measures identified by said assessment.

Criteria for Patient Enrollment and Follow Up (see Annexes 13.10 and 13.11): The project would set up criteria for patient enrollment, follow up, and monitoring and evaluation of ART according to QEH HIV/AIDS Management Team advice. Low compliance would be addressed through strong education campaigns carried out by treating doctors who are managing patients, counselors, health workers, and voluntary organizations working close to patients' home. The project would support periodic seminars for updating patient enrollment and treatment follow-up according to new findings published in the scientific literature.

C. Component #3: Management and Institutional Strengthening—US$3.5 million

Management Strengthening. This subcomponent would support the restructuring of Barbados' existing National HIV/AIDS Program to ensure a sustainable institutional structure and management that will allow Barbados to effectively control, prevent, and care for HIV/AIDS over the long term. This would be accomplished by providing the necessary leadership, advisory services, staffing, goods, and general operating costs of the following institutions:

The National Advisory Committee on HIV/AIDS (NACA) has been reformulated into a National Commission on HIV/AIDS (NACHA) with executive powers, under the Prime Minister's Office. In addition to a Chairperson and an Executive Director, NACHA has representatives from the private sector, the Church, the Youth Organization, the Media, the Trade Unions, the NGOs, the people living with HIV/AIDS (PLWHAs), and the Director of the AIDS Management Team of the QEH (see institutional and implementation arrangements).

The Executive Director's Office is functioning as the Secretariat of NACHA and is responsible for project implementation, that is, it would become the Project Coordination Unit (PCU). The Office is be staffed by the

Executive Director, a Deputy Director, an Assistant Director responsible for coordinating programs in prevention (including education, training and research); and a Financial Officer.

HIV/AIDS Program Units in Key Ministries. In the initial stages of the project, six Ministries and the Government Information Services would each have key roles to play in reaching the goals of the five main prevention activities. They would each form a core management group, to be responsible for implementing HIV/AIDS prevention and control activities directed at their respective target populations. Each of these Ministries has included a line item for HIV/AIDS activities in its budget for 2002. The Ministries that would participate in the project are as follows:

- Ministry of Health (MH)
- Ministry of Education, Youth Affairs and Culture (MEC)
- Ministry of Social Transformation (MST)
- Office of the Attorney General and Ministry of Home Affairs (MAG)
- Ministry of Tourism (MTIT)
- Ministry of Labor, Sports and public Sector Reform (MLS)
- Government Information Services (GIS)

Project Monitoring and Evaluation. The project will support the MH implementation of standardized protocols for behavioral ("second generation") and biological surveillance with the assistance of the Chronic Disease Research Center (CDRC) of the University of West Indies (UWI) and CAREC. CAREC will also assist the MH providing technical support towards the strengthening of the STI/HIV/AIDS information system, programming and execution of surveys. The standard data and criteria for the HIV-AIDS information system are detailed in Annex 13.3. The database design would provide access to online information on diagnostic and lab testing relative to the management of opportunistic infections, anti-retroviral status, CD4 and viral load, applied history and date-sensitive treatment, non compliance alert, as well as up to date information on drug dispensation, online therapeutic protocols, adverse effects help, utilization and effects. Integrity and confidentiality of the electronic medical records would be assured with encrypting technology.

The project would fund the technical assistance required for the selection, acquisition, adaptation and implementation of clinical information systems focusing HIV-AIDS case management and surveillance from applications available in the market.

Research. The scope of research activities would include the following:

- Social and economic impact studies, particularly HIV/AIDS household impact and cost effectiveness of HIV/AIDS prevention, diagnosis and treatment, and projected demand for treatment;
- situation analyses starting with baseline indicators for monitoring HIV/AIDS epidemic and demographic trends, KAP studies for assessing knowledge, attitudes and practices in sexual behaviors and attitudes towards PLWHAs;
- needs assessment studies, including criteria and provision of anti-retroviral treatment, payment capabilities, funding options, and service needs according to community groups and PLWHAs; and
- research capacity building on HIV/AIDS, with local, regional and international collaboration and support.

Staged Implementation. All project components would build up their activities, based on lessons learned as implementation progresses. This recognizes that the effectiveness of many project activities, especially those that are directed at changing behavior and attitudes is difficult to predict and that modifications in implementation rates, scope and details would be necessary throughout the implementation period. Annual progress reviews and a mid term review will be important project management tools and are provided for in support to project management. The work plan for the first project year is attached to Annex 13.3.

Of particular concern is Barbados' ability to scale up the ART program that now serves about 15 patients, to one that

serves the estimated population of about 1,250 HIV positive persons who could qualify for ART in the medium term (24 to 36 months). A significant scaling up of ART and the use of loan proceeds to support it would be initiated only after the proposed infrastructure has been completed, and staffing and training contemplated under this component is found satisfactory (see Conditions and Annex 13.11 for the criteria to be applied in making the determination of readiness). The progression of project actions leading to the decision would be:

a) **Management Organization**: Establishing and operating the PCU within NACHA's organization, the Inter-Ministerial Committee and the HIV/AIDS Ministerial Units to ensure a sustainable institutional structure and management for GOB's HIV/AIDS overall program (and project implementation) and the reconfiguration of the AIDS Management Unit in the MH. This first stage would be accomplished in the first 12-18 months of project implementation .

b) **Preparation and Development of Prevention Programs**: The five key prevention programs would be fully prepared including objectives, target populations, types of interventions, staffing, and other inputs with their respective budget. Initiating the implementation of all of the five programs would be expected at the beginning of the second project year.

c) **Completion of Infrastructure for scaling up ART**: Infrastructure to support an expanded ART program would be complete when:

- The civil works (refurbishing, remodeling, expansion of facilities) providing the required space for voluntary counseling and testing, laboratory and pharmaceutical services, and home and hospital care for HIV/AIDS patients are completed;
- the laboratory equipment and staff training for HIV testing (ELISA test), opportunistic diseases, CD4 count and viral load testing is completed;
- the procurement process for required quantities of ARV drugs has been clearly established;
- staffing and training for the HIV/AIDS Referral Center has been completed;
- review and updating of protocols for ART has been completed and found satisfactory, as well as the updating of the manual for the proper handling and disposal of medical waste at the QEH; and
- financial feasibility and sustainability for further annual scaling up the number of patients under ART treatment are achieved.

These steps should be completed in the first 20-24 months of the project.

Component	Indicative Costs (US$M)	% of Total	Bank-financing (US$M)	% of Bank-financing
1. Prevention and control of HIV/AIDS transmission	5.7	24.3	4.1	27
2. Diagnosis, treatment and care for HIV/AIDS	14.3	61.1	9.45	63
3. Management and institutional strengthening	3.5	14.5	1.45	9
Total Project Costs	23.50	100	15.00	64
Front-end fee	.15		.15	1
Total Financing Required	23.64		15.15	100

2. Key policy and institutional reforms supported by the project

The project would support the strengthening of Barbados' HIV/AIDS management capacity to ensure the long-term sustainability of scaled up efforts by developing a proactive Commission on HIV/AIDS and a solid Office of the Director; formally recognize the participation of CSOs through grant and other contractual arrangements to implement parts of the government HIV/AIDS Management Program; and mainstream addressing HIV/AIDS issues in various Ministry programs.

3. Benefits and target population

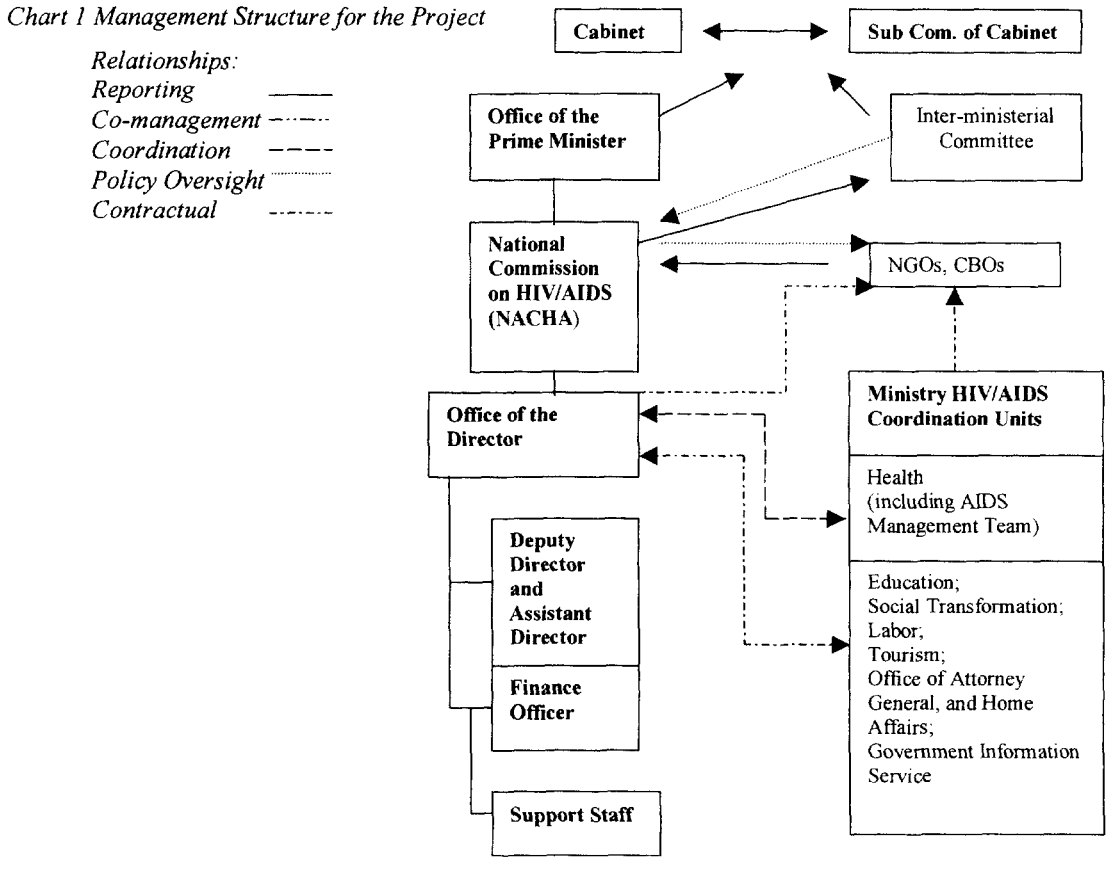
The project would provide the following benefits for Barbados. First, by slowing the rate of new HIV infections it would be reducing the number of new AIDS cases that would appear in the future, and the consequent human and social costs, human suffering, and financial burdens to families. Second, the project would extend the lives of PLWHAs, most of whom are between 25 and 49 years of age, extending their productive contributions to society. Thirdly, on a macro-economic point of view, these effects would allow Barbados to significantly reduce the risk of losses in GDP, poverty rates, and erosion of social cohesion. Finally, the project would allow Barbados to continue to manage the epidemic through the longer term.

4. Institutional and implementation arrangements

The project would be implemented under the authority of the Office of the Prime Minister (who is also the Finance Minister). At the political level, an Inter-ministerial Committee would set the political strategy guiding the implementation of the National Program. The Prime Minister and the Inter-ministerial Committee are finalizing executive appointments of experienced staff to assure sound implementation of the program.

Management Structure

Chart 1 Management Structure for the Project



National Commission on HIV/AIDS (NACHA). Responsibility for determining the strategic content and direction for implementing the project in Barbados would be vested in the NACHA. This body has been created by the Barbados Cabinet as a "statutory board" to oversee the performance of the project and be accountable for its success to the public. The NACHA would advise government on HIV/AIDS policy, advocate and promote the active involvement of all sectors and organizations in implementing HIV/AIDS management actions, create partnerships to broaden the national response to HIV/AIDS, mobilize resources, internationally and locally to support the efforts, and to monitor and be ultimately accountable to the public for the successful implementation of the project.

NACHA will comprise representatives from groups in many sectors of Barbados with stakes in reducing the threat of HIV/AIDS. It would be led by a Chairperson who would be an individual of recognized public leadership, capable of mobilizing public action and managing controversy. The Chairperson would be selected by the Prime Minister and serve on a full-time paid basis. The 12 to 14 additional members of the Commission would receive honoraria in accordance with regulations governing other Statutory Boards.

NACHA would be expected to be proactive in listening to public concerns and expert advice and probing issues. It would also have access to consulting services and assist in formulating strategies for dealing with these issues. NACHA would solicit assistance and participation of NGOs, community groups or public sector agencies to sponsor and be accountable for implementing such strategies. This would extend to recommending changes in legal and

regulatory frameworks, as needed. It would report to the Inter-ministerial Committee and to the public through the media.

Office of Director (the Office). The daily work of implementing the program will be executed through the Office of the Director, serving as a secretariat for NACHA. The Office would be established within the Prime Minister's office as a government department, which would have its own budget approved by the legislature, management team, and responsibilities to the Prime Minister as its hierarchical authority. The Office would also be the PCU for the World Bank-financed project.

The Office would be managed by a Director, appointed at the level of a Department Head in the civil service. In addition to the regular duties of a department head, he/she would perform the following functions:

- Advise the Inter-ministerial Committee and the Commission on the formulation of national programs and policy for HIV/AIDS management;
- assure the development of the overall HIV/AIDS Prevention and Control Project prevention and control work programs and coordinate its implementation through various Ministries' implementation plans and through those of stakeholders in the private sector, NGOs and community groups;
- advise on budgetary allocations to be made to line Ministries for HIV/AIDS activities and report on the financial performance of Ministries and to NGOs and community groups in relation to HIV/AIDS;
- assure, through subordinates, the sound financial management of the project, and be ultimately responsible for project procurement; and,
- monitor and evaluate the performance and results of actions implemented by Ministries and stakeholders.
- The Director would have senior-level working experience in the government service or in a comparable agency. The Office would also be staffed with a Deputy Director, an Assistant Director and a Financial Officer responsible for:
- HIV/AIDS prevention programs and programming, including guiding the design and implementation of education, training, and behavior change motivation in other Ministries, as well as through the Office directly;
- policy, planning, research and monitoring and evaluation intended to continue to focus the activities financed under the project on key target groups in a cost-effective manner;
- financial management related firstly to the management of resources provided through the WB and other donors as these may become available (resource allocation, accounting, disbursements); and secondly to monitor and advise on the uses and needs for financing Ministries' and NGOs HIV/AIDS activities; and
- procurement management, devoted essentially to the use of WB loan proceeds.

The terms of reference for these key personnel and their accountabilities would be contained in a project operations manual, and qualifications and experience agreed with the WB. Appointments are immanent.

The staff of an AIDS Program Unit, being reformed under the MH to assume expanded responsibilities for prevention and managing the treatment of ART, would be considered as an adjunct management staff of the Office. Considering the relative size of their financial responsibilities, they would be considered as "co-managers" of the project.

As a government department, the Office would have a legal status that allows it to receive treasury resources as a "line item" authorized by the legislature, and from donor agencies; be audited by independent auditors, to establish contracts under Barbados' laws governing tendering and to commit public monies. Administratively, the Director with his financial officer (a position analogous to a Ministry's Finance Officer) would have full accountability for the program, its spending and results.

Ministry Implementation Units. Coordinated by the Office, significant parts of the project would be implemented through the efforts of several core Ministries including: *Health; Education, Youth Affairs and Culture; Social Transformations; Office of the Attorney General and the Ministry of Home Affairs; Tourism; Labor, Sport and Public Sector Reform; and the Government Information Services.*

Each of these Ministries and agencies would establish its own programs to promote behavior changes, and contribute to the prevention of HIV transmission among the populations and target groups that it normally serves (see Annex 13.3). Each would organize its work through (or in the case of the Ministry of Health re-establish; see below) a specific *HIV/AIDS Prevention Unit*, managed by a designated Ministry coordinator to be responsible for consolidating the Ministry's work plan, supervising its execution, and coordinating its efforts with the Office. For planning and monitoring purposes, these units would consist of key Ministry staff (Minister, permanent secretary, relevant technical officers), representatives of the Ministries' constituencies, and a representative of PLWHAs. The coordinator would establish the work and programming and budget covering the Ministry's expected contribution to the project, coordinate these plans with the national program managed by the Office, and upon inclusion in the national work program, assure its implementation. Each Unit would be responsible for maintaining financial and performance records for its own activities, and for being accountable under the public service system which places these accountabilities with permanent secretaries and Ministry Finance Officers.

The Ministry of Health has been primarily responsible for the national AIDS Control Program since 1984 and has managed it through an AIDS Management Team within the Queen Elizabeth Hospital. To improve the management of the expanded prevention and treatment components, MH would constitute an HIV/AIDS Program Unit that would include the HIV/AIDS Management Team responsible for treatment, and additional staff responsible for the MH prevention activities. The Unit's composition would be modified and would be physically relocated to allow it to increase the level and quality of preventive actions, clinical treatment, counseling, social services, nutrition counseling, patient education and community care management.

Civil Society Organizations (CSOs). CSOs would be fully involved in the design and implementation of the project. Key formal NGOs would be represented on NACHA to participate in strategic and policy management of the project. They would also have a direct role in implementing various HIV/AIDS Prevention and Control Project activities, supported through public sector financing in two ways. First, each Ministry would identify a role for these organizations within their own areas of responsibility, and proactively solicit their participation. Such solicitation would be on the basis of well-defined tasks, with clear and monitorable expectations, and an expected time frame and budget. Secondly, NGOs, community groups and CSOs could develop proposals that may address themes that are not aligned with specific Ministry responsibilities, and submit these to the Office directly for funding. These proposals would also specify the task, accountabilities and monitorable deliverables and outcomes, and the time and resources proposed to perform the task.

NGOs, community groups and civil society organizations that are either invited or proposing to contribute to the project would meet criteria to establish their technical competence, managerial capacity, financial accountability, and credibility in the eyes of their constituencies. Evidence would include past records of accomplishments, qualifications and experience of managers, audited financial statements, bank records, or other evidence of sound business practice, and testimonials or other representations of the intended beneficiaries of the organization's activities. The cost of tasks assigned to these partners would normally not exceed by more than 20%.the cost of "projects" that the organization has typically managed.

Barbados has a long tradition of partnering with established NGOs to implement public-sector sponsored initiatives. Part of the project, however, will be to offer technical assistance to community groups and others in organizing to be more effective "NGOs", and thus participate in the project. This would have the effect of broadening the commitment to and ownership of the HIV/AIDS prevention and treatment agenda, as well as increasing its "reach".

The Office would adapt guidelines currently being used to support community groups in the area of social development for Ministries wishing to engage such non-governmental partners. These would be included in the Operational Manual of the project. The process of soliciting and selecting NGOs, community and civil society groups would be shared by the Ministry concerned and the Office of the Director. The Office would maintain

contractual arrangements with the NGOs financed with World Bank funds, and technical ministries (or the Office as the case might be) would assure technical supervision of the tasks involved.

Project Planning and Programming

An indicative project implementation plan for the first project year has been agreed, based on the program's strategic objectives, an initial needs assessment and expected budget and resource availability would be appraised (Attachment to Annex 13.3). Subsequently, the project would be implemented through rolling annual work programs to allow it to evolve over time, building on success and accommodating new initiatives and partners. Following a timetable established by the Office that would correspond to the budget cycle of the government (April–March), each Ministry implementation unit would establish its HIV/AIDS program of activities, resource needs, statement of implementation arrangements and near term outcomes for inclusion in the national program of that year. The Office would review, evaluate and compile the programs into a national plan of action. Independently, the Office would if necessary, identify additional activities that should be included in the program, and would then arrange with Ministries or other agencies (NGOs) for implementation.

The operational plan would be submitted to the Commission for advice, and subsequently submitted to the Inter-ministerial Committee and Cabinet for political approval. Once approved, the respective Ministry programs would be implemented. The above programmatic and budgetary instruments would constitute the participation arrangements for project implementation according to the terms of the Operational Manual and satisfactory evidence of which would be provided to the WB. Ministries would administer their earmarked HIV/AIDS budgets according to Barbados budget regulations, and the Office would manage the flow of project funds to suppliers and community groups to complete program activities. The Office would monitor all activities, budget execution and results under the project.

A half-yearly review of progress would be conducted by the Office as a basis for mid-year adjustments and modifications to the program and budgets. An end-of-year review of implementation progress would also be conducted and a program for the subsequent year would be developed in December of each year, and agreed with the Bank, along with a procurement plan (see below). Among the elements to be reviewed would be the level of public expenditures being made on HIV/AIDS, and an evaluation of the continuing sustainability of such expenditures. Independent consultants may be engaged for part of this work, and the participation of such agencies as PAHO, UNAIDS, CAREC and Caribbean Network of People Living with HIV/AIDS (CMR+) would be solicited. A full mid term review would be conducted after 30 months of project implementation. This is expected to coincide with a review leading to a decision concerning WB financial support for Barbados' expanded ART program.

Procurement. Procurement under the project would follow WB guidelines for works, consulting services, and goods when Bank funded and would be complemented by Barbados tendering regulations when purchases are to be totally funded by Government funds (see Annex 13.8). The Office would supervise and account for all procurement activity a part of its functions as project coordinator. The PCU would also perform the procurement function for purchases financed under the project for all participating Ministries except the MH. Individual Ministry implementation units would procure goods and services with their individual treasury allocations. In cases where a Ministry's activity may not be fully financed with it's legislative "vote", it would agree with the Office on a cost sharing arrangement that allowed the Office to procure the goods, services and works needed to complete the Ministry plan. In the case of the MH, however, it would perform the procurement function all of its project related needs either through the HIV/AIDS Project Unit or the BDS according to the relevant guideline. It would maintain its own records, and assure that the PCU was aware of its activities so that a full accounting of project procurement would be maintained.

The following procurement processes would be adopted:

- The Office would prepare a procurement plan for each year which would be submitted by Government to the WB for approval, not later than December of the previous year. It would specify: (i) major lots of goods and services to be procured; (ii) the method of procurement; and (iii) the timetable for carrying out the procurement. If needed, the plan could be revised and re-submitted. The procurement plan for the first year of the project has been prepared and agreed at appraisal.
- In the case of activities being contracted for execution by NGOs, if this involved further purchasing of goods and services, the community groups or CSOs, each would carry out its procurement in accordance with procedures accepted by the Bank, that would be described in their contract with the Office. These would follow the same thresholds as for the project as whole.
- Barbados is expected to be included in the Accelerated Access Initiative for ARV drugs, which would result in substantially reduced prices being offered for these drugs by six major companies. Barbados would procure ARV drugs from these companies according to registered brand names. Procurement would thus be considered as "sole source" and a technical justification would be submitted for Bank approval at the time of purchase which addressed the ARV drug procurement at the source.

A procurement capacity assessment has been completed and approved by the RPA's office. The risk on procurement in considered AVERAGE. Procurement actions will be basically concentrated in the Office of the Director, in Ministry of Health Unit and in Barbados Drug Service. Procurement performance will be re-assessed through a performance assessment conducted by the Bank during a Mid-Term Review of the project, and thresholds may be modified accordingly. The initial applicable thresholds for prior review and for recommended procurement methods are given on Annex 13.8.

Financial Management. The Office would be responsible for maintaining financial accounts for all project expenditures, and for having these audited annually by independent auditors. While participating Ministries would maintain their own accounts covering their parliamentary "votes", the Office would also maintain a consolidated account for the government on HIV/AIDS activity. The Office is new, however, it is expected that the accountant/financial manager appointed to serve in the Office will be fully familiar with the Barbados centralized and computerized "Smart Stream Financial" system (a cash accounting system installed in recent years in Barbados and many OECS countries, among others). A financial management assessment was completed by the Bank as part of the project appraisal process, and its results are discussed in Annex 13.8, which also contains a more detailed discussion of some of the topics referred to below.

Budget and Financing Cycle. The Office, as other Ministries and departments in Barbados, would prepare its annual budget and financing needs in December of each year. The legislature approves budgets by mid March for implementation at the start of the Barbados fiscal year (which runs from April - March), and this would apply to the Office and the project. Authorized commitment levels would then be established for the year. While quarterly spending and commitment levels are estimated, some flexibility is permitted in executing the budget, provided overall authorized amounts are not exceeded.

Payment Flows and Accountabilities. Ministries in Barbados do not handle cash, but work on a payment order system. The Director, in conjunction with the financial Manager would maintain control of the issuance of payment orders and the orders would be executed by the Barbados Accountant General. The project and the Accountant General have access to the same accounts through the centralized computer system. The Accountant General's office subsequently would draw from the loan proceeds through the Central Bank, after which the Accountant in the PCU would submit Special Account (SA) replenishment applications to the Bank.

Disbursements. Disbursements would be made following traditional WB disbursement methods, until the borrower has met requirements to disburse via Project Management Reports (PMRs) and has expressed its desire to use this disbursement method.

Retroactive financing of up to 10% of the loan amount, or US$1.5 million, would be authorized for eligible expenditures made after May 15, 2001, that have been made following Bank procurement guidelines. These are likely to include civil works and equipment.

To facilitate disbursements, a SA would be opened at the Central Bank with an authorized allocation of US$ 1 million, covering four months of expected eligible expenditures. Upon effectiveness, GOB would withdraw US$500,000, or 50% of the authorized allocation. When the aggregate amount of funds withdrawn from the Loan Account and outstanding commitments reaches US$4 million, the remaining 50% may be withdrawn. Replenishment applications will be submitted approximately monthly, with full documentation for contracts above the prior review threshold. It is envisaged, however, that substantial disbursements would be made through statements of expenditure (SOEs), with expenditure records maintained by the Office for inspection of WB missions and external auditors. SOE thresholds and further information on project disbursements are shown in Annex 13.8.

Audits. The project accounting records and financial statements would be audited annually by independent auditors, in accordance with terms of reference acceptable to the Bank. Auditors would be selected at the start of the project, as a condition of effectiveness, and the same audit firm would be retained throughout the implementation period, unless their performance was at some point considered to be unsatisfactory by the government or the Bank. Their terms of reference would include providing a Report on Internal Controls, and giving separate audit opinions on the Statement of the SA, the validity of SOEs, and compliance with legal covenants. Audit reports would be submitted to the Bank within four months of the end of the Borrower's fiscal year.

Monitoring, Evaluation, and Supervision. Owing to the size of the loan and the political importance of this project, the Planning and Priorities Committee of the Cabinet would regularly review its implementation, results and costs. The PCU at the NACHA would have major responsibility for monitoring and evaluating the implementation and results obtained from each project component. The PCU would provide quarterly reports of implementation progress and an annual report on the results obtained relative to program expectations. The strengthening of the HIV /AIDS Surveillance and Information System would ensure timely data collection and analyses for monitoring and evaluating project performance.

The WB would commit adequate supervision resources to ensure timely and proper follow up of project phases in order to agree with the GOB on decisions as to keep or change the course of implementation. This is particularly important in the case of starting support for ART. The Bank would invite such organizations as UNAIDS, PAHO/CAREC, and CRN+ to join it in discussing project results with the Government, and in providing advice on these decisions. This would contribute to assure Bank's fiduciary responsibilities. As part of its regional leadership role, Barbados expects to continue to participate in the work of such organizations as the CARICOM Task Force on HIV/AIDS to both share its experience to others and to learn.

D. Project Rationale

1. The Rationale for Bank Financing for Barbados' HIV/AIDS Project

It is of critical importance to include Barbados in the Caribbean Regional HIV/AIDS APL supported by the World Bank because of the strong public goods and externalities aspect of the regional HIV/AIDS program explained in Section B.1 and Barbados' unique leadership role in the sub-region. Despite the critical importance of this project, our analysis indicates that Barbados cannot finance the proposed operation through alternative sources at reasonable terms. (See Annex 13.1 for greater details). An analysis of alternative financing options indicates the following (and this lack of alternative sources makes IBRD lending to Barbados permissible under the IBRD Articles of Agreement):

Options for own financing of the HIV/AIDS project. Barbados already allocates a significant proportion of its overall budget (12 percent or US $100 million annually) to health, including HIV/AIDS, and has additionally committed to financing an additional US$7.6 million of the proposed HIV/AIDS program. If Barbados were to finance the entire project from its own resources, other critical health services would likely suffer.

Options for international financing. The other option would be for Barbados to seek international financing of the HIV/AIDS program. Our consultations with international financial institutions indicate that Barbados would not be able to raise the required resources for expanding its HIV/AIDS program from international commercial or multilateral sources on reasonable terms.

- **Commercial borrowings**. Commercial banks typically do not provide financing on a project basis for non-revenue generating projects, such as the HIV/AIDS project.

- **Bond Issues on the regional Caribbean or global bond markets**. The Caribbean regional market can accommodate the relatively small US$15.15 million financing needs of this Project. However, the regional market would charge a very high interest rate spread (about 350 basis points), despite Barbados' A- Standard & Poor's credit rating. The interest rate spread is likely to be somewhat lower on the global bond markets, but US15.15 million would be too small an issue for the global market, and the timing of any such issuance would be contingent on the issuance of a larger bond issue. The need for HIV/AIDS financing, however, is urgent.
- **Other international financial institutions**. The multilateral banks (the IDB and the CDB), of which Barbados is a borrowing member, were consulted by the Bank on co-financing the HIV/AIDS project but neither institution showed interest at that time. As of July 2000, IDB had a portfolio of US$230 million in Barbados, though it had no operations in the health sector. As of now, it does not have any HIV/AIDS operations with any of its clients and has not yet developed the technical capacity to design and supervise such programs. Similarly, CDB does not currently finance any health sector projects in the Caribbean. With respect to bilateral agencies, though many support regional HIV/AIDS programs in the Caribbean, currently there is limited support for national level activities.

2. **Project alternatives considered and reasons for rejection**

This proposed project in Barbados is one of the first to be proposed for financing under the Caribbean Multi-Country HIV/AIDS Prevention and Control Program. It has been designed as a Specific Investment Loan to conform to the World Bank's strategy of employing a regional APL framework for accelerating its assistance to Caribbean countries as part of its response to the epidemic world wide. The specific features of the project have been guided by the Bank's decision to recommend to its borrowers adapting the Caribbean Strategic Plan of Action for HIV/AIDS to their specific needs.

The following project alternatives were considered in the specific case of Barbados:

Vertical or decentralized care delivery: The selected interventions with cost-effective anti-retroviral drugs will principally be delivered through the QEH's AIDS Management Team in coordination with the primary health care network. This was considered to be preferable from a public health point of view, to minimize the risks of poor case management, low continuity in treatment, misuse of the drugs, and over-prescription. It also allows Barbados to react quickly to changes on recommended therapy regimes.

Single- versus Multi-sectoral approach: The response of the Barbados Government to the HIV/AIDS epidemic has been characterized by a broad partnership involving the Government, NGOs, religious groups, communities, PLWA, and local and international donors. The creation of the National Commission on HIV/AIDS--NACHA--was an important policy decision that recognized the importance of program implementation through different sectors. The health sector clearly does not have a monopoly on the instruments to promote behavioral changes and to break HIV transmission paths. The proposed project's strategy is to support those efforts that are being conducted outside the strict confines of the health sector and that are demonstrably cost-effective.

3. **Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).**

World Bank lending to Barbados has been limited for several years. An education project approved in 1993, which was the last, is now closed. The WB has not lent for the health sector in Barbados. Apart from having provided technical assistance to the MH, and support for advocacy, there have been no major projects addressing HIV/AIDS in Barbados. As mentioned in point 1 above, neither the Inter-American Development Bank or the Caribbean Development Bank provide financing in the health sector or for an HIV/AIDS project in particular, nor any of the bilateral agencies. However several other development partners are active in HIV/AIDS control and prevention in the Caribbean. UNAIDS, the Pan-American Health Organization (PAHO), and the Caribbean Epidemiological Center (CAREC), are active at the regional level and will complement the Bank's efforts.

4. **Lessons learned and reflected in the project design.**

The project adapts design features that underpin the Multi-Country HIV/AIDS Prevention and Control Program, and have been successful in other countries. These include the following:

- Demonstrating a high level of government commitment and providing clear national leadership for a program;
- building collaboration networks with NGOs, community groups and CSOs, as a complement to public sector agencies;
- deconcentrating the initiatives for efforts to address the epidemic;
- including the focus on treatment and care as a continuum in the program;
- providing focus on behavior change as a key element of prevention and control; and
- adopting implementation measures that provide flexibility and responsiveness to the epidemic as it evolves.

The proposed project also adapts lessons from the Government experience with the NACHA in that direct line authority for the project's implementation is attached to the Prime Minister's Office to give institutional structure to the effort. Second, the project is being driven by pre-identified monitorable goals with financial resources allocated through Ministries to achieve them. Third, management of the HIV/AIDS activities is being assigned to dedicated persons both within Ministries and within the new Office, which brings managerial accountability.

Other lessons of previous Barbadian experience are less easily built in to the project's design; notably the difficulty of motivating behavioral change in individuals even when they may be well informed about the epidemic. The proposed project is designed to at least accommodate this risk by allowing for annual evaluation of results and the presumption that the activities to be financed (especially in the area of prevention) will change over time as a result.

This project also includes a major lesson from the other regional APL on Disaster Management in the Eastern Caribbean. Multi-country projects need a strong regional component to coordinate strategy and actions. This project will include such a regional coordinating mechanism.

5. **Indications of Borrower commitment and ownership**

The Government of Barbados organized its first nationwide effort to address the issues of HIV/AIDS in 1985. It established HIV/AIDS in public thinking and as a part of public dialogue. Government has now placed the advocacy and responsibility for achieving an effective response to the epidemic directly in the Office of the Prime Minister. It adopted a comprehensive program for the management, prevention and control of HIV/AIDS in September 2000. This program corresponds to recognized "best practices" as agreed by agencies such as UNAIDS, PAHO/CAREC, and CARICOM. Implementation of the program will involve a broad cross-section of Barbadian leadership from the public sector, NGOs, communities and civil society. For 2001, GOB has, in addition allocated new budgetary resources specifically for the program, and has re-qualified for "borrower status" from the World Bank (having previously been graduated). These are strong indications of commitment to effectively reversing the epidemic's trend.

Barbados has also been a key leader in mobilizing efforts to prevent and control the spread of the epidemic throughout the Caribbean. As Chairman of CARICOM, the Barbadian Prime Minister gave strong impetus to reaching agreement on a Caribbean Regional Strategic Plan of Action for HIV/AIDS by Caribbean Heads of Government during July 2000. Barbados hosted a Caribbean Conference on HIV/AIDS in September 2000 that further built support for HIV/AIDS programs by governments as well as multilateral and bilateral donors. Most recently, (January 2001) Barbados has given additional encouragement to the OECS countries to invigorate their own national responses to the HIV/AIDS threat.

Finally, Barbados has agreed to devote additional resources to become one of the two "flagship" countries to launch the Caribbean Multi-Country HIV/AIDS Program, and serve as a model for subsequent country projects.

6. **Value added of Bank support in this project**

The most important value of Bank involvement in supporting this project would be its contributions to policy consolidation on HIV/AIDS in Barbados, improved management of prevention activities, and technical expertise for ensuring appropriate scaling up of ART. The Bank's support for this project will assist Barbados to effectively establish an operational multisectoral HIV/AIDS program.

At present, Barbados is receiving strategy advice and advocacy support for its initiatives, but making them operational has been assumed almost exclusively by the country. The Bank has supported detailed planning of the prevention and institutional development program, and in particular is contributing to Barbados planning to initiate ART for all residents within a few years. The Bank would provide incremental resources that will allow Barbados to undertake a scaled-up level of prevention activities in the short term, and finance an ART program at a national level, as a matter of public health. This would be one of the first such experiences among developing countries and would be a critical pilot project in establishing the credibility of similar programs in other countries.

Through the project, the Bank would also be supporting Barbados' establishment of an institutional framework that would perpetuate the management, prevention, treatment and control program in the longer term. This activity is likely to require a period of experimentation and adaptation of processes to succeed and the project would provide a phased implementation within which this can occur. In addition, the Bank's proposed project package also includes technical advice, assistance in designing an implementable program, advice on procurement, regular supervision and assistance with monitoring and evaluation. These intangibles, and the continuing transfer of global lessons of experience, are particularly important in a complex area such as HIV/AIDS where best practice is still emerging. Finally, by supporting Barbados, the Bank would be assisting in establishing an anchor for the rest of the OECS and the Caribbean in general, in establishing their own prevention and treatment programs, several of which may depend on future partnerships with Barbados to be viable.

E. **Summary Project Analysis** (detailed assessments are in the project file; see Annex 13.13)

1. **Economic** (supported by Annex 13.6)

[x] Other (specify)

An economic analysis of the non-ART components of the project was carried out. Additional analyses will be carried out in the early stages of project implementation to evaluate the economic feasibility and financial sustainability of the ART component. The partial economic analysis carried out here indicates that the expected rates of return are high (62.3% in the base scenario) and quite robust to changes in key parameters (reduction in incidence achieved by the project, savings on hospital care, etc).

2. **Financial**:

Barbados health system infrastructure is already well-developed. To absorb an ART program, relatively modest improvements in facilities, laboratory equipment, and staff training would be required. Improvements in the surveillance system via improved information technology applications are being designed to manage care, and a proven system for monitoring "second generation" effects of prevention programs is being adapted. Barbados medical community is very experienced in managing individual AIDS cases, as well as other STIs.

Once introduced, the ART program should reach its maximum client group, estimated to be about 1,250 persons, relatively quickly. Barbados is geographically small with excellent ground transportation. The Government program expects to implement a broader community care network that should facilitate home-to-clinic movements and following clinical prescriptions out of the clinics. Barbados' population exhibits a literacy rate in excess of 95% which indicates a high degree of readiness to understand and follow ART instructions. Barbados' program also expects to improve knowledge and practices on the part of health care workers and professionals to better serve HIV-positive and AIDS individuals. Barbados currently follows WHO-approved protocols for treating HIV/AIDS, for blood-bank protection and for post contact prophylaxis.

Barbados' guidelines for the admission of patients to ART follows international clinical norms for viral load and "C" cell count. It intends to practice a policy of free and universal access to ART for Barbadian residents meeting the clinical test. This policy is widely known in the country.

Barbados is a relatively well-off middle income country, with GDP per capita of about $9,000. It currently spends about 5.8% of GDP and about 3.8% of public expenditures on health care. At the last analysis, Barbados spent about US$8 million for drugs in the public sector which represented 10% of public health expenditures. If the estimated yearly cost of the ARV is added, then Barbados' expenditures for drugs will be increased by 30% or about US$2.6 million. A preliminary estimate of the impact of public sector financing of ARV drugs at negotiated prices would be to raise public expenditures by about 2%. A further refinement of this estimate is required, but indicates that the problem of post-project sustainability may be smaller than anticipated.

These indications suggest that Barbados is in a good position to absorb support for and sustain ART as a feature of its HIV/AIDS program.

3. **Technical**

A select core group of Barbados' public health service providers is well informed on evolving medical and scientific basis of HIV/AIDS treatment and care. Barbados is less informed on the options available to it in the area of prevention, but is mobilizing technical advice to address these weaknesses.

The February 2001 workshop in Bridgetown reviewed several local and international experiences in the use of IEC for positive behavioral change in different risk groups, and other cost effective prevention programs such as STIs prevention and control using the syndromic approach. An important agreement was the identification and assignment of target groups (high-risk and vulnerable groups) to be addressed by different Ministries according to their own sphere of work. In some cases where these groups overlap, the Ministries would be able to coordinate activities to jointly ensure total coverage of their stakeholders. This project would support means for improving the management, prevention, treatment, and control of HIV/AIDS that are derived from successful international and regional experience. A menu of options analyzed during the February 2001 workshop will be included in the project operational manual. The technical issues to be resolved will be essentially in adapting actions that may have been successful in changing behavior, attitudes and eventually practices of the general population and high risk groups elsewhere to the Barbadian situation.

Barbados is currently treating about 15 cases of AIDS with ART. These are managed by a core group of public health service providers upon referral from private physicians, and financed with private funds. Two separate recent technical analyses of Barbados' readiness to scale this experience up to a national level have concurred that the limits to meeting this objective are correctable in the medium term with project assistance. They include:

- Improving the number and quality of sites (using existing polyclinics) and supporting infrastructure (laboratories) to accommodate a larger number of patients in testing, counseling and facilitate referrals;
- training and including additional health care professionals in the safe and effective use of ARV drugs, diagnosis and follow-up care and surveillance of ART patients after prescription;
- strengthening continuum of care from home to referral hospital by involving community groups, local clinics and other satellite health centers; and
- consolidating the capacity to procure, ARV drugs (the reliability of current regulatory mechanisms against the misuse and misappropriation of the drugs is rated as satisfactory) and to acquire ARV drugs at affordable prices.

The difficult decision whether to scale up ART would be preceded by project support to address these requirements.. A phased implementation that permits experimentation and learning, and periodic evaluations to change or stop implementing project interventions is a technical feature to ensure better informed decisions (see C, Component 2).

4. Institutional

Executing Agencies. Project implementation will be assured through line Ministries. Principal among these, the Ministry of Health through its AIDS Referral Unit has long experience in the management, treatment and care of persons affected by HIV/AIDS and in treating STIs through its polyclinics. Other Ministries have had varying degrees of contact with HIV/AIDS programs specifically, but all are managed by experienced career civil servants who serve as chief executive officers for the government's programs.

Barbados' NGOs, community organizations, and CSOs have had varied experiences in implementing project activity under contractual relationships with the government including being accountable for results and financing. The project operational manual would include criteria for qualifying such organizations as partners in the program

Project Management. The Office of the Director is not at this point experienced in managing WB financed projects. However, Barbados benefits from adequate management resources that would be mobilized for this purpose and is currently searching for qualified staff to be appointed before project appraisal. The Office could out-source some financial management functions in the short term to accommodate project management demands.

5. Social

The project is expected to have positive social consequences through continuing the public dialogue on HIV/AIDS, in empowering communities, families and individuals to deal with the aspects of the epidemic that affect them, and to seek assistance more openly than may have been possible in the recent past.

The project would also seek to change discriminatory attitudes and behavior against persons living with AIDS through promoting legislation and regulation, information and education, that make violations of rights less likely.

6. Environmental assessment

Environmental Category [ ] A [x] B [ ] C

At the PCD stage, the project was assessed as Category B, considering a risk that might accompany the treatment of medical waste associated with increased ART in public health facilities.

An assessment of the medical waste situation (Annex 13.3-B) shows that the Barbados MH and The QEH, the major hospital facility in the country, have appropriate practices and institutional capabilities for managing hospital infections and for handling wastes (about 15% of all hospital and clinical waste is infected biological material). Asepsis and antisepsis are routine practices for handling patient care and biomedical equipment such as needles, razors, scalpels, endoscopy instruments, etc.

HIV/AIDS management in the health care network will add relatively little additional medical, laboratory and hospital wastes. For practical purposes, management of used goods in handling HIV/AIDS patients will not have different treatment than those already established for asepsis and antisepsis in any ambulatory and hospital setting.

No additional technology for managing health care wastes appears to be needed to accompany introducing or scaling up HIV/AIDS care.

However, the management of medical wastes would be improved as detailed in Annex 13.3-B.

7. Participatory approach

Primary Beneficiaries and Other Affected Groups

Barbados has a tradition of community self help which would be encouraged through the project. Information would be made public encouraging "demand-driven" initiatives to address HIV/AIDS care, treatment and prevention activities.

Project monitoring and evaluation would rely on beneficiary assessments as part of its basis for introducing modifications to activities, and informing policymakers.

Other Key Stakeholders

The membership of the NACHA will include representatives of all identifiable stakeholders in the management of HIV/AIDS.

F. Sustainability and Risks

1. Sustainability

The project itself is likely to be sustained throughout its implementation period owing to the high level of ownership and commitment being shown by the government. The project would involve a broad number of stakeholders in its actual implementation, which will also raise the level of general ownership of the program and its subsequent sustainability.

The project would also satisfy other conditions that will build longer term loyalty and commitment including:

- Having immediate impacts on PLWHAs quality of life;
- strengthen NGO capacity to deliver services;
- resolving regulatory and legal issues that have been controversial;
- encouraging broad participation, involvement, and therefore ownership; and
- addressing prevention as well as treatment.

While less problematic in the short term, achieving financial sustainability of an ambitious program in the longer term will require further study and policy decisions. Government expects to arrive at a long term financial sustainability plan at project mid-term evaluation.

2. Critical Risks: (reflecting assumptions in the fourth column of Annex 13.2)

Risk	Risk Rating	Risk Minimization Measure
From Outputs to Objective		
Political leadership and commitment not maintained.	N	While there is low risk that the present Government of Barbados will reduce its ownership of and commitment to the project, establishing early credibility of the NACHA will be essential. Early startup to the project should help.
Transparency and accountability in management questioned.	N	Operations are to be guided through an operations manual that will be a public document which outlines actions, eligibility criteria for participation; annual audits are planned. The Commission is expected to be very public in its work.
NGOs, community groups, CSOs do not engage.	N	There is currently unmet demand for assistance to these organizations. The project would be proactive in encouraging more sponsorship from the private sector, and would support it financially to do so.
Fiscal sustainability not achieved.	S	Careful costing of activities and a clear policy on cost sharing will be needed before the end of the project.

From Components to Outputs		
Lack of experience in scaling up preventive activities in high risk groups would delay or make insufficient a clear impact on positive behavior changes.	M	The project would provide technical assistance on how to scale up activities in high-risk groups and support study tours to other countries with successful outreach programs.
Scaling up ART would be constrained by lack of sufficient infrastructure, knowledge on the part of practitioners, drug availability and patient compliance.	S	Phasing up project implementation would allow making informed decisions about additional efforts needed to correct these difficulties or stop ART scaling up.
Slow start up owing to inexperience of line Ministries, NGOs, community groups, and CSOs.	M	Vigorous project launching activities would be conducted to motivate participation; the Office will outsource services as may be needed to assure timeliness of operations.
Slow availability of counterpart funds.	M	The GOB has made emergency financing available to initiate the program, and expects to earmark funds for the next budget year. Careful attention to the budget cycle will be needed in following years.
Overall Risk Rating	M	

KEY: H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

3. **Possible Controversial Aspects**

The Bank's support of the Government's commitment to provide ART free of charge to all HIV/AIDS patients may raise controversy as to the affordability of such a policy and concern among the international community on full compliance with international intellectual property rights. IBRD financing of this component may also be controversial as it is not being offered to all countries in the APL.

Though the cost-effectiveness of anti-retro viral drugs is uncertain, evidence on its rates of return is still evolving. Increasing evidence of the beneficial impact of ART on morbidity and mortality from HIV infection is increasingly being reported in Europe, and North America. By effective restoration of the immune system with ART, many opportunistic infections do not occur or are halted, thus greatly improving patient management, costs, quality of life and life expectancy. This is particularly important for small health care systems such as in Barbados, where if we also take into account the potential costs of overloading the health care systems with AIDS related infections. In fact, ART has made it increasingly possible to consider HIV infection as a manageable chronic disease. Given that best practice on this issue is still evolving, the inclusion of ART in Barbados, though potentially controversial, provides an important pilot that could provide lessons for other countries. Barbados is suitable for such a pilot because of its small size, the financial sustainability of such an approach because of its good fiscal management, and its superior procurement and financial management capacity. Further, all such drugs will be obtained exclusively from patent holding manufacturers or their licensees. The experience of this component will be an important part of the Bank's own learning and best practice for HIV/AIDS prevention programs world-wide.

Major difficulties, such as low compliance and drug resistance, may also arise if ART is not backed up by a well established infrastructure: lab facilities and equipment, timely drug supply, adequately trained staff for diagnosis and treatment, and adequate patient follow up in his/her community and in hospital. Although Barbados has good facilities and a well trained medical and nursing staff with up to date information on recent scientific developments in ART, the project would support the provision of facilities, laboratory equipment, and additional staff and training for ensuring high standards in ART management (see Annex 13.10).

Because Barbados is a small country, HIV anonymous testing to better track the "hidden part of the iceberg" may be controversial because it would be unacceptable not to make an effort to identify those tested positive and provide advice and support. The recommendation of performing anonymous testing may be suspended if the conflicting positions become an implementation issue. Instead, the project would make provisions for greatly expanding voluntary testing and counseling.

Other controversial subjects to be dealt with are working with socially uncomfortable issues areas such as the behavior of sex workers, men who have sex with men, teen sexual activity, to name a few. Government has already encountered some controversy over the provision of condoms to prisoners. However, the project would involve NGOs, community groups and CSOs with direct experience and a mission to deal with such issues who would assist in overcoming controversy in appropriate ways.

Eventually, with more information and experience, government will have to address issues of financial sustainability of the program in the longer term. Controversy would be managed as phased project implementation provides full information on options and consequences.

Another controversial aspect relates to the fact that Barbados graduated from World Bank lending in 1993. However, for the reasons set forth in Sections B.1, D.1, and Annex 13.1 hereto, an exception to the Bank's graduation policy in this unique case is defensible.

G. Main Loan Conditions

1. Effectiveness Conditions

The Borrower would have adopted the Project Implementation Plan for the first project year, and accompanying procurement plan, approved operations Manual, complied with the relevant steps described in the financial management action plan (Annex 13.8), opened a special account in the Central Bank, and appointed auditors satisfactory to the WB.

2. Conditions for Disbursement for ART

A condition of disbursements for ART would be a positive assessment of Barbados' readiness to expand ART conducted by independent reviewers following terms of reference acceptable to the WB (see Annex 13.11), and the upgrade of the manual on medical waste management.

H. Readiness for Implementation

[x] 1. The design documents for the first year's works activities are complete and ready for the start of project implementation. The first year implementation plan has been developed, however, subsequent year's activities, especially in the area of prevention, will evolve with experience.

[x] 2. The procurement documents for the first year's activities are under preparation and shall be ready for the start of project implementation.

[ ] 3. The following items are under preparation and are discussed under loan conditions (Section G): The Borrower is completing the Operations Manual and the core of the financial management system.

I. Compliance with Bank Policies

[x] 1. Except as provided in paragraph 2 below, this project is expected to comply with all applicable Bank policies.

[x] 2. As mentioned in Sections B.1 and D.1 and Annex 13.1 of this Technical Annex, the proposed loan to Barbados to partially finance the HIV/AIDS Prevention and Control Project is being presented as an exceptional case to the Bank's graduation policy.

Patricio Márquez, Team Leader

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ANNEX 13.1

Rationale for Including Barbados in the Caribbean HIV/AIDS Control and Prevention Regional APL

Barbados graduated from IBRD lending in 1993. However, as one of the countries more severely affected by the HIV/AIDS epidemic in the Caribbean, and also one with a strong leadership role in the sub-region, there is a strong economic and social justification for its inclusion in the Bank's Caribbean-wide HIV/AIDS program. This operation for Barbados is being proposed as an exceptional case. This annex outlines the scope of the AIDS epidemic in the Caribbean, the Bank's strategy to respond to it, the critical importance of including Barbados in this program and the reasons why Barbados cannot finance its participation through alternative sources. Finally, this annex then spells out the reasons why Barbados' inclusion would be fully consistent with the Bank's Articles of Agreement.

The AIDS Epidemic in the Caribbean

HIV/AIDS and the Caribbean. The HIV/AIDS epidemic in the Caribbean is second only to that of sub-Saharan Africa. In the English-speaking Caribbean, AIDS is now the largest cause of death among young men between the ages of 15 and 44 years, and by the end of 1999, the cumulative number of Caribbean children estimated to have been orphaned by HIV/AIDS at age 14 or younger stood at 83,000. In fact, HIV/AIDS is already reversing life expectancy gains from previous decades in some countries. HIV/AIDS also has a debilitating economic impact, hitting hardest in the labor force's core age group, a particularly important issue for the small Caribbean economies which do not have the cushion of large populations. As an illustration, preliminary assessments by the University of the West Indies (UWI) indicate that over a five year period, the economic costs of HIV/AIDS even in relatively less affected economies such as Jamaica and Trinidad and Tobago could reach as high as 6.4 and 4.2 percent of GDP respectively. Though a similar estimate is not currently available for Barbados, the economic impact is likely to be greater as the infection rate in Barbados is estimated to be 4.5 percent, amongst the highest in the Caribbean, and comparable to Haiti and the Bahamas.

Learning from the experience in Africa, the Caribbean countries are now acting decisively to prevent the further spread of the epidemic, with Barbados taking a leadership role. In September 2000, Barbados took the lead in organizing a Regional Conference on HIV/AIDS, so as to build consensus among neighboring countries and development partners on a regional approach to fight the epidemic. At this meeting, the Caribbean Heads of State, led by Prime Minister Owen Arthur of Barbados, requested immediate assistance from the international community and since then, the WB has taken the lead role amongst the development partners in the preparation and financing of a comprehensive program to combat HIV/AIDS in the Caribbean.

The World Bank's Response to the AIDS Epidemic in the Caribbean

The Horizontal APL approach. WB assistance for HIV/AIDS in the Caribbean is being structured as an horizontal Adaptable Program Loan (APL) of US$155 million, to be implemented across the 14 countries of the Caribbean Community (CARICOM) and the Dominican Republic. Under this APL, only one loan is envisaged for each participating country. The APL would provide a common framework for separate investment loans for each country to finance its national HIV/AIDS project. Each country-specific loan would typically include the following types of interventions: (i) communication and advocacy to promote positive behavioral change and government commitment; (ii) scaling up prevention activities to change high risk behavior, such as promotion of condom use, voluntary testing and counseling, especially amongst youth, interventions to eliminate mother-to-child transmission and improving the safety of blood supply; (iii) scaling up care and support activities such as the treatment of sexually transmitted and

opportunistic infections; (iv) support of research and surveillance at the national level; and (v) capacity building for program coordination and monitoring and evaluation.

At the same time as the framework APL, we are presenting the first two of the national loans to the Board, with Barbados being one of them (the other being the Dominican Republic). The proposed loan for Barbados of US$15.15 million (of a total project cost of US$22.6 million) will be less than 10 percent of the overall regional program. The Barbados project is based on the country's own strategic plan, and is consistent with the framework APL and the Bank's policy in the sector. Barbados' program also demonstrates readiness at entry, as the country has already met the basic criteria for participating in the APL program, such as the preparation of a national HIV/AIDS strategy, strong support by the national leadership, effective programming for multi-sectoral implementation, readiness to adopt simplified business arrangements, and the existence of basic monitoring and evaluation capacity.

The Importance of Barbados' Participation in the Caribbean Program

Even though the proposed loan to Barbados forms only a small part of the overall program for HIV/AIDS prevention and control in the Caribbean, its inclusion in the program is of critical importance for several reasons:

Public goods and externalities: As noted by the April 2001 Development Committee, "*Disease respects no borders, impoverishes and poses huge obstacles to development....*"[2] Barbados is both a regional hub with significant population movements across the Caribbean, as well as a popular destination for tourists from all over the world. The frequent movement of people inevitably leads to the import and export of diseases. Effective containment of an infectious disease such as HIV/AIDS requires that the entire region be part of the prevention and control measures. Excluding any country, especially a regional hub such as Barbados, would undermine the success of the program region-wide.

Leadership: Barbados' proven economic and political leadership in the Caribbean implies that its absence from the program could significantly undermine the chances of success for the entire Caribbean program. Indeed, it is only due to Barbados' central role in the September 2000 HIV/AIDS Conference, and the Prime Minister's personal leadership, that the Caribbean countries now have a shared strategy for combating this epidemic.

Regional center for technical expertise and health infrastructure: In addition, Barbados is also the regional leader in developing technical expertise and health care infrastructure, and has a sub-regional center for services to smaller countries with lesser institutional capacity. For example, the Queen Elizabeth Hospital in Barbados is the only one in the Eastern Caribbean with adequate standards for laboratory quality control and blood bank screening for infectious diseases, including HIV, and potential treatment of AIDS with anti-retroviral drugs. Assisting Barbados in developing the right strategies and technical approaches, and in expanding their outreach to neighboring countries, would have significant positive spillovers to the entire region. In this regard, it is important to keep in perspective that the entire English-speaking Caribbean has a population of about 7 million, less than a metropolitan area in the United States. Movements across sovereign borders mean less than we may commonly expect and for obvious economies of scale, the small island economies are highly inter-dependent for specialized services and infrastructure. In essence, Barbados is the regional hub with advanced economic and social infrastructure providing these services to some of the less equipped countries of the Eastern Caribbean.

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[2] See *Poverty Reduction and Global Public Goods: A Progress Report* DC2001-0007, April 13, 2001.

Transferable development lessons: Through its continuing dialogue with anti-retroviral drug companies, Barbados is also a front-line participant in the UNAIDS Accelerated Access Initiative.[3] Its experience in promoting HIV/AIDS treatment through anti-retroviral therapies will provide valuable models for integrating such treatment into general public health for developing countries across the world.

The Rationale for Bank Financing for Barbados' HIV/AIDS Program

Options for own financing of the HIV/AIDS project: Barbados already allocates a significant proportion of its overall budget (12 percent or US $100 million annually) to health, including HIV/AIDS, and has additionally committed to financing an additional US$7.6 million of the proposed HIV/AIDS program (that is, about $1.5 million annually). If Barbados were to finance the entire project from its own resources, other critical services would likely suffer. There is little scope for financing it through other expenditure cuts or additional revenue efforts as Barbados is a prudently managed economy, both from a macro and a resource allocation point of view. One option would be an annual increase in the government deficit of about 0.2% of GDP (FY 1999/2000 numbers). Financing this increased deficit from domestic borrowing would not be advisable as it would crowd out private investment and lead to inflationary pressures. A higher deficit could also result in a corresponding reduction of official reserves, which stood at about four months of imports in December 2000. Given Barbados' small economy and its highly concentrated and volatile export earnings, the Bank would normally recommend reserves of about six months of imports.

Options for international financing. The other option would be for Barbados to seek international financing of the HIV/AIDS program. Our consultations with international financial institutions indicate that Barbados would not be able to raise the required resources for expanding its HIV/AIDS program from international commercial or multilateral sources on reasonable terms.

- **Commercial borrowings**. Commercial banks typically do not provide financing on a project basis for non-revenue generating projects, such as the HIV/AIDS project. This was confirmed by consultations with three major banks active in the Anglophone Caribbean. All indicated that they would not consider financing the HIV/AIDS project under any conditions.

- **Bond Issues on the regional Caribbean or global bond markets**. The Caribbean regional market can accommodate the relatively small US$15.15 million financing needs of this Project. However, the regional market would charge a very high interest rate spread, despite Barbados' A- Standard & Poor's credit rating. Market estimates indicate that the interest rate spread for a ten-year bond would be at least 350 basis points over US treasuries. Such a spread appears excessive given that other countries with the same credit rating are currently paying spreads of about 170 basis points over US treasuries, or about half of what Barbados would be paying. The additional spread is due to the relatively small size of Barbados' offering, and the associated low trading volumes for its bonds on the secondary market. Though these spreads may be somewhat lower on the global bond market — in the range of 270 basis points based on past indications — these are still high compared to other countries with similar credit ratings. Furthermore, US$15.15 million would be too small a bond issue for the global market, and the timing of any such issuance would be contingent on the issuance of a larger bond issue. The financing needs for this project, however, are immediate.

- **Other international financial institutions**. Although Barbados has good relations with the Inter-American Development Bank (IDB) and the Caribbean Development Bank (CDB), neither institution

[3] The UNAIDS Accelerated Access Initiative is designed to accelerate the availability and access to anti-retroviral drugs at affordable costs and under highly effective conditions. Several African, Latin American, and Asian countries are pilots to this program. Currently Barbados is one of the more advanced pilots.

has worked in the area of HIV/AIDS. As of July 2000, the IDB had a portfolio of US$ 230 million in Barbados, though it had no operations in the health sector, and as of now, no HIV/AIDS operations with any of its members. The CDB has no operations in the health sector in any of the Caribbean countries. Both institutions were originally consulted on potential co-financing of the Bank's HIV/AIDS regional program, but declined. More recently, both have declared that they would like to make HIV/AIDS a new priority area.[4] However neither organization has as yet developed the technical capacity to put together a complex regional operation on HIV/AIDS. Given the CDB's expressed interest, the World Bank is ready to offer its help in building its operational capacity in this technical area. CDB could then potentially support future activities in this area.

Table 13.1.1: HIV/AIDS Project: Alternative Financing Sources

	Availability	Maturity (years)	Interest Rate Spread
Commercial Bank Borrowing	NO		
Global Bonds Market	YES*	10	> 270 bp over US treasuries
IFI Financing (IDB & CDB)	NO		
Caribbean Regional Bonds Market	YES	10	> 350 bp over US treasuries
IBRD Financing	YES	15	to be determined; currently 50-75 bp over LIBOR

* Only within the issuance of a larger bond offering.

The Role of Other Development Partners

Several other development partners are active in HIV/AIDS control and prevention in the Caribbean. UNAIDS, the Pan-American Health Organization (PAHO), and the Caribbean Epidemiological Center (CAREC), are active at the regional level and will complement the Bank's activities. CAREC in particular is financed by other development partners such as the Canadian International Development Agency (CIDA), the UK Department For International Development (DFID), Germany (GTZ), and the US Agency for International Development (USAID).

[4] The President of IDB made this point in a speech in Quebec City, in April 2001. The President of CDB made a similar declaration in May 2001 during the CDB's Annual Meetings.

Articles' Provisions on Exceptions to the IBRD Graduation Policy

Barbados graduated from IBRD lending in 1993, in line with the Bank's existing graduation policy, which was developed in the early 1980s[5] and has since been interpreted by the Vice President and General Counsel.[6]

As explained in a 1997 Memorandum of the Senior Vice President and General Counsel, the Board of Executive Directors can approve loans to graduated members as long as the proposed operation meets the requirement of Section 4 (ii) of Article III of the Articles. This section provides that the Bank must be satisfied that the Borrower would be unable, under the prevailing market conditions, to obtain the loan under terms which the Bank considers reasonable to the Borrower. As explained in the above paragraphs, approval of the HIV/AIDS project for Barbados would be consistent with the provisions of this Article as Barbados cannot find financing for the HIV/AIDS project on reasonable terms.

In making the exception to the graduation policy, the Bank also takes into account the provisions of Section 4 (v) of Article III of the Articles which provides that "the Bank shall pay due regard to the prospect that the Borrower will be in position to meet its obligations under the loan; and the Bank shall act prudently in the interests both of the particular member in whose territories the project is located and of the members as a whole". Barbados meets this provision as well, given its prudent macroeconomic management and its A- Standard & Poor's credit rating.

Consequently, given the exceptional nature of the Barbados case (as outlined in the above paragraphs) making an exception to the Bank's graduation policy would not be inconsistent with the Bank's Articles of Agreement.

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[5] Graduation from the Bank, R82-1, January 6, 1982. Also see Memorandum to the President entitled "Statement on Graduation," R84-252, September 6, 1984, adopted by the Executive Directors in their meeting of September 11, 1984.

[6] See *Graduation Policy – Korea,* Memorandum from I.F.I. Shihata to James D. Wolfensohn, November 29, 1997. See also: *Graduation from the Bank,* R82-1, January 6, 1982; *Consistency of the Graduation Policy with the Bank's Articles: Opinion of the Vice President and General Counsel,* SECM84-213, March 12, 1984; *Statement on Graduation,* R84-252, September 6, 1984.

ANNEX 13.2

HIV/AIDS Prevention and Control Project

Project Design Summary

Hierarchy of Objectives	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
Sector-Related CAS Goal: Reduce risks of growing poverty, especially among vulnerable groups (women, children, dependent persons) Economic growth and income protection	**Sector Indicators:** Secular trends in income growth, income distribution, and GDP growth maintained	**Sector / Country Reports:** Country Economic Reports and International Agencies Studies	**(from Goal to Bank Mission)**
Project Development Objectives: By year 2006: 1. Reduce rate of new HIV reported cases 2. Increase life expectancy of PLWAs 3. Improve the quality of life for PLWHAs 4. Build sustainable organizations and institutions for managing HIV/AIDS	**Outcome / Impact Indicators:** Reduced reported cases from 1.5% to 1% of positive HIV tests per year. Stabilization/reduction in mortality attributed to AIDS Reduced discrimination and improved receptivity in public places and work environments, among public servants and care givers; Controversial/discriminatory regulations and practices acted upon National Commission on HIV/AIDS, Inter-Ministerial committee and HIV/AIDS Ministries Units' functioning Relevant Ministries have mainstreamed appropriate HIV/AIDS management actions, received adequate budgets, and executed them. Increased numbers of NGOs, community groups and CSOs implementing legitimized HIV/AIDS management activities	**Project Reports:** Periodic epidemiological surveillance statistics from Barbadian and Regional sources KAP surveys Project developed Information System	**(from Objective to Goal)** Regional and neighboring country HIV/AIDS programs keep pace with Barbados' program Economic climate continues to favor economic growth Program continuity maintained politically, and fiscally

Output from Each Project Component:	Output Indicators:	Project Reports	(from Outputs to Objective)
1. Prevention Component **By year 2006:** a) Increase condom users to 60% in people 15+ years old b) Postpone by 2 years age at first sex c) Reduce to 15% number of males 15+ years old with more than one sex partner last year, d) Reduce to 5% number of females 15+ years old with more than ones ex partner last year e) Reduce unsafe sexual practices (anal sex without condom) f) Maintenance of HIV/AIDS blood transfusion cases to 1% or less g) Reduce mother-to-child HIV transmission to 12% or less	a) % (men and women 15+ years old) using condoms. b) Age at first sex in men and women (% in 2001 and 2006) c) % males 15+ years old with more than one sex partner last year d) % females 15+ years old with more than one sex partner last year e) % anal sex with condom f) % of HIV/AIDS transmitted by blood transfusion g) % of HIV children born from HIV/AIDS mothers	KAP surveys with behavioral indicators Project developed Information System Surveillance data from serviced populations;	Political leadership maintained Transparency and accountability in the management process NGO and community groups engages Fiscal sustainability achieved

Output from Each Project Component:	Output Indicators:	Project Reports	(from Outputs to Objective)
2. Diagnosis, Treatment & Care Component By year 2006: a) Increase voluntary testing and counseling by 50% b) Treat 80% of AIDS patients with ART c) Increase life expectancy of PLWHAs by 3 or more years d) Improve the quality of life for PLWHAs e) Improve quality and coverage of clinical treatment and care for PLWHAS (through the public health system; and through improved community/home care)	a) % voluntary testing and counseling in 2001 and in 2006 b) % of reported AIDS patients under ART c) Life expectancy of PLWHAs in 2001 and in 2006 d) % reduced hospital stays % OI reduced in PLWHAs % increased HIV/AIDS patients' time at work e) Increased numbers of PLWHAs served, in appropriate settings; f) quality care norms met	HIV/AIDS Referral Unit reports HIV/AIDS Referral Unit reports and medical supervision reporting on case loads and facility use; anecdotal feedback from users on satisfaction 3. Survey data on knowledge, attitudes and behavior; objective data from testing of sentinel groups 4. Anecdotal feedback from stakeholders on satisfaction	Infrastructure for ART has been deployed Government confirms financial feasibility of ART for all Barbadians

Output from Each Project Component:	Output Indicators:	Project Reports	(from Outputs to Objective)
3. Management & Institutional Development Component a) NACHA decision-making in place with financial autonomy b) Inter Ministerial Committee established c) HIV/AIDS Ministerial Units established d) Improved information system e) Monitoring and evaluation established	a) NACHA periodic reports on project implementation b) Monthly meetings and policy formulations c) Ministry programs executed d) Data collection, analysis of HIV/AIDS epidemic e) Target indicators of project components collected , processed and evaluated	PCU reports PCU Reports Ministries reports to NACHA/PCU National HIV/AIDS Information System	Government keeps highest Political commitment, and Ministries established the HIV/AIDS Prevention Units
Project Components	**Inputs: (budget for each component)**	**Project Reports**	**(From Components to Outputs**
1.Prevention: a) IEC production and diffusion; b) condoms; and c) other recurrent costs	Estimated US$5.7 million	Quarterly Management Reports from Commission Director to Commission and Permanent Secretary/PM's Office Financial management reports and annual audit	Timely availability of counterpart funds
2. Diagnosis, Treatment & Care: a) refurbishing, remodeling, equipping clinical, laboratory, pharmacy services; b) community services supporting home care via polyclinics; c) ARV drugs	Estimated US$ 14.3 million		Timely increases in ART capacity and know-how Experience in scaling up preventive activities with high risk groups;
3. Management & Institutional Development: a) NACHA Office of Director; b) Ministry HIV/AIDS units; c) HIV/AIDS surveillance, monitoring, and evaluation	Estimated cost US$3.5 million		Timely formulation of plans from line Ministries and NGOs

ANNEX 13.3-A

HIV/AIDS Prevention and Control Project

Detailed Project Description

The MH of Barbados, has undertaken a multisectoral national response to the AIDS epidemic. Under the leadership of the Prime Minister's Office, the National AIDS Commission, the Inter Ministerial AIDS Committee and AIDS units in each of 10 Ministries, the GOB has proposed the implementation of the Management, Prevention and Control of HIV/AIDS Project, with three main components, as discussed below.

A. Component #1: Prevention and Control of HIV/AIDS Transmission—US$5.7 million

The first component of the project is the prevention and control of HIV/AIDS transmission. After a full review of prevention activities (workshop February 21-23, 2001) conducted with the different Ministries of Barbados, a proposal to internalize best practice and the most cost effective options for affecting prevention was agreed upon. Eight Ministries and the Government Information Service in Barbados have begun to formulate work plans incorporating these practices and options.

The target populations identified for prevention interventions are:

- Adolescents (both genders) in and out of school;
- pregnant women;
- sex workers and "beach boys";
- men who have sex with men;
- persons with STIs;
- uniformed personnel;
- hard-to-reach persons and groups;
- health workers;
- hotel, motel and tourism personnel; and
- people living with HIV/AIDS.

The following prevention programs would be developed through the different Ministries (see below), under NACHA coordination, monitoring, and evaluation:

Information Education and Communication: This program aims at maintaining people's *awareness* on HIV/AIDS risks and protection measures, promotion of *behavior changes* for safe sex practices and risk reduction, and *advocacy* among public and private leaders on human rights protection, abolition of discrimination practices and learning to live with PLWHAs. The Government Information Services would be the sole user of mass media (radio, TV, press, open letters, etc.) for implementing IEC. Other Ministries would use person to person education, curricular changes, teachers training in sex education, peer groups communication and education, recreation and artistic activities, etc.

Condom Distribution: Use of social marketing, peer groups, vending machines, and other strategies to make condoms available and accessible to all segments of adolescents and adult groups; visible access to condoms in hotels, motels, restaurants, entertainment and other public places. Each Ministry would choose the best strategy to make condoms available and accessible to its clients (target populations).

Prevention and Control of STIs: The MH would strengthen the STIs prevention and control program trough its polyclinics network. The project would finance the pre-packed STI therapy for implementing the syndromic management approach, which has been highly successful in many countries. This

program would be implemented by MH, and other Ministries would promote it among their target populations.

Prevention of HIV/AIDS Mother-to-Child Transmission: The successful implementation of this preventive program in Barbados achieved a 82% reduction in HIV transmission from HIV/AIDS mothers to their newborn children, since 1995. The savings per averted infection has been estimated at US$7,000 without estimating gains in quality of life and life expectancy. The project would support the MH to continue the implementation of this important preventive program. Other Ministries would promote among pregnant women the use of services offered through this program.

Control of Laboratories and Blood Supply: This is another successful effort of the GOB over the years, as reflected in less than 1% HIV cases due to blood transfusions. The QEH has maintained high standards for laboratory quality control and blood bank screening for infectious diseases including HIV. The project would support the continuation of this preventive program under the MH responsibility.

The Government Ministries and Offices would be responsible for implementing prevention activities on HIV/AIDS for their client populations. They would each establish an HIV/AIDS Coordination Unit responsible for designing and managing implementation of their respective programs. These units would work closely with the PCU (NACHA's Director's Office) for developing specific interventions according to target populations. The Ministry of Health would act as technical facilitator, when needed, to NACHA's Director's Office (PCU) and to each Ministry's HIV/AIDS Coordination Unit. Also, joint activities, when target populations are overlapping, would be developed by the Ministries.

During the first year of project implementation, each Ministry would implement two core national program interventions designed jointly with NACHA: IEC, specifically addressed to behavioral change; and condom distribution among different target groups. Other interventions specifically designed (with NACHA support, when needed) for their target populations would be undertaken by each Ministry's HIV/AIDS Unit according to their readiness for implementation. The target populations and key prevention interventions to be undertaken by each Ministry agreed upon at the workshop were as follows:

Ministry of Health

- General population: IEC for awareness and behavior changes on HIV/AIDS prevention and services;
- sex workers and patients attending STI clinics: Behavior change communication, treatment, and condom distribution;
- general population: Voluntary counseling and Testing;
- blood donors and recipients: Safe blood collection and transfusions;
- laboratories: Quality control for HIV, OI, STI testing;
- pregnant women and newborn: Prevention of mother-to-child HIV transmission; and
- Ministry HIV/AIDS Unit: Staff training for developing HIV/AIDS prevention programs.

In addition, the MH would be also responsible for diagnosis, treatment and care of HIV/AIDS patients and HIV/AIDS reporting and surveillance (third component).

Ministry of Home Affairs

- General population: Policy, legislation and regulation of patient confidentiality, tattoo piercing, disability legislation, and protection against discrimination of PLWHAs. Review of legislation on homosexuality and prostitution with a view to protecting human rights;
- law professionals: IEC on HIV/AIDS patient rights;
- uniformed personnel: Behavior change communication on HIV/AIDS and condom distribution;

- staff of the Attorney General Office: Workshops on substance abuse reduction and prevention, promotion of safer practices from abstinence to condom promotion, sexual education and life skills;
- youth groups: Promotion of "youth friendly centers" within existing structures;
- police officials: Bio safety at workplace; and
- Ministry HIV/AIDS Unit: Staff training for developing HIV/AIDS prevention programs.

Ministry of Education, Youth Affairs, and Culture

- School children and university students: Incorporating sex education and HIV/AIDS education into curricula;
- school populations: Establishing peer sex and HIV/AIDS education for students;
- youth groups: Use of youth commissioners in community education;
- artists and youth : Use major cultural activities and festivals for IEC, involving artists in the design and transmission of messages;
- teachers: Training teachers and other staff on the content and approaches to HIV/AIDS; and
- Ministry HIV/AIDS Unit: Staff training for developing HIV/AIDS prevention programs.

Ministry of Social Transformation

- Community groups: Outreach efforts to generate NGO and community interest groups on HIV/AIDS prevention,
- friends and relatives of PLWHA: Support community initiatives for local HIV/AIDS prevention and community care; and
- Ministry HIV/AIDS Unit: Staff training for developing HIV/AIDS prevention programs

Ministry of Tourism

- Hotels: Continuing implementation of the CAREC "Healthy Hotels" initiative;
- restaurants, night clubs and entertainment industry: IEC and condom distribution;
- sailors: Initiatives on HIV/AIDS prevention by the Barbados Worker's Union;
- "Beach boys," hotel workers, airline employees, tour operators and taxi drivers: IEC on risks of getting HIV/AIDS, and comportment vis-à-vis visitors; and
- Ministry HIV/AIDS Unit: Staff training for developing HIV/AIDS prevention programs

Ministry of Labor, Sports and Public Sector Reform

- Trade unions: Promotion and dissemination of "AIDS in the Workplace";
- public service employees: Education and sensitization in-service and at initiation;
- sport groups: IEC on risks of getting HIV/AIDS and condom distribution; and
- Ministry HIV/AIDS Unit: Staff training for developing HIV/AIDS prevention programs.

Government Information Service

- General population;
- vulnerable groups;

- parliamentarians, media people, churches, NGOs and private sector;
- production and dissemination of mass media campaigns using TV, radio, newspapers, letters, etc., with messages on prevention and services for HIV/AIDS. The objective being raising awareness and support for Government efforts to prevent, control and treat HIV/AIDS among the Barbadians, and promoting safe sexual behaviors.

As part of their implementation activities, Ministries may contract technical assistance and NGOs to assist in reaching beyond traditional constituencies or hard-to-address populations to advance their respective prevention. The PCU would pay services contracted and each Ministry would supervise and evaluate products contracted. Direct involvement of PLWHAs in planning and implementation would be stressed. For this, the NACHA would promote the organization of coalitions or groups of PLWHAs.

B. Component #2: Diagnosis, Treatment, and Care for HIV/AIDS—US$14.3 million

The second component of the project would scale up the diagnosis, treatment, and care for HIV/AIDS patients in the island. As noted earlier, the GOB has already made a commitment to meet patients clinical and emotional needs, reduce opportunistic infections, reduce work disability, and improve quality of life. Under this component, the project would support scaling up the following interventions:

- Voluntary testing and counseling;
- laboratory strengthening;
- pharmacy strengthening;
- community and home care; and
- facilities for treatment of OIs and ART therapy for patients with AIDS;

These interventions are currently carried in a very limited extent through the QEH and MH polyclinics. QEH has established an HIV/AIDS Management Team which has been operating since 1991. Private health providers send their patients to this hospital for diagnosis and treatment. According to the infrastructure assessment for HIV/AIDS patient management done during project preparation, Barbados requires strengthening of present laboratory and health care facilities, trained staff, and improved protocols and management information systems to ensure efficient and effective diagnosis, therapy and follow up for HIV/AIDS patients. The bright spot is the transparent procurement and efficient distribution of drugs through the BDS, a MH agency whose best practices have been acknowledged by WHO.

Based on identified needs both from the demand and supply side on patient management, the project would support the implementation of subcomponents discussed below.

a) **Strengthening Voluntary Counseling and Confidential HIV Testing**. This service, when implemented in a supportive environment, will improve people's willingness to access HIV testing sites and services where they can receive appropriate pre and post-test counselling. This has been evidenced in Barbados, where counseling and HIV testing were offered through local community outreach efforts. Thus, the project would support: (i) upgrading eight polyclinics for accommodating space, furniture and audio visual equipment required for counselling and testing; (ii) relocation of the AIDS Management Team to a temporary space at the refurbished old PNUD building, and then to the new AIDS Reference Unit (see below), where a counseling clinic would be set up, including furniture, equipment, and two staff. (iii) Training of 50 HIV/AIDS counsellors of which, eight would be located at the upgraded polyclinics, two at the counselling clinic of the AIDS Reference Unit, and the remaining 40 located at other Ministries and community organizations involved in HIV/AIDS prevention programs.

b) **Strengthening laboratory capacity**. Provision of ART has significant repercussions in lab capacity for testing and follow up of patients under treatment. HIV testing (ELISA) is currently available, and staff is adequately trained to perform this test; CD4 can be performed only once a week at the QEH laboratory. Viral load tests are not available and test samples are processed outside the country at US$300 per test. Clinical decisions on therapy and patient follow up require CD4 and Viral Load testing on a permanent basis. The Government has made arrangements with providers for installing the equipment (flow cytometer for CD4, and a viral load rented machine and reagents for viral load testing) and training four to five lab technicians for performing the tests. Recently, the QEH laboratory hired a high level trained medical laboratory professional who would greatly improve management and quality testing. The AIDS Management Team has estimated that about 5000 CD4 tests and 7500 viral load tests per year would be required when they reach 1250 HIV/AIDS patients (the currently total detected number) for treatment. This patient load would be reached possibly in the fourth or fifth year of project implementation. Also, supplementary investments in remodeling space, laboratory technicians, air conditioning, safety hoods, and testing equipment and reagents will be required to strengthen present lab capacity for early diagnosis of OIs, especially for MAI complex, PCP, and Cryptococcus.

c) **Pharmacy strengthening**. ART drug procurement, storage, distribution and dispensing is well organised. Eight local wholesalers representing close to 250 international drug companies and local drug laboratory, participate in the bidding. The local suppliers are responsible for drug storage and inventory availability, as well as monthly distribution as demanded by public pharmacies and hospitals according to written authorization provided by the Barbados Drug Service. This mechanism provides efficient cash flow, reduces storage costs and prevents expiration and obsolescence of drugs. At present, the pharmacy has available seven out of 11 anti-retroviral drugs procured last year: two protease inhibitors, three nucleoside analogues and two non-nucleoside reverse transcriptase inhibitors. The choice of the HIV/AIDS Management Team for ART therapeutic regimens is a triple combination of two non-nucleoside reverse transcripatase inhibitors (efavirenz and niverapine) or two nucleoside analogues (zidovudine, lamiduvine or zidovudine/lamiduvine) with one protease inhibitor (Indinavir or Nelfinavir). Criteria for using these combinations are based on literature reports, drugs available, and cost (see Annex 13.9, Table A9-3). The Team preferences for ARV combinations can make cost of ART range from US$1,317 to US$9,240 per year. In 2000, the team provided testing, counseling and support services to 350 HIV persons with advanced symptoms and has managed up to 15 AIDS patients with ART.

The project would support the BDS conversations with UNAIDS to seek agreements with providers for lowering cost ART drugs through the UNAIDS Drug Access Initiative. In order to provide a supportive environment for the utilization of ART, the project would upgrade some aspects of current pharmacy services: space would be provided for a satellite pharmacy in the HIV/AIDS Reference Centre, outside Queen Elizabeth Hospital. This would facilitate swift dispensing practices, increase patient compliance, improve patient education and permit better tracking and accountability within the pharmacy service. In addition, a program to monitor drug quality, safety and efficacy would be instituted to ensure that reduced drug cost does not imply reduced quality.

Disbursing against ART by the project would be initiated after the proposed infrastructure has been completed satisfactorily, and staffing and training contemplated under this component is found satisfactory.

d) **Strengthening infrastructure for community health services**. Many HIV/AIDS patients and those with opportunistic illnesses can be cared for in a home setting, if provided proper support and community back up from local clinics (polyclinics). In addition to upgrading the eight polyclinics (see above), the project would provide training for a core of 40 health workers from the eight polyclinics and NGO volunteers on the WHO model of Continuum AIDS Care and how to utilize available resources for such care. The caring doctor and the core health workers would interact with

the NGOs located near the patient's home in order to provide clinical follow up, education for the patient and family members, moral and psychosocial support, and referrals whenever necessary. Particular attention would be given to education on the importance of compliance *vis a vis* resistance, meaning of CD4 and viral load counts.

e) **Expanding the infrastructure for OI treatment and introduction of ART**. The project would support: (i) the refurbishing and remodeling of the old nursing building, where the HIV/AIDS Reference Unit would function as the state-of-the-art site for clinical treatment and patient monitoring; (ii) strengthening laboratory capabilities (see b above); (iii) improving pharmacy services (see above) to speed up drug delivery, improve drug tracking and accountability; and (iv) upgrading in-house information management technology for improved HIV/AIDS surveillance (see component 3). The project would also support civil works for providing additional space and facilities for the enhancement of treatment and care including: (i) two drop in centers for psychosocial support for PLWHAs to be located near easy access routes; (ii) an AIDS Food Bank to facilitate nutritional support, education, counseling and to provide cooked meals; and (iii) a hostel care facility and its operation of up to 20 beds. The project would also support the construction, operation and staffing of a 10-20 bed hospice unit for PLWHAs. Civil works for adapting temporary facilities for care and treatment of HIV/AIDS patients has begun and permanent facilities will be ready by the end of 2001, except the site for the HIV/AIDS Reference Center, which would be started later this year. Finally, although introducing ART will not substantially increase the volume and types of medical waste, GOB will provide technical assistance for reviewing the legal framework governing medical waste handling and disposal, upgrading the coding for handling of medical waste of different types and sources, updating the manual for the handling and disposal of medical waste at the QEH, training of personnel for the proper handling and disposal of medical waste, and if deemed necessary, financing for the repairing or the replacement of the incinerator at the QEH. In addition, the loan would finance a study to assess improved alternatives for medical waste disposal in Barbados, and said study shall include the carrying out of a fully consultative environmental assessment of any alternatives the study might recommend. Such alternatives may be carried out only in compliance with the environmental mitigation measures identified by said assessment.

Criteria for patient enrollment and follow up (see Annex 13.11): QEH HIV/AIDS Management Team has set the following criteria for patient enrollment: (i) a valid Barbados ID card; (ii) a CD4 count of 350 cells/mm3 or less; and (iii) a valid prescription by the HIV/AIDS clinic director (for adults) or the Head of Pediatrics (for children). Follow up of patients includes: CD4 count every three months (four times/year) and Viral Load every three to four months (three to four times/year), in addition to periodic clinical evaluations. Monitoring and evaluation of ART would be carried out by the treating doctor who would track: (i) toxicity experienced by patients; (ii) clinical improvement of symptoms and signs and general status of the patient; and (iii) virologic response as measured by viral load counts. Low compliance would be addressed through strong education campaigns carried out by treating doctors, counselors, health workers, and voluntary organizations working close to patients home. The project would support periodic seminars for updating patient enrollment and treatment follow up according to new findings published in scientific journals. The project would not contemplate subsides, but would channel patients in need to government welfare programs.

C. Component #3: Management and Institutional Strengthening—US$3.5 million

The third component of the project would support sustainable institutional structure and management that will allow Barbados to effectively control, prevent, and care for HIV/AIDS over the long term. This would be accomplished by providing the necessary leadership, advisory services, staffing, goods, and general operating costs of the institutions discussed below.

The National Commission on HIV/AIDS (NACHA)

The existing National Advisory Committee on AIDS has been reformulated into a National Commission

on HIV/AIDS (NACHA) with executive powers, under the Prime minister's Office. In addition to having a Chairperson and an Executive Director's Office, NACHA would be formed with representatives from the private sector, the church, the youth organization, the media, the trade unions, NGOs, the people living with HIV/AIDS (PLWHAs), and the Director of the AIDS Management Team of the QEH. NACHA would do the following:

- Advise government on HIV/AIDS policy;
- advocate and promote active involvement of all sectors and organizations in implementing HIV/AIDS activities and create partnerships to broaden the national response to HIV/AIDS;
- mobilize resources, internationally and locally;
- coordinate and support implementation of HIV/AIDS interventions with the 10 Ministries involved;
- execute, monitor, and evaluate the proposed project; and
- be ultimately accountable to the public for the successful implementation of the project.

NACHA chairperson would be a recognized public leader in Barbados, capable of mobilizing public action and managing controversy. He would be selected by the Prime Minister and serve on a full – time paid basis. The Executive Director would be appointed by the prime Minister at the level of a permanent secretary of the government and would have legal status allowing him/her to receive funds from donor agencies, be audited by independent auditors, and establish contracts, and disburse public monies.

The Executive Director's Office would function as the Secretariat of NACHA and would be responsible for project implementation, that is, it would become the Project Management Unit PCU. Terms of reference for the NACHA staff who would function as the PCU would be presented and agreed upon at appraisal. Salaries of key staff and operating costs of the Office would be covered by the project.

The Office would be staffed by the Executive Director, assisted by a Deputy Director, an Assistant Director and a Financial Officer. Collectively, they would be responsible for programs in prevention (including education, training and research); policy development, planning and monitoring and evaluation; financial management; and procurement management. These key personnel would have specific terms of reference and accountabilities to be contained in a program operations manual, and qualifications and experience agreed with the WB. The senior staff of the MH charged with managing treatment and care would be considered as an adjunct staff of the Office.

The terms of reference for the NACHA Director Office would include the following responsibilities:

- Develop and coordinate the implementation of the project through various Ministries and partners in the private sector, NGOs and community groups;
- advise on budgetary allocations and report on the financial performance of Ministries [and partners] in relation to HIV/AIDS;
- manage the distribution of funds from donor agencies across various sectors, Ministries and NGOs;
- monitor and evaluate the performance and results of actions implemented by Ministries and partners;
- follow up on initiatives taken by the Commission, and prepare such reports and documentation in collaboration with Ministries and partners that the Commission may require; and
- advise the Inter-ministerial Committee and the Commission on the formulation of national programs and policy for HIV/AIDS management.

HIV/AIDS Prevention Units in Key Ministries

Eight Ministries and the Government Information Services would form a core management group each, to

be responsible for implementing HIV/AIDS prevention and control activities within their target populations. Each Ministry would identify a full time coordinator, and an office for this function within its staff and office space. A management committee comprising the Minister, Permanent Secretary, and relevant representatives of the Ministry's target populations, including PLWHAs, would advise and support each HIV/AIDS Prevention Unit.

Essentially, each Ministry would implement two core national program interventions designed jointly with NACHA: IEC, and condom distribution, and others specifically designed (NACHA will support, when needed) for their target populations (see Component #2). The Government has already authorized to include a line item for HIV/AIDS activities in each Ministry's budget. The Ministries that would participate in the project are the MH; Ministry of Education, Youth Affairs, and Culture; Ministry of Social Transformation; Ministry of Home Affairs; Ministry of Tourism; Ministry of Labor, Sports and Public Sector Reform; and the Government Information Service.

Monitoring, Evaluation and Research

a) **Project monitoring and evaluation**. The GOB blueprint for the HIV/AIDS 2001-2006 Action Plan, calls for the upgrade of the present system and incorporates "CAREC recommendations for improved surveillance and monitoring of the epidemic". The expected upgrade of the surveillance system includes also the updating of the HIV-AIDS information system for monitoring and evaluating the project.

   Current biological, behavioral, and HIV-AIDS case surveillance information should include protocol-based HIV sentinel surveillance on vulnerable groups as a complement to monitoring voluntary testing and counseling, and the integration of STI databases in the HIV-AIDS-STI surveillance system. The standard data and criteria for the HIV-AIDS information system would include:

   - Biological indicators: HIV prevalence, STI prevalence, TB prevalence, OI cases, HIV and AIDS cases;
   - behavioral indicators: age at first sex; age of partner at first sex; bisexual or homosexual contact in lifetime; number of sex partners in last 12 months; number of sex partners in lifetime;
   - condom use in last 12 months; condom use in last sexual intercourse with non-regular partner;
   - perception of being at risk of HIV/AIDS; ever gave or received money, things or drugs for sex; ever used crack/ cocaine;
   - socio-demographic indicators: age, sex, socio-economic and educational status, residency and migration status, marital status;
   - data sources, particularly MH, Queen Elizabeth Hospital laboratory and blood bank, private and public polyclinics and hospitals, and NGOs;
   - standard coding definitions for patient identification (personal ID code, restricted access to patient name, ID card), diagnosis (ICD10), procedures (medical, laboratory tests, blood bank, diagnostic imaging, hospital, others);
   - classification of vulnerable subgroups;
   - data validation and cross-analysis from HIV-AIDS case notification system and sentinel surveillance systems;
   - security and confidentiality of HIV-AIDS-STI databases and research studies, electronic transfer protocols, encrypted double key, access control, electronic trail and auditing, compliance monitoring and quality control procedures; and
   - interface with the drug supply system.

The project will support the MH implementation of standardized protocols for behavioral and biological surveillance with the assistance of the Chronic Disease Research Center (CDRC) from the University of West Indies (UWI) and CAREC. CAREC will also assist the Ministry of Health providing technical support towards the strengthening of the STI/HIV/AIDS information system, programming and execution of surveys. Also, CAREC would assist in training of participating staff in surveillance, HIV and STI diagnostics, behavioral sciences and research, mass media, strategic planning, program management and NGO support. CAREC will be able to provide this support through its own technical staff, through advisers of bilateral donor agencies (CIDA, GTZ, French Cooperation, DFID), and through its network of regional experts.

The database design should provide access to online information on diagnostic and lab testing relative to the management of opportunistic infections, anti-retroviral status, CD4 and viral load and applied history and date-sensitive treatment, non compliance alert, as well as up to date information on drug dispensation, online therapeutic protocols, adverse effects help, utilization and effects. To protect patient's privacy rights as well as the integrity and confidentiality of the electronic medical records, the selected application should include encrypting technology and double key facilities, restricting access to name to authorized personnel only. Epidemiological studies and surveillance processes should be based on coded data.

To provide up to date clinical and epidemiological information required for the HIV-AIDS-STI surveillance and case management, the current manual HIV-AIDS clinical records system will be computerized with project resources. The project would fund the technical assistance required for the selection, acquisition, adaptation and implementation of clinical information systems focusing HIV-AIDS case management and surveillance from applications available in the market. The system should provide protocols to transfer and analyze data on mapping applications with geographical reference. To ensure cost-effectiveness of the HIV-AIDS treatment and in particular ART, the treating physicians will require among others, the systematization of clinical records to assure compliance, prevent redundancy of treatment, monitor drug effects and efficacy, and to provide real time online information for decision making.

The proposed platform should be scalable and compatible with Ministry of Health current platform and the GOB Data Processing Department policies and standard specifications. Training to all users should include the use of microcomputers and windows environment, office applications, and the use of the HIV-AIDS-STI application in decision-making, surveillance analysis and monitoring and evaluation. The availability of case studies with online help would provide computer based self-tutoring. The terms of reference for the request for proposals, should include in addition to two years of maintenance and upgrade of the software, the establishment of a help desk to support the users on a day to day basis for the duration of the implementation and one year after, subject to contract extension according to performance.

The terms of reference to be prepared for the request of proposals, should reflect the work to be executed by the technical assistance for the design or acquisition, adaptation and implementation of the information system for HIV-AIDS surveillance system. Also, terms of reference should include in addition to two years of maintenance and upgrade of the software, the establishment of a help desk to support the users on a day to day basis for the duration of the implementation and one year after, subject to contract extension according to performance.

b) **Hardware and software, data storage and servers location**. The implementation of the HIV-AIDS surveillance system would require to add, replace or upgrade current workstations and to acquire and install servers, communication equipment and local area networks (LAN) to be linked with the wide area network being implemented by the BDS. To protect confidentiality and secure the integrity of the HIV-AIDS database, the server application and the server database should be located in an area with restricted access and monitoring system in the MH. The intranet should be protected with virtual

private network (VPN) application to assure proper encryption, restricted access and confidentiality of patient's electronic medical records. The implementation of the system will be staged according to the demand and progress of the remodeling of the physical installations and the relocation of the different units. Those units are the following:

- AIDS Reference Center (3 servers, LAN and 5 workstations);
- Queen Elizabeth Hospital Laboratory (1 server, LAN and 4 workstations);
- Public Health Laboratory - Sir Winston Scott P/C (1 Server, LAN and two WS);
- two selected Polyclinics (one server each, LAN and two workstations each);
- Chief Medical Officer (one server, LAN and three workstations);
- Chief Pediatrics (two workstations);
- HIV-AIDS Surveillance Center (one server, LAN and four to workstations); and
- National AIDS Commission (two servers, LAN and seven workstations).

The MH through the Project Implementation Unit, would develop the technical specifications according to the protocols defined by the Barbados Data Processing Department, to be included in bidding documents for the purchase and installation of the hardware and respective operational software; structured wiring for local area networks (LAN); communication equipment (optical equipment, routers, switches, hubs, multiplexes, paneling) and telephone systems for the wide area network (WAN); and extended warranty for the repair and maintenance of the equipment for at least three years. The providers should be responsible for the installation of the equipment, the configuration of the servers and operational system and the interconnection of the different components of the wide area network, including the training of MH staff responsible for the day to day technical support, in database administration and network operation and management.

c) **Research**. The scope of research activities would include the following:

- Social and economic impact studies, particularly HIV/AIDS household impact and cost effectiveness of HIV/AIDS prevention, diagnosis and treatment, and projected demand for treatment;
- situation analyses starting with baseline indicators for monitoring HIV/AIDS epidemic and demographic trends, KAP studies for assessing knowledge, attitudes and practices in sexual behaviors and attitudes towards PLWHAs;
- needs assessment studies, including criteria and provision of anti-retroviral treatment, payment capabilities, funding options, and service needs according to community groups and PLWHAs; and
- research capacity building on HIV/AIDS, with local, regional and international collaboration and support.

D. Staged Implementation

All project components would build up their activities, based on lessons learned as implementation progresses. This recognizes that the effectiveness of many project activities, especially those that are directed at changing behavior and attitudes is difficult to predict and that modifications in implementation rates, scope and details would be necessary throughout the implementation period. Annual progress reviews and a mid term review will be important project management tools and are provided for in support to project management. The work plan for the first project year is attached to this Annex.

Of particular concern is Barbados' ability to scale up the ART program that now serves about 15

patients, to one that serves the estimated population of about 1,250 confirmed AIDS cases in the medium term (24 to 36 months). A significant scaling up of ART and the use of WB loan proceeds to support it would be initiated after the proposed infrastructure has been completed, and staffing and training contemplated under this component is found satisfactory (see Conditions and Annex 13.11 for the criteria to be applied in making the determination of readiness). The progression of project actions leading to the decision would be:

- **Management Organization**: Establishing and operating the PCU within NACHA's organization, the Inter-Ministerial Committee and the HIV/AIDS Ministerial Units to ensure a sustainable institutional structure and management for GOB's HIV/AIDS overall program (and project implementation) and the reconfiguration of the AIDS Management Unit in the MH. This first stage would be accomplished in the first 12-18 months of project implementation.
- **Preparation and Development of Prevention Programs:** The five key prevention programs would be fully prepared including objectives, target populations, types of interventions, staffing, and other inputs with their respective budget. Initiating the implementation of all of the five programs would be expected at the beginning of the second project year.
- **Completion of Infrastructure for scaling up ART**: Infrastructure to support an expanded ART program would be completed when:

  a) The civil works (refurbishing, remodeling, expansion of facilities) providing the required space for voluntary counseling and testing, laboratory and pharmaceutical services, and home and hospital care for HIV/AIDS patients are completed;

  b) The laboratory equipment and staff training for HIV (ELISA test), opportunistic diseases, CD4 count and viral load testing is completed;

  c) The procurement process for required quantities of ARV drugs has been clearly established;

  d) Staffing and training for the HIV/AIDS Referral Center has been completed;

  e) Review and updating of protocols for ART has been completed and found satisfactory, as well as the updating of the manual for the proper handling and disposal of medical waste at the QEH carried out; and

  f) Financial feasibility and sustainability for further annual scaling up the number of patients under ART treatment are achieved.

  These steps should be completed in the first 20-24 months of the project.

ANNEX 13.3-B

HIV/AIDS Prevention and Control Project

Medical Organization, Infrastructure and Waste Management in Barbados

This note includes: (i) a description of the Barbados' Health Care System; (ii) a description of the infrastructure currently available for ART; and (iii) analyses the implications of additional medical waste produced by scaling up HIV/AIDS prevention and control into the system and present recommendations for appropriate health-care waste management.

I. Organization of the Health Sector

Institutional Arrangements. The Government operates QEH, a large secondary and tertiary care facility, a network of four district hospitals for geriatric care, a main geriatric institution, a mental health hospital and a half-way house, two small rehabilitation institutions for the physically and mentally handicapped, an AIDS hostel, a development center for disabled children and adolescents, and a nutrition center.

A nationwide network of eight polyclinics provides a wide range of preventive and curative services as well as limited rehabilitative services. These polyclinics and four satellite stations provide traditional public health services such as maternal and child health, family life development, communicable disease control, community mental health, chronic disease programs; dental health, nutrition and general practice. These services also cover environmental health, which includes food hygiene, mosquito and rodent control, building development control, atmospheric and chemical pollution monitoring and control, monitoring and control of water quality, monitoring and control of sewage disposal, solid waste disposal, the maintenance of cemeteries, and the licensing and control of stray dogs.

The Government also operates the BDS, a WHO collaborating center, that controls the importation and distribution of essential drugs in the country, thus ensuring that Barbadians receive affordable quality drugs and pharmaceuticals.

The private sector is comprised of about 100 general practitioners operating singly or in multiple practice; consultants (senior doctors working in government hospitals or polyclinics) also have private practices. There is only one small private hospital in the country -- Bayview Hospital-- with fewer than 30 beds, representing under 4% of the country's total acute bed capacity, Private sector health services and facilities also include 18 homes for long-term care, as well as pharmaceutical, laboratory, diagnostic, dental, psychiatric, and physical therapy services.

Staff at all levels are well trained and continue to receive regular updates. All of the polyclinics are supplied with the necessary equipment for the delivery of quality health care. There is a referral system between clinic, hospital, and other support services.

The MH maintains autonomy over the health services. The decision on how money is to be spent lies within the Ministry, but the Ministry of Finance appropriates the overall budgetary allocation. And while the GOB exercises some independent control over health professionals with regard to health service legislation, physicians and nurses maintain involvement in health policy dialogue through their own trade union.

In order to improve health, the health sector must work with other public sector agencies, the private sector, civic organizations, community groups, and citizens. The MH, the private sector, and other government ministries collaborate on several activities, such as the vector control education program, "World Health Day," "World Environmental Day", and "World AIDS Day".

Health Services Delivery. Health service delivery falls into the following seven program areas: primary health care; 24-hour acute, secondary, tertiary and emergency care; mental health care; care for the elderly including rehabilitation services; drug service; assessment services and rehabilitative care; and health promotion. Primary health care services encompass maternal and child health; family life development, including family planning and ophthalmic and dental care for schoolchildren; care for the disabled, pregnant

women, and the elderly; general medical care with clinics for hypertension, diabetes, and sexually transmitted infections; nutrition; pharmaceutical services, and community mental health and environmental health care.

The Chief Medical Officer is responsible for all matters affecting public health and medical services on the island, advising the MH on these matters, the Chief Medical Officer also plays an integral role in health planning and health infrastructure development. Two Senior Medical Officers support the work of the Chief Medical Officer, and a team approach is applied for each program area.

Each polyclinic is managed by a Medical Officer, who functions as a clinician and an administrator, heads a team of clinical medical officers and public health nurses, and works closely with the Public Health Inspectorate. Additional staff comprises pharmacists, community nutrition officers, dental officers, and other ancillary personnel. An administrator, a clinician, support medical staff, and other ancillary staff similarly run other institutions.

The major problem at the primary health care level is the shortage of staff resources, especially at the clinical level. This results in longer waiting periods and the inability to offer services at some of the polyclinics after 4:30 p.m. and on weekends.

At the secondary care level, the Government operates the QEH, a 547-bed facility that offers 24-hour acute, secondary, tertiary, and emergency care. The hospital houses more than 90% of the country's acute care beds; clinical services include outpatient, emergency and inpatient care in surgery, medicine, pediatrics, obstetrics and gynecology, pathology, radiology, radiotherapy, rehabilitation therapy, ophthalmology, and ear, nose, and throat. The hospital's diagnostic equipment includes a CAT scan and ultrasound and modern radiotherapy equipment. A cardiac catheterization unit was established in 1993, and by the end of 1996 had performed 50 open-heart surgeries and 242 cardiac catheterizations.

Mental health care is provided by the government run psychiatric hospital, which has 627 beds, and at the eight-bed unit at QEH. The Psychiatric Hospital offers the following services: (i) acute psychiatric care, including child and adolescent care; (ii) long-stay psycho-geriatric care; forensic psychiatric care for the subnormal; and (iii) addiction services. Community mental health services include a district nursing service that follows up persons who have been discharged from the hospital, and a primary community mental health program offered from the polyclinics.

Health Regulatory Activities. The country has a comprehensive health legislation. The Health Services Act and its regulations, which were enacted in the late 1960s and early 1970s, cover all areas that fall under the jurisdiction of the MH and the Environment. The Ministry has undertaken to improve the legislation for effective administration of the health services, the regulation of related public activity, and the services given to the public. Among laws to be reviewed are: (i) the Dental Registration Act; (ii) regulations regarding alternative medicine; (iii) food hygiene and restaurant regulations as they relate to street vending operations; (iv) random testing of food-handlers; (v) the Mental Health Act and all related legislative instruments that affect mental health, such as housing and the General Nursing Council Act, regarding the enforcement of the regional examination and registration for nurses. In addition, (i) the solid waste management plan; (ii) the regulation of private hospitals and nursing homes; (iii) regulation of organ donation and organ transplant; (iv) the development of a national spill contingency plan, (v) registration of medical specialists; and (vi) the establishment of criteria for general fitness to practice medicine will all be part of the review and reform process.

Several pieces of legislation regulate the registration, licensing, and governance of health professionals through the establishment of councils. There are councils for medical, dental, general nursing, pharmacy, and paramedical professions. The last one, which encompasses such professions as physiotherapists, occupational therapists, chiropractors, and laboratory technologists, may be amended to include nutritionists, acupuncturists, and osteopaths.

Barbados has specific health regulations designed to control food safety, and public health inspectors who issue licenses to all food establishments enforce these regulations. Currently, these regulations are under

review, so that food handlers will only be issued their annual licenses after undergoing several training sessions. Legislation dealing with the licensing and control of the itinerant vendors also is being reviewed.

The well organized BDS, is Government owned and controls the importation and distribution of essential drugs in the country, ensuring good access by Barbadians to affordable quality drugs and pharmaceuticals. It has been selected as a WHO collaborating Center.

The private sector is well developed, with about 100 general practitioners operating singly or in multiple practice, and consultants (senior doctors working in government hospitals or polyclinics) who also have private practices. Private sector health services include a small 30 bed hospital (less than 4% of total acute bed capacity in the country) and 18 homes for long-term care, as well as pharmaceutical, laboratory, diagnostic, dental, psychiatric, and physical therapy services.

II. Infrastructure for HIV/AIDS Prevention and Control.

The proposed HIV/AIDS Management Prevention and Control project would provide the required infrastructure to ensure appropriate scaling up of preventive and therapeutic activities for HIV/AIDS in Barbados. This infrastructure would require the same routine and practices on asepsis and antisepsis carried out at the QEH, and appropriate management of wastes from care of patients with HIV/AIDS.

Facilities. As the number of HIV/AIDS patients has increased continuously, space difficulties in the QEH have become a quality issue for counselling, testing and monitoring of treatment. Hence, the proposed project would shift some of these services to an adjacent government building, which would be remodelled and adapted for: (i) Counselling Services; (ii) a Drop-In/Walk in Centre for psychosocial support of persons living with HIV/AIDS (PLWA); and (iii) an HIV/AIDS Food Bank for nutritional education and preparation of food for PLWA, presently located at the QEH. Also, construction is proposed of a 10-20 bed hospice and expansion of a hostel to accommodate additional four to six beds for PLWA.

Present overcrowding difficulties of the QEH laboratory facility would be solved by expanding and refurbishing its plant, thus ensuring appropriate space for processing laboratory tests for opportunistic infections, HIV testing and monitoring of antiretroviral therapy.

Other space needs to be met by the project are: (i) facilities for pre and post-test counselling and testing at eight Polyclinics through rehabilitation or expansion of present facilities; and (ii) space for the AIDS Management Team, which would be temporarily relocated to an adjacent government building and eventually to the AIDS Reference Unit which would be located at an old nursing building close to the QEH, which would be refurbished and adapted by the project. This 30 bed AIDS Reference Unit would be state of the art for managing HIV/AIDS patients both in ambulatory and hospital settings.

Logistics for drug supply and monitoring and evaluation of antiretroviral therapy would be strengthened through the BDS, training of health care staff, and improvement of the surveillance and information system.

Home Care Program for HIV/AIDS. The NACA has proposed a Home Care Program which would promote a continuum of care, integrating institutional, community and home-based care. This Program would be run by trained staff to provide care with respect, dignity, sensitivity and confidentiality to HIV/AIDS patients.

III. Management of Medical Wastes related to HIV/AIDS Projects

Health care activities such as immunizations, laboratory tests, medical treatments, and surgical procedures generate wastes and by-products which require special handling. From the total wastes generated by health-care activities, almost 80% are general waste comparable to domestic waste. The remaining 20% is considered hazardous materials that may be infectious, toxic or radioactive.

Infectious and anatomic wastes represent about 15% of total waste in health care activities: Infectious wastes come from laboratory cultures and batches of infectious agents, wastes from infected patients, wastes

contaminated with blood and its derivatives, discarded diagnostic samples, infected animals from laboratories, and contaminated materials (swabs, needles, bandages) and equipment (disposable medical devices etc.).

Hazardous sharp wastes such as: (i) syringes, disposable scalpels and blades represent about 1%; (ii) chemicals and pharmaceuticals amount to about 3%; and genotoxic waste such as radioactive matter and heavy metal content represent about 1%.

High-income countries can generate up to 6 kg of hazardous waste per person per year, whereas most low-income countries may produce between 0.5 to 3 kg. The problem is not so much the volume but lack of appropriate handling of wastes, which in many cases, are not separated into hazardous and non-hazardous waste.

Risks. Health care wastes can cause infections, injury, poisoning, and pollution. The groups at risk in order of importance are hospital patients, health workers, and the general population. Worldwide, re-use of syringe needles without sterilization may cause 8-16 million hepatitis B; 2 - 4.7 million hepatitis C and 80, 000 to 160, 000 HIV infections, each year.

Land filling can potentially result in contamination of drinking water. Inadequate incineration, or incineration of materials unsuitable for incineration can result in the release of pollutants into the air. For instance, incineration of materials containing chlorine can release dioxins and furans, which are possible human carcinogens. Dioxins, furans and metals are persistent and accumulate in the environment. Only modern incinerators working at 800-1000 °C, with special emission-cleaning equipment, can ensure that no dioxins and furans (or only insignificant amounts) are produced.

Perceived risks by the general public related to health-care waste management may be significant and can become a sensitive and ethical issue.

Waste Management. Many countries do not have appropriate regulations on health-care waste management, or do not enforce them. The absence of waste management, lack of awareness about the health hazards, insufficient financial and human resources and poor control of waste disposal are the most common problems connected with health-care wastes. An essential issue is the clear attribution of responsibility of appropriate handling and disposal of waste. According to the 'polluter pays' principle, this responsibility lies with the waste producer, usually being the health-care provider, or the facility involved in related activities.

HIV/AIDS Prevention and Control Project in Barbados

Health-care waste management is important for ensuring safe quality care to patients and a safe environment to health workers and the general public. Wastes caused by HIV/AIDS prevention and care of patients represent a very small fraction in terms of quantity and quality to current wastes in the health care system of Barbados. This can be confirmed by examining what is done in delivering services in ambulatory and hospital settings to a typical user of the HIV/AIDS program: initially, he/she is interviewed and tested. If positive, he/she will be entered into different protocols according to the stage of the infection, for management and care in ambulatory or hospital services. About two or three in 10 would need hospitalization. Surgical procedures are similar to those in other infected patients, that is, routines in asepsis and antisepsis are carefully enforced.

Ambulatory and hospital care for an HIV/AIDS patient requires the same asepsis and antisepsis routines for handling other infected patients such as: (i) those with hepatitis B or C; (ii) Polio; (iii) diphtheria; (iv) septicemias from different germs, etc. For practical purposes, management of used goods from handling HIV/AIDS patients will not have different treatment than those already established for ambulatory and hospital settings dealing with infected patients.

As described below, the QEH has appropriate practices and institutional capabilities for managing hospital

infections. Measures to protect and prevent iatrogenic or hospital infections such as hepatitis B or C, are well established in hospital practices and are similar to those required in the management of HIV/AIDS infections. A possible beneficial effect would be improved compliance and practices in the management of biological, pharmaceutical, pathological and potentially infectious waste. Likewise, improved surgical practices in operating rooms, and more appropriate use of intravenous therapy may result from scaling up HIV/AIDS diagnosis and care, due to refreshing courses in better asepsis and antisepsis and apprehension that may exist in some health workers.

No new technology for managing health care wastes is needed due to introducing or scaling up HIV/AIDS care.

Management of Hospital Waste in Barbados' QEH.

There are some waste management measures well established as part of the operation of the hospital to prevent risks and exposure to hazardous health–care waste. However, such measures although sufficient, could benefit for improvement.

Wastes in the QEH are classified under three categories:

- Regular waste: solid and liquid wastes, which are similar to domestic related residues. The solid generated wastes are collected according to a pre-determined schedule among the ordinary-municipal-waste collection system. As all domestic wastes, they are disposed at the sanitary landfill of the island. The liquid waste is collected and discharged to the Bridgetown sewer system.;
- radioactive waste, usually generated from Cancer Treatment Machines and other Radioactive based-operated equipment are handled by the representatives of respective manufactures who are responsible for their handling, collection and their shipment outside of the island;
  - hazardous wastes include all hazardous health-care generated waste. This category includes:

  a) used items as sharps, needles, syringes;

  b) anatomical and pathological residues;

  c) waste contaminated with human blood, fluid, excreta,;

  d) chemicals and pharmaceutical wastes; and

  e) discarded containers e.g. bottles, cans, boxes etc.

Those wastes are disposed and burned at the hospital incinerator. The ashes are then transported to the sanitary landfill of the island.

The Infection Control Department of the QEH exercises the control and handling of all health-care-generated wastes in the hospital. This department has also established a set of rules for handling health–care wastes. All waste classified as hazardous are disposed in special plastic containers. When filled, those containers are sealed by trained nurses and transported to the incinerator site for burning and disposal.

Several clinics, other hospitals and laboratories use the incinerators of the QEH. In the island, there are two other incinerators operational in addition of the incinerator at the QEH: one is at the Sea port, and the other one is at the airport.

There is not a coding system for the categorization of different type of hazardous waste. There is no special marking obligation, at the exception of the wastes coming from outside clinics which come with markings of point of origin, type of waste and date of generation.

The QEH has a single-chamber incinerator, which, under good condition, reach 1500° F as burning temperature. Its capacity is 500 pounds an hour. According to the hospital operator, the technology is old and

it constantly needs repairs. The pollution from the exhaust of the incinerator has been cause of complaints by the neighboring residents of the hospitals.

The hospital management is well aware of the need to update its waste management program for the hospital.

The Barbados's legislation is very silent with regards to management of hospital waste management. In the Health Services Act of 1989, there are three pages dealing with health-care wastes under the Health Services (Nuisances) Regulations. These recommendations found in the regulations here attached are generally vague and not specific to hospital waste disposal measures. As a result, the QEH and the other health care facilities: clinics, polyclinics, health centers are operated outside of any legal frame work with regards to health care waste disposal.

Recommendations.

Therefore, in agreement with the Engineering Division of the MH and the management of the QEH, several actions have been proposed to improve the conditions of healthcare waste management in Barbados. These include:

1. Technical assistance to review the overall framework of health-care waste management in Barbados.
2. Technical assistance to QEH to upgrade the Standard Operation Procedures for hospital waste handling and disposal.
3. Technical assistance to conduct a study of hospital waste categorization that covers all health facilities in the island.
4. Technical assistance to conduct a study to assess improved alternatives for medical waste disposal in Barbados. Said study shall include the carrying out of a fully consultative environmental assessment of any alternatives the study might recommend. Such alternatives may be carried out only in compliance with the environmental mitigation measures identified by said assessment.

Attachment to Annex 13.3

Barbados HIV/AIDS Prevention and Control Project

Key Implementation Plan for first Project Year (PY1)

(by component , by quarter)

Component	Managing Agency	Quarter (Barbados fiscal year; April-March)			
		Q1	Q2	Q3	Q4
1. Prevention Program	PCU/Prevention	Agree PY1 Program with Key ministries, including targets budgets and timing of initial interventions; Initiate bulk condom purchase with BDS/PAHO	Conduct program management training for AIDS Units in Key ministries	Conduct Mid Year Evaluation of prevention actions; conduct self-evaluation workshop	Identify additional options for PY2 prevention programs and coordinate priorities and the work plan
	PCU/MH	Organize and conduct HIV/AIDS Sensitivity Training for other Ministries			
	PCU/MH	Design program for introducing STI therapy on syndromic basis, and for continuing MTCT reduction			Evaluate scaled up program and plan PY2
	PCU/ Other Key Ministries	Complete preparation of PY1 roles and actions with priority focus on selected target IEC and condom distribution	Initiate ministry activities with support of appropriate technical assistance and NGOs	Participate in Mid Year review	Prepare PY2 activities for IEC, budget and financing needs
	MH	Maintain VTC, treatment of opportunistic infections			Evaluate ongoing treatment programs, design PY 2 interventions
2. Diagnosis and Treatment	PCU/Procurement with MH	Prepare tendering for rehabilitation and construction of ART support infrastructure	Continue tendering procedures	Supervise construction	Supervise construction and installation of equipment
	MH/AIDS Management Team	Revise protocols and case management to accommodate 100 ART patients in existing facilities	Out-of-country training visit to AIDS Management Unit (sight to be identified)	Participate in mid year review	Evaluate status of PY1 ART program against objective criteria; establish PY2 goals
	MH	Prepare intensified MTCT plan via polyclinics	Initiate scaled up MTCT plan		Evaluate PY1 MTCT activities; establish PY2 goals
3. Program Management and Institution Building					

a) National Advocacy and Leadership	Commission	Conduct organizational retreat	Conduct public hearings on results of impact, situation and needs assessments,		Prepare events for PY2 program launch
b) Program Management	PCU/Director	Organize Office; Project Launch workshop based on operation manual		Conduct mid year review of progress.	Prepare Second Year Program,
	PCU/Policy	Complete Basic Impact, Situation Analysis and Needs Assessment Studies		Revise Strategic Objectives for PY2; Conduct first "beneficiary assessment"	
	PCU/Financial	Consolidate program budget for PY1		Conduct mid year budget review; advise on reallocations and supplements	Prepare PY2 budget, and expenditure plan
	PCU/Prevention	(see also Prevention Component)			
	PCU/Procurement	(see also Diagnosis and Treatment)			Prepare PY2 procurement plan
c) Surveillance, M & E	PCU/Policy, and MH	Contract Design Services; Contract Training and IT Implementation Services	Prepare biding for equipment	Commencial Installation and Training; MH	Continue Training and Installation in Key ministries

ANNEX 13.4

Barbados HIV/AIDS Prevention and Control Project

Indicative Roles, Responsibilities and Targets

Responsible Agency	Activity	Target population (Consider In-house staff for all ministries)
1.National AIDS Commission	1. Advise on HIV/AIDS Policy 2. Create partnerships for a National response 3. Advocate for national and regional policies	• General population • Legislators • Ministries • International Agencies • NGOs • Private Sector
2. Office of the Director (Prime Minister's Office)	1. Coordinate multi-sector efforts and information 2. Allocate support funds for proposals from the Ministries 3. Assure adequate monitoring, evaluation and policy responses	• Ministries and Official • NGOs, CBOs • **Private Sector Partners**
3. Ministry of Health	1. Blood supply protection 2. Prevention of MTCT, and counseling for artificial feeding 3. Voluntary Counseling and Testing 4.STI diagnosis, treatment and reporting 6. AIDS case reporting 7. HIV Surveillance 8. Behavior Change Communication (IEC) 9. Treatment and care (inpatient, outpatient and home based); including ART 10. Training of health professionals – according to international protocols and consensus for treatment procedures 11 Training and sensitizing Government officials	• Blood donors • Pregnant women • General population • CSWs (males and females) • STI patients • General population • Health professionals • Government Officials dealing with suspected and confirmed HIV/AIDS infections

Responsible Agency	Activity	Target population (Consider In-house staff for all ministries)
4. Ministry of Home Affairs, Office of the Attorney General	1.Workshops for substance abuse reduction and prevention, promotion of safer sexual practices from abstinence to condom promotion, sexual education, and life skills. 2. Promote the establishment of "youth friendly centers" within existing structures. 3. Outreach to schools and community	• Youth • General population
(Police Department)	4. Bio safety/ workplace training /acquire safety equipment 5. Modifying law and regulations regarding : homosexual practices, tattoo and piercing practices, patient confidentiality, disability legislation issues, discrimination of persons who live with HIV/AIDS	• Law enforcement officials/police force • General population • Confined populations / prisoners
5. Education, Youth Affairs and Culture	1.Sex education 2. AIDS prevention through life skills, personal empowerment (peace program) 3. Continuous linkage w/other sectors for IEC dissemination 4. Disseminate information at major cultural activities and festivals	• Teachers and guidance counselors • Primary and secondary school children and youth • Education officers, parents, principles, youth commissioners, • Auxiliary staff and all in-house staff
6. Social Transformation	1.Support of people living with AIDS 2.Counseling and psychological support 3.Poverty alleviation and social security for PLWAs 4.Home based care support 5.Mobilize special outreach actions to neglected communities by NGOs/CBOs	• Persons with disabilities • People living w/HIV/AIDS • Children(orphans) • NGOs and CBOs • Religious community

7. Tourism	1.Maintain health standards for hospitality industry 2.AIDS Awareness program and information dissemination through specific IEC	• Hotel staff • Tourists and tourism industry, Ports and airport personnel, • Taxi drivers • CSWs • Hospitality workers, linked with private sector and community organizations

Responsible Agency	Activity	Target population (Consider In-house staff for all ministries)
8. Labor and Sports	1.Workplace information and education- HIV/AIDS policy 2.Employment assistance program 3.Dissemination of HIV/AIDS to module workers 4. Advocacy for modernization of labor legislation to insure nondiscrimination and social protection* 5. Support and IEC for and via sports teams and sports media involvement of campaigns	• Migrant workers, overseas employment program workers, • Factory workers • Small and large business • General population and specially youth
9.Government Information Services	1.Production of mass media campaigns, and newspapers, newsletters, etc. with messages in diverse formats, sponsored by other ministries	• General population and more vulnerable groups • Ministry personnel • Parliamentarians • Media professionals • Churches, NGOs,CBO • Private sector

ANNEX 13.5

Barbados HIV/AIDS Prevention and Control Project Prevention and Control Project

Estimated Project Costs

Table A 13.5-1 - Project Cost by Component and Category

(US$, 000)

Project Cost By Component	Local	Foreign	Total
		US $ 000's	
1. Prevention	3,737	1,938	5,675
2. Diagnosis and Treatment	3,582	10,685	14,267
3. Institutional Development	2,125	535	2,660
Total Project Costs	9,444	13,158	22,602
Unallocated		891.5	891.5
Front-end fee		150	150
Total Financing Required	9,444	14,199	23,643

Project Cost by Category	Local	Foreign	Total
		US $ 000's	
1. Works	1,615		1,615
2. Goods:			
(a) Equipment	885		885
(b) ARV drugs		4,482	4,482
(c) Laboratory Reagents		3,735	3,735
(d) Condoms		1,000	1,000
3. Consultant Services and Training (including NGOs)	925	2,535	3,460
4. Operating Costs	6,019	1,406	7,425
Total Project Costs	9,444	13,158	22,602
Unallocated		891.5	891.5
Front-end fee		150	150
Total Financing Required	9,444	14,199	23,643

ANNEX 13.6

Barbados HIV/AIDS Prevention and Control Project Prevention and Control Project

Benefits and Cost Analysis Summary

A. Cost-Benefit Analysis: Summary of Benefits and Costs

The cost of the program runs at $23.5 million over a five year period and the proposed objectives are to reduce the rate of newly reported cases by half and to increase the life expectancy of PLWHAs by three or more years. About US$14.3 million are earmarked for diagnostic and treatment activities, of which US$4.5 million are destined for the purchase of anti-retroviral drugs. Some $8.8 million are destined to support a variety of prevention and institutional development initiatives. The analysis below bears on the project exclusive of anti-retroviral drugs component. Anti-retroviral drugs will be introduced in the program in a gradual fashion subject to an evaluation of the country's institutional and financial readiness. The evaluation criteria and the steps towards the gradual introduction of anti-retroviral drugs are described in Annexes 13.9 and 13.10.

Hypothetical scenarios of the evolution of HIV/AIDS prevalence and incidence were constructed: (i) under the assumption of a 50% reduction in HIV incidence over project lifetime, and (ii) under the counterfactual assumption of a constant HIV incidence. The difference between these two scenarios then yields the number of HIV infections prevented due to the project. Table A.13.6-1 presents a scenario where incidence decreases linearly to half its original value over a five-year period. Table A13.6-2 shows what would have happened if the incidence rate had stayed at its initial level.

The following additional assumptions are made: (i) the natural population growth rate is 0.4%; (ii) incidence is taken to be 498.1 per million in year 0; (iii) the number of deaths due to AIDS in year t is calculated as 7.26% of prevalence in year $t-1$; and (iv) prevalence in year t is equal to prevalence in year $t-1$ + incidence in year t – AIDS deaths in year t.

Table A 13.6-1. Incidence Rate Halves Over 5-Year Period

Year	Population	Incidence	Prevalence	Deaths due to AIDS	Incidence rate (per million)
0	269,000	134	1,800		498.1
1	270,076	121	1,791	130	448.3
2	271,156	108	1,769	130	398.5
3	272,241	95	1,736	128	348.7
4	273,330	82	1,691	126	298.9
5	274,423	68	1,637	123	249.1

Table A 13.6-2. Incidence Rate Unchanged

Year	Population	Incidence	Prevalence	Deaths due to AIDS	Incidence rate (per million)
0	269,000	134	1,800		498.1
1	270,076	135	1,804	131	498.1
2	271,156	135	1,808	131	498.1
3	272,241	136	1,812	131	498.1
4	273,330	136	1,817	132	498.1
5	274,423	137	1,822	132	498.1

From tables A.13. 6-1 and A.13.6-2, the number of infections averted due to the project can be derived. In turn, it is possible to obtain rough estimates of the productivity losses and cost of treatment thus averted with the use of the following parameters: (i) on average, averting HIV infection 'buys' an individual 10 more years of productive life; (ii) average annual productivity is valued at 1999 GDP per

capita (US$8,620); (iii) a patient who gets infected will live for 10 years with adequate care; (iv) the average annual cost of care per patient is US$1,380[7]; (v) the consumption benefits of a lower HIV prevalence are not factored in; and (f) the stream of benefits is supposed to last 12 years after project closing[8].

Table A.13.6-3. Estimating Project Benefits

Year	Infections averted	Years of life saved	Productivity losses averted ($)	Averted cost of care ($)	Total benefits ($)
1	13	135	1,159,604	185,644	1,345,249
2	27	270	2,328,485	372,774	2,701,259
3	41	407	3,506,699	561,397	4,068,096
4	54	545	4,694,301	751,524	5,445,825
5	68	683	5,891,348	943,162	6,834,510
Total	**204**	**2,039**	**17,580,437**	**2,814,502**	**20,394,939**

The valuation of productivity losses obviously is a lower bound on the value of lives lost to the disease. The rates of return associated with the project were calculated using the assumptions discussed above and are shown in table A.13.6-4 below.

Table A.13.6-4. Internal Rates of Return

Year	Costs	Benefits	Net Benefits
1	3,545,000	1,345,249	(2,199,751)
2	3,225,000	2,701,259	(523,741)
3	3,610,000	4,068,096	458,096
4	3,845,000	5,445,825	1,600,825
5	4,070,000	6,834,510	2,764,510
6...17	0	6,834,510	6,834,510
IRR = 62.3%			

Sensitivity analysis—switching values of critical items: A switching value analysis was conducted for critical parameters. The results of this analysis are summarized in table A.13.6-5 below.

Table A.13.6-5. Switching Values for Key Parameters

Parameter	Base case	Limit value of parameter that yields an IRR above 10%
Incidence rate	Reduction of 50% over project lifetime	Reduction of 16% over project lifetime from 498.1 per million to 418.6 per million
Annual cost of care for patient	$1,380	Even if the averted cost of care goes to zero, the rate of return is 49% since the productivity losses averted alone generate sufficient benefits.
Average number of years patient needs care	10 years	Idem: even if the averted cost of care goes to zero, the rates of return is 49%
Average number of years lived if infection is avoided	10 years	2.1 years
Productivity valuation	$8,620 per year	$1,805 per year

In addition, if the stream of costs stays the same but the stream of benefits is delayed by one year, then the rate of return drops to 38%, and if the stream of benefits is delayed by two years, the IRR drops to 29%. The returns to the project are therefore robust to significant negative biases against project feasibility.

The economic analysis above was conducted on the non-ARV part of the project. Annex 13.11 discusses the further analyses that will be conducted during the early stages of project implementation to ensure that

[7] This is calculated as $210 + 3 x current health spending per capita ($58), which mirrors the hypothesis made in the cost estimation exercise for the Caribbean as a whole (see Caribbean HIV/AIDS Control APL PAD).

[8] Because of discounting, the present value of the benefits tapers off rapidly over time.

the purchase of ARV drugs is economically desirable, equitable and sustainable. The critical issues will be whether ARV crowds out other programs and whether the country is able to shoulder the incremental recurrent costs upon project closing. At the current market price of $10,000 per patient per year, providing ARV to 1,300 patients costs $13,000,000 or 13% of total public health spending. If the prices go down to $2,000 per patient per year, the incremental recurrent spending on drugs represents 3% of total public health spending, and if prices are at $1,000, then the additional financial burden of providing ARV is only 1.3% of public spending in health (exclusive of the fiscal impact of prolonged longevity).

2. Cost-Effectiveness Analysis

Once it is decided that a set of interventions warrants public intervention in the form of financing, provision, regulation or mandate, then information about cost-effectiveness is useful to determine to prioritize among those interventions.[9] Table A.13.6-6 below, adapted from Jha et al. (2001)[10] summarizes ranges of values from the literature relating to the cost-effectiveness of some of the most frequent interventions in HIV/AIDS prevention.

Table A.13.6-6: Cost-Effectiveness Ratios for Different Groups of Interventions

	Sex worker interventions	STI management	Voluntary counseling and testing	Anti-retrovirals in pregnancy	IEC to change risky behavior[11]	Anti-retrovirals [12]
Cost per HIV infection averted	$8-12	$218	$249-346	$276	$1,324	--
Cost per DALY saved	$0.35-0.52	$9.45	$12.77-17.78	$10.51	$66.2	$720-$2,355

The proposed project gives clear financing priority to those interventions that are most cost-effective (especially interventions targeted at sex worker and other high-risk groups such as the military, the police, prisoners and sugar-cane workers—see Annexes 13.2 and 13.3). As such, it is expected to achieve maximum impact in reducing the spread of the epidemic. The project priorities are also closely aligned with those suggested by Ainsworth et al. (2000).[13]

Eighty-six percent of the project corresponds to the categories identified in the above table. If the parameters[14] in the table above apply to Barbados[15], then it can be shown that the cost-effectiveness of the components of the project which support interventions of known cost-effectiveness ratios is $22.58 per (DALY) saved. The overall cost-effectiveness of the project is extremely sensitive to the distribution of resources among the above series of interventions: if the project neglects to allocate adequate amounts

[9] There is an ongoing debate about the use of cost-effectiveness to guide public financing decisions. Public financing decisions should be made on the basis of market failure arguments. Jack (see footnote 1) suggests that the correct approach to public financing decisions would be to carry out a full cost-benefit analysis to include the external benefits and the costs of raising public revenues. Hammer (in Hammer, J., (1997) 'Prices versus protocols in public health care' *World Bank Economic Review*, 11 (3)) also argues against the use of cost-effectiveness in guiding public finance decisions on the grounds that if there is private demand for an intervention, then publicly-subsidized provision substitutes for private demand so that the net health effect is typically smaller than in the absence of public demand. Cost-effectiveness is not used here to guide public financing decisions but to order the interventions once it has been decided that they should benefit from some form of public intervention.

[10] Jha, P., et al. (2001) 'The evidence base for interventions to prevent HIV infection in low and middle-income countries.' Background paper of the Commission on Macroeconomics and Health, the World Health Organization.

[11] UNAIDS

[12] UNAIDS - Brazil Program

[13] Ainsworth, M., and Teokul W., (2000) 'Breaking the silence: setting realistic priorities for AIDS control in less-developed countries' Lancet, 356: 55-60. The authors single out increased condom use, treatment of STIs, safe injecting behavior and drugs to prevent mother-to-child transmission as interventions of known effectiveness in preventing HIV infection and AIDS.

[14] Using the higher end of the ranges.

[15] Cost-effectiveness parameters are sensitive to the scale of the activity and the stage of the epidemic.

for sex worker interventions, STI management, and voluntary counseling and testing, this translates into a low cost-effective ratio.

The project will enable the collection of relevant cost and effectiveness data to enable the periodic calculation of the cost-effectiveness of the interventions being supported and allow policymakers to update the national strategy to combat the spread of the epidemic.

ANNEX 13.7

Barbados HIV/AIDS Prevention and Control Project

Financial Summary

Table A.13.7-1. Project Financing for Years Ending 2006

	Implementation Period				
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Total Financing Required					
Project Costs					
Investment Costs	2,100	1,120	735	285	345
Recurrent Costs	1,920	1,920	2,211	2,320	2,324
Laboratory Testing	315	450	720	1,125	1,125
ARV Drugs	378	540	864	1,350	1,350
Total Project Costs	4,713	4,030	4,530	5,080	5,144
Financing					
IBRD	2,610	1,765	3,152	3,635	3,689
Government	2,093	2,265	1,378	1,455	1,455
Project Financing	4,703	4,030	4,530	5,090	5,144
Front-end Fee	150				
Total Project Financing	4,853	4,030	4,530	5,090	5,144

ANNEX 13.8

Barbados HIV/AIDS Prevention and Control Project

Procurement and Financial Management Arrangements

I. Procurement

Procurement Guidelines

1. **Procurement for the proposed project would be carried out in accordance with World Bank "*Guidelines: Procurement Under IBRD Loans and IDA Credits*"**, published in January 1995 (revised January/August 1996, September 1997 and January 1999); and "*Guidelines: Selection and Employment of Consultants by World Bank Borrowers*" published in January 1997 (revised in September 1999 and January 1999), and the provisions stipulated in the Loan Agreement.

2. Barbados' own tendering laws will be used for procurement of activities under Government budgetary funds. They establish three general processes, related to the expected size of the contract as follows:

   a) Contracts under BDS$ 20,000 (US$ 10,000): purchase made on the basis of price quotations from local suppliers; approved by the Ministry Permanent Secretary and executed by the Ministry Financial Officer;

   b) Contracts of between BDS$ 20,000-BDS$ 100,000 (US$10,000-US$50,000): price quotations invited through local media, evaluated by a ministry tendering committee (optional) advising the Permanent Secretary and Financial Officer, with contracting concluded by the Solicitor General's Department; ex post; and

   c) Contracts over BDS$ 100,000 (US$50,000): tendering managed by the contracting ministry, following a process similar to the World Bank concept of "National Competitive Bidding", with contracting concluded by the Solicitor General's Department, which is consulted ex ante.

Procurement Responsibility

Procurement responsibilities will be divided between the PCU and the MH, which has the bulk of procurement to be performed. The Office of the Director (also the PCU) which serves as the Secretariat for the National Commission on AIDS (NACHA), and is located in the Prime Minister's Office will supervise and maintain consolidated account of the project's procurement. It will also perform the procurement activities for the ministries other than the Ministry of Health, participating in the Project. The PCU will employ a procurement-competent Financial Officer for these purposes. Individual participating ministries would have their own line-item budgets to support their individual HIV/AIDS management activities and would follow government tendering rules in deploying Government funds. However, in most cases, ministries will also use loan proceeds to complement existing funding, and, in these cases, they would follow World Bank guidelines for the entire amount. When the cost of an activity to be financed exceeds the ministry "vote", it would agree with the PCU on cost sharing and the PCU would procure the goods and services to be financed by loan proceeds.

In the case of the Ministry of Health, the HIV/AIDS Program Unit would procure all of its project-related needs and use loan proceeds as required to complement its "vote". It would maintain its own records, but assure that the PCU was fully informed. In the specialized area of drug purchases, including the eventual purchase of project-financed ARV drugs, the BDS would manage the process. Established in 1980 by the MH, the BDS has implemented best practice procedures supported by appropriate information systems. The World Health Organization recognized the good performance of the BDS by selecting it as a collaborating center for drug supply management. The drug purchasing process is designed to ensure the availability of drugs for a yearly contracted period (July-June). Once tendering documents are prepared, a bidding notice is posted in the two principal newspapers in the country. The bidding process beginning in

November provides a competitive mechanism to purchase the required quality specifications and acceptable past performance at the lower bidders. Eight local wholesalers representing close to 250 international drug companies and local drug laboratory, participate in the bidding.

The BDS has direct management responsibilities for 13 of the public pharmacies located in the polyclinics and district hospitals. The Queen Elizabeth Hospital and the Psychiatric Hospital are supplied with drugs by the BDS on a semi-decentralized scheme. The public pharmacies and most of the country's private pharmacies (close to 80) participate in the distribution and dispensing of drugs. The BDS provides a negotiated mark-up with private pharmacies, assuring immediate access and availability to MH patients. The BDS's computerized supply system provides for the purchasing, patient benefit verification, private pharmacy reimbursement, inventory control and point of service dispensing.

Procurement methods

A procurement plan will be prepared along with the annual work plan. The procurement plan for **each year** would be submitted by the PCU to the WB for approval, not later than December of the prior year (Barbados operates on an April-March budget and fiscal year) following a standard format which would list as a minimum: (i) goods and services to be procured for the year, (ii) their value; (iii) the method of procurement; and (iv) the timetable for carrying out the procurement. At the time of approving the annual work plan, the WB would agree on the appropriate methods of procurement to be used in each package. If needed, the plan could be revised and re-submitted. A format for a typical plan would be agreed at the negotiation of the Program. An indicative procurement plan for the **first year** has been agreed at appraisal and finalized prior to loan approval.

The methods to be used for the procurement described below, and the estimated amounts for each method, are summarized in Tables A.13.8-1 and A.13.8-2. The threshold contract values for the use of each method are fixed in Table A.13.8-3. Both, methods and thresholds will be reviewed and adjusted annually, if necessary when the new plan is presented to the Bank.

Procurement of Works. Works procured under this Project will include the remodeling and refurbishing of the PCU offices, establishing a new site for the AIDS Management Team, remodeling of existing government properties to house a drip-in center, AIDS food bank, polyclinics, some laboratory facilities, counseling services, and for new construction of a 10-20 bed hospice, and extended hostel accommodation. The project would also finance works associated with the upgrading of incinerator facilities and waste management. **Total cost is expected to reach US$1.6 million** and various lots would be procured under NCB.

Procurement of Goods. Goods procured under this Project will include general medicines, condoms, computers, surveillance network and office equipment, and educational and campaign publications, laboratory equipment and testing reagents for an aggregate amount of $6,367,000. In addition, while the Bank agrees in principle to finance the procurement of ARV drugs, a final decision would await a full analysis of Barbados' progress in preparing the necessary infrastructure, staff skills and surveillance systems. If agreed, an amount to about **US$4,482.,000** is envisaged for procurement of ARV drugs from suppliers according to registered brand marks. Procurement would thus be carried out under "sole source".

To the extent possible, contracts for goods will be grouped into bidding packages of more than $250,000 equivalent and procured following International Competitive Bidding (ICB) procedures, using Bank-issued Standard Bidding Documents (SBDs). Contracts (other than anti-retroviral drugs) with estimated values below this threshold per contract may be procured using National Competitive Bidding (NCB) procedures up to an aggregate amount of **$400,000 equivalent,** using standard bidding documents agreed in advance with the Bank. Contracts for goods which cannot be grouped into larger bidding packages and estimated to cost less than US$50,000 per contract may be procured using shopping (National /International) procedures, up to an aggregate amount of **US485.000** based on at least three quotations

received in response to a model request for quotations which will include detailed technical specifications, required delivery date, guarantees and conditions and a basic form of agreement satisfactory to the Bank

Selection of Consultants. Consulting services will be contracted under this Program in the following areas of expertise: HIV/AIDS Education and Prevention Campaigns, Investigation, Studies, Technical Assistance and Training, Monitoring and Impact Evaluation, Implementation of part of the Program through NGOs, Auditing, Development and maintenance of information and statistical Databases, and participation in National and International Congresses and Workshops. These services are estimated to cost US$**3.5 million** equivalent and would be procured using Bank Standard Request for Proposals.

Firms. Contracts for firms would be selected using QCBS. Small and simple contracts estimated to cost of less than US$100,000 for an aggregate amount of **US$1.0** equivalent would be selected using Least Cost Selection (LCS).

Individuals. Specialized advisory services would be provided by individual consultants selected by comparison of qualifications of three candidates and hired in accordance with the provisions of paragraphs 5.1 through 3.5 of the Consultant Guidelines. Additionally, owing to the temporary nature of the PCU, individual consultants would be hired to complement up to 50% of the PCU staff. All individual consultants amount to an aggregate amount of US$**2.5 million**

NGOs. NGOs will be hired to assist ministries and the PCU in the implementation of the Project to address high risk groups (sexual workers, prisoners, street children, hotel employees, casual sex workers port employees), including training, monitoring and evaluation. Barbados has had some experience in awarding targeted grants to better recognized NGOs and this would continue. Criteria for the qualification and selection of NGOs would focus on their experience, credibility with their target group and financial reliability. The decision to include NGOs would be made annually as part of the annual programming exercise.

Operating Costs. Sundry items, utilities and general operating costs including national consultants will be procured by the PCU using well-tested government of Barbados administrative procedures which were reviewed and found acceptable to the Bank up to an aggregate amount of **US$7,425,000.**

Review of Procurement Actions

Review of Procurement Plans. Every year a detailed procurement plan shall be furnished to the Bank before December for its review and approval. This plan will include: a firm list of contracts to be procured in the next fiscal year; estimated contract costs; schedule for bidding; and method of procurement or of selection of consultants. The plan shall be consistent with the provisions above for the procurement methods for goods, works and the selection of consultants. Once approved the plan is binding and changes will require review and approval by the Bank.

During the fiscal year, if changes are required in the procurement plan a revised version should be submitted to the Bank for its review and approval four weeks in advance to any invitation to bid not included in the previous plan.

Prior-Review Thresholds. The proposed thresholds for prior review are based on the procurement capacity assessment of the project implementing unit and are summarized in Table A.13.8-3.

Project Implementing Unit Procurement Capacity Assessment

A procurement capacity assessment of the CPU was carried out and approved by the RPA on 04/11/2001. The procurement risk is assessed as AVERAGE. The major risks identified and actions recommended to address them are:

a) **Office of the Director (PCU):** The Office is a new agency which will be responsible for coordination of the whole program and will carry out procurement actions for the different ministries,

except for Ministry of Health. The lack of procurement experience in this unit and the need for strong coordination with several ministries should be addressed by hiring a finance officer with procurement experience to assist the Director.

b) **Ministry of Health**: This Ministry will carry out about 66%of the procurement for the project, including all civil works, the majority of goods and specialized consultant services. The Ministry has staff very well trained in procurement, however, with limited experience of Bank procurement. To address this issue, a procurement seminar of one whole week is recommended to all staff working in procurement in the project (PCU, Barbados Drugs Service and all Ministries) as soon as all staff are appointed.

c) **Barbados Drug Service**: This agency will carry out the procurement of drugs (including ARV) and condoms for the whole program. It has excellent experience in procurement of drugs, however, it has not have any exposure to Bank procurement. To address this, BDS should participate in the one week training recommended in (b) above.

d) **Filing**: The Office of the Director will establish such a system to systematically maintain records on all procurement in the project for purposes of auditing reports and to comply with legal covenants in the Loan Agreement. The Ministry of Health will maintain records of its procurement and assure that the Office/PCU has identical information. Initial Bank's supervision missions should validate the establishment of adequate filing system of documents, and electronic data bases on procurement and financial records of contracts financed under the loan.

Frequency of Procurement Supervision

The project will need strong support from the Bank in the first six months particularly to create procurement capacity in the PCU and on Bank guidelines in the Ministry of Health and the BDS. After this initial phase, the project would receive a minimum of one full supervision mission to visit the field to carry out post review of procurement actions, six months after implementation and then one every 12 months. The post-review field analysis should cover a sample of not less than one in five contracts signed.

Table A.13.8-1 Project Costs by Procurement Arrangements[16]
(US$ 000's equivalent)

Expenditure Category	Procurement Method ICB	NCB	Other	N.B.F	Total Cost (including contingencies)
1. **Works**		1.615 (1.370)			1.615 (1.370)
2. Goods					
(a) Equipment		0.400 (0.400)	0.485 (0.485)		0.885 (.885)
(b) Antiretroviral Drugs			4.482a/ (3.534)		4.482 (3.534)
(c) Lab Reagents and Tests	3.735 (3.000)				3.735 (3.000)
(d) Condoms	1.000 (.650)				1.000 (.650)
3. Consultant Services and Training	()	()	3.460 (3.460)	()	3.460 (3.460)
4. Operating Costs b/			2.450 (1.208)	4.975 (0)	7.425 (1.208)
6. Unallocated			0.891 (0.891)		0.891 (0.891)
7. Front-end Fee	()	()	0.150 (0.150)		0.150 (0.150)
Total	4.735 (3.650)	2.015 (1.770)	11.920 (9.730)	4.975 (0)	23.644 (15.150)

Note: N.B.F. = Not Bank-financed (includes elements procured under parallel co financing procedures, consultancies under trust funds, any reserved procurement, and any other miscellaneous items

Figures in parenthesis are the amounts to be financed by the Bank loan/IDA credit.

Footnotes: **a.** Procurement of ARV drugs through direct contracting.
b. Includes CPU staff and national technical staff financed by the Borrower.

[16] For details on presentation of Procurement Methods refer to OD11.02, "Procurement Arrangements for Investment Operations." Details on Consultant Services can be shown more easily in the Table A1 format (additional to Table A, where applicable).

Table A.13.8-2 Consultant Selection Arrangements

(US$ 000's equivalent)

Consultant Services Expenditure Category	Selection Method							Total Cost (including contingencies)
	QCBS	QBS	SFB	LCS	CQ	Other	N.B.F.	
A. Firms			()	1.0 (1.0)		()		1.0 (1.0)
B. Individuals		()	()	()		2.5 (2.5)		2.5 (2.5)
Total			()	1.0 (1.0)		2.5 (2.5)		3.5 (3.5)

Note: QCBS = Quality- and Cost-Based Selection
QBS = Quality-based Selection
SFB = Selection under a Fixed Budget
LCS = Least-Cost Selection
CQ = Selection Based on Consultants' Qualifications
Other = Selection of individual consultants (per Section V of Consultants Guidelines), Commercial Practices, etc.
N.B.F. = Not Bank-financed.
Figures in parenthesis are the amounts to be financed by the Bank loan.

Table A.13.8-3 Thresholds for Procurement Methods and Prior Review[17]

(US$ 000's)

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review
	US $ thousands		US $ millions
1. Works	Any	NCB	All
2. Goods:			
(a) Equipment, Laboratory Reagents, and Condoms	>250 <50	ICB Shopping	All First 2
(b) ARV Drugs	Any value up to $4,482	Direct Contracting of Anti-retroviral Drugs	All
3. Consultant Services and Training	Firms >100 Individuals >50		All n.a.
		Total value of contracts subject to prior review:	8,780

Overall Procurement Risk Assessment:

High	
Average	x
Low	

[17] Thresholds generally differ by country and project. Consult OD 11.04 "Review of Procurement Documentation" and contact the Regional Procurement Adviser for guidance.

Frequency of procurement supervision missions proposed: One every six months during first year of execution; and one every 12 months subsequently

Table A.13.8-4: Allocation of Loan Proceeds

Expenditure Category	Amount in US$ millions	Financing Percentage
1. Works	1.370	100% foreign, 85% local
2. Goods		
(a) Equipment	.885	100% foreign, 85% local
(b) ARV drugs	3.534	90% following determination of capacity to manage, until disbs. reach $3,233,000; 50% thereafter
(c) Laboratory reagents	3.000	90% until disbursements reach $2,831,000; 50% thereafter
(d) Condoms	.650	80% until disbursements reach $500,000; 50% thereafter
3. Consultant Services and training	3.460	100%
5. Operating Costs	1.208	50%
Subtotal	14.107	
6. Unallocated	0.891	
7. Front-end Fee	0.150	100%
Total Loan Proceeds	15.150	

Table A.13.8-5: Disbursement Schedule of Loan Proceeds

(US$ Million equivalent)			
	Year Ending	**Appraisal Estimate**	**Cumulative**
FY 2002	June 2002	3.05	3.05
FY 2003	June 2003	1.6	4.65
FY2004	June 2004	3.1	7.75
FY 2005	June 2005	3.7	11.45
FY 2006	June 2006	2.7	14.15
FY 2007 (a)	December 06	1.0	15.15

(a) Refers to the expected disbursement in the last semester of project implementation.

Table A.13.8-6: Total Cost by Component and Procurement Plan

Type of Expense and Component	Total Cost, All Years US$, 000's	Cost, First Year US$, 000's	Type of Procurement, First Project Year, by Quarter
National Personnel			
- Prevention	1.125	150	Local hiring; Q 1
-Diagnosis and Treatment	3.000	600	Local hiring; assuming 50% contractual, ; Q 1.
-Program Management	.850	170	Local hiring; 50% contractual; Q 1 (and pre-approval)
Sub-total	**4.975**	**920**	
Operating costs			
- Prevention	1.250	200	Shopping; lots < US$50,000; all quarters
-Diagnosis and Treatment	.600	120	Shopping, lots < US$50,000; all quarters
-Surveillance, M&E	.050	10	Shopping; lost < US% 50,000, all quarters
-Program Management	.550	110	Shopping; lots <US$50,000; all quarters
Sub-total	**2.450**	**440**	
Civil works			
-Diagnosis and Treatment	1.615	1,300	NCB; lots>US$150,000; Q 1; Q 3, Q 4
Sub-total	**1.615**	**1,300**	
Equipment & Condoms			
-Prevention	1.475	350	NCB; lots>US$50,000; Q 2; Q 3; Q 4 Condom procurement through PAHO, Q 2;
-Diagnosis and Treatment	0.090	45	Shopping; lots<US$50,000; Q 3
-Surveillance	0.220	80	NCB; lots>US$50,000; Q 3, Q 4
-Program Management	0.100	75	Shopping; lots<US$50,000; Q.1, Q 2
Sub-total	**1.885**	**550**	
Short Term Consultants			
-Prevention	1.075	150	CQ for all individuals; Q 2 for training; Q.4 for end year evaluations
-Diagnosis and Treatment	.700	140	
-Surveillance	.035	35	QBS for Firms; lots>100,000; Q 1 for
-Program Management	.650	110	CQ for all individuals; Q 2 for mid year and end year evaluations
Sub-total	**2.460**	**435**	
Training			
-Prevention	0.750	100	Shopping; lots < US$ 50,000; Q 2, Q 3, Q 4
-Diagnosis and Treatment	0.045	15	Shopping; lots< US$ 50,000; Q 3 (overseas training)
-Surveillance	0.205	100	
Sub total	**1.000**	**215**	
Laboratory Services	3.735	315	Not Bank financed in first project year
ARV Drugs	4.482	378	Not Bank financed in first project year
TOTAL	**22.062**	**4.553**	

II. Financial Management

As part of reviewing the government's readiness to begin to implement the above-named project, during the week of April 9-13, 2001, the Bank carried out a Financial Management (FM) Assessment. As stated in the Bank's *FM Assessment Toolkit*, the objective of this exercise is to assess whether the project complies in all material respects with the FM requirements of the Bank. Additional objectives are to agree with the borrower to an Action Plan for establishing the mechanisms necessary to manage and control project funds, and to identify areas where the Bank can be of assistance in this process (Attachment 1).

Agreed-to Framework for Project Financial Management.

Discussions held during the assessment resulted in an operational framework for project financial management. The project is to be coordinated by a central Project Management Unit (PMU), located in the Office of the Prime Minister (OPM). This unit will include a Financial Officer, trained as an accountant who will coordinate and organize all project financial management activities. Each of the six Ministries involved will have their own budget for the project (the vast majority of expenditures will be incurred in the Ministry of Health and OPM), and will make expenditures under the uniform budgetary categories of the HIV/AIDS program. The Accountant General will control the Special Account and periodically (approximately monthly) reimburse the government's Consolidated Fund with a transfer from this account.[18] The Accountant General will promptly inform the PMU as to expenditures reimbursed, so that the PMU can make the necessary accounting entries and prepare loan account withdrawal applications.

Staffing – Responsible Party for Project Financial Management.

The OPM will contract a Project Financial Manager/Accountant. This person should understand government accounting procedures, including the Smart Stream system, while also having strong skills in accounting and the use of computers. His/her main responsibilities will include accounting, preparation of financial reports for project management, preparation of disbursement applications, and liaising with all of the implementing ministries as well as other entities such as the Accountant General's Office and the project's audit firm. A model Terms of Reference for a Project Financial Manager/Accounting Specialist is attached as Attachment 2.

Funds Flow from the Bank to the Project.

The project will disburse via traditional Bank disbursement procedures, under which an initial advance – the amount of which is fixed in the loan agreement – is made to the US$ Special Account following the submission of the first withdrawal application, and subsequent replenishments to the account are made based on transaction listings of disbursements made (Statements of Expenditure – SOEs) submitted to the Bank on approximately a monthly basis. At the same time, the project will produce quarterly Project Management Reports (PMRs -see Attachment 3) which include a financial report, a discussion of project progress including a summary of project implementation indicators, and a report on procurement and contract management. The initial PMR financial reports will focus primarily on cash balances, expenditures made classified in accordance with the agreed Chart of Accounts (see below), and Special Account activity. Should the government eventually decide to disburse via PMRs instead of SOEs, the financial report would need to be augmented with more detailed information about disbursements made (PMR Report 1-D) and a forecast for the subsequent 2 quarters of project activity (Report 1-E), which would serve as the primary basis for advances to the Special Account. For large purchases the government will have the option to submit a request for a Direct Payment from the Bank to the supplier, but the PMU should maintain appropriate communication with the Accountant General's Office to ensure

[18] No local currency bank accounts will be established for the project, as all expenditures will be made via government budgetary/disbursement procedures (i.e. from the Consolidated Fund).

that any payments made are incorporated into the Estimates of Expenditure and project accounting records.

The OPM would be responsible for preparing and approving the SOEs and PMRs, although disbursement applications may also require sign-off from the Ministry of Finance and Planning. Authorized signatories should be sent to the Bank once the loan agreement is signed.

Chart of Accounts.

An important aspect of keeping project accounting "simple" will be the establishment of a straightforward Chart of Accounts which allows for the tracking of all key elements of the program. It was agreed that the MH will immediately work to unify all budget classifications for any HIV/AIDS program-related expenditure that appears in the current government budget. Then, following loan signing, this effort will be further extended by the then-functioning PMU, so that the Budget Office of the Ministry of Finance and Planning will create the budget classifications necessary for project accounting. The budget classifications will represent the accounting structure of the project, and are expected to be roughly as follows:

Program: HIV/AIDS Prevention and Control

Subprograms: The 3-4 Project Components (e.g. Treatment), to be defined in the Project Appraisal Document (PAD)

Items: The disbursement categories (e.g. Civil Works), to be specified in the Loan Agreement, Schedule 1 (see Table A8-4)

Sub-Items: A further breakdown of the Items (this level is flexible, and can be used for any desired dis-aggregation of project expenditures)

In this way the Chart of Accounts will capture the essence of the project design, while at the same time being integrated into the government's budgetary framework. The PCU will monitor the project accounts via a reporting mechanism which will be set up by the Accountant General's office (see below).

All loan-financed expenditures would be included only in the budgets of the MH and OPM – with all expenditures in other Ministries being accounted for as counterpart funds. This type of arrangement would need to be clearly spelled out in project documents, including Schedule 1 of the loan agreement, so that no confusion is caused in accounting and disbursement processes.

Financial Reporting

Most project financial reporting would be done via the Smartstream System. An obstacle to this is that currently most ministries have very limited ability to produce financial reports, due to constraints in the hardware and software of the system. Reporting is therefore generally centralized in the Accountant General's office. For the project, it was agreed that the OPM and other Ministries will be provided with appropriate access rights and reporting capabilities. It is recommended that the PCU and MH have full rights to view all program information and create the consolidated financial reports required, with other ministries having access rights consistent with existing government practices. Report formats (e.g. for PMRs, other management reports, and annual audited statements) will be arranged between the PCU, Accounts Department in the MH, and the Accountant General so that the project Financial Manager will be able to manipulate information and generate reports as needed.[19] Models for the PMRs and the annual audit report are available electronically on the website referred to above. For PMRs, as stated earlier in this report, the Reports 1-A and 1-B are most important, and for these reports, the "Planned" and "Variance" columns are not considered to be critical.

[19] The Financial Manager will not be able to "override" the entries of the ministries, but will need to have full capabilities to manage and report this information.

Funds Flow within the Project.

Expenditures will be made within the Ministry where the budget lies, in the same way that normal government expenditures are made. This process is explained above, as well as in the Bank's in-process CFAA. Stated briefly, each of the six Ministries involved, as well as the OPM, will be given a "vote" (budget) for the relevant subcomponents that it may be responsible for. Expenditures are entered into the Smartstream system and approved within the Ministry. Receipt of the goods or services is recorded by the same Ministry, and this "receipt into the (Smartstream) system" is then acted upon by the Treasury, which approves payment and produces a check. The check is sent to the Ministry, which then delivers it to the supplier. This process, especially as it specifically applies to the project, will be explained in more detail in the Financial Manual (see Attachment 3).

Internal Controls including Control of Assets

The project will establish reporting relationships, approval procedures, and other processing-related internal controls, and document these within the Financial Manual (which forms part of the Operational Manual.) Included in this manual should be a description of how assets – especially large-volume (e.g. condoms) or high-value (e.g. medicines/drugs) assets – will be purchased, maintained, and distributed. The control risk over medicines is considered to be mitigated to a large extent by the expected heavy involvement of the Barbados Drug Service, a government-run service that procures drugs for the country's pharmacies but generally does not inventory them. The Drug Service has a good reputation for handling the types of activities that it will deal with under the project.

Retroactive Financing of Eligible Expenditures

Retroactive financing of eligible expenditures from a approximately May 15, 2001, would be permitted. The exact amount of retroactive financing under the loan would be 10% of the loan value and the types of expenditures that will be financed under such a provision - will need to be determined during the loan preparation and negotiation process.

Project Audit

The project will require a financial audit in accordance with relevant Bank guidelines and international auditing standards. The audit will be carried out by a private auditor, who will prepare an audit report which can be submitted to the Bank within 4 months of the end of the financial year (April – March). Assuming that project processing proceeds as planned, the first audit report would therefore be submitted to the Bank by July 31, 2001.

The GOB will follow Bank procurement procedures in contracting the audit firm for the project. These procedures include the submission of auditor terms of reference - in line with the Bank's model TORs for audits and a short list of audit firms, to the Bank for its No Objection. The procurement process should be started as soon as possible to allow for selection of the firm prior to loan effectiveness. The Bank recommends using the same firm for the life of the project, provided that its performance is satisfactory.

Attachment 1

Action Plan

The following represents a summary of actions to be taken with respect to project financial management, and the approximate time frame for their implementation:

Item	Completed By	Responsible Party
1. Decision as to the ceiling amount and nature of allowable retroactive expenditures	Negotiations	GOB, Bank
2. Selection/Identification of Project Accountant and submission of c.v. for Bank's No Objection (see Attachment 2).	Effectiveness	GOB
3. Agreement as to the project's Chart of Accounts [20]	Effectiveness	GOB, Bank
(i) agreement as to format of quarterly PMRs, with financial section in accordance with agreed Chart of Accounts (see Annex 13.2).	Effectiveness	GOB, Bank
(ii) harmonization of government budget classifications so that all program activities fall under the same coding structure.	Effectiveness	GOB
(iii) Incorporation of Agreed Chart of Accounts into govt. budgetary Framework and the GOB Info. Systems should be requested from the Budget Division of the Ministry of Finance following the completion of loan negotiations.	Effectiveness	GOB, MOF
4. Preparation of a financial manual for the project (including item 1 above: see Attachement 3).		
(i) draft, submitted to the Bank		GOB
(ii) finalized	Effectiveness	GOB, Bank
5. Follow-up financial management assessment to determine implementation readiness and finalize reporting** ** to be combined with a Project Launch workshop.	Effectiveness	Bank
6. Selection of private audit firm	Effectiveness	GOB

[20] Depends mainly on the final definition of the Project Components and Disbursement Categories.

Attachment 2

Example Terms of Reference – Financial Manager / Accounting Specialist

Reporting to the Project Director and Coordinator, the following are indicative Terms of Reference for the Financial / Accounting Specialist:

General

- Every quarter, the specialist, in coordination with the project director and other project officials as required, should prepare the **Project's Management Report (PMR,** Annex 13.1**),** which is expected to include:

- **Financial Statements**. The goal of the financial statements is to report cash inflows and outflows, forecasted cash needs, and Special Account activity.

- **Program Progress Report.** The format and details of this report will need to be developed. Arguably the most important aspect of it will be the accompanying narrative interpreting the progress of the Program with the agreed *milestones* and how costs to date relate to that planned at appraisal, and its likely effect on the Program at its completion. This report is prepared by project management and any relevant technical specialists.

- **Procurement Management** (including Goods, Works and Services).

Specific

- Ensuring that all accounting records and bank accounts are up-to-date using computerized system;
- preparing monthly Bank Reconciliation for all Bank Accounts on a timely basis;
- establishing and maintaining suitable systems of internal control (including over fixed assets, civil works, inventories management and distribution);
- developing a Financial Procedures Manual (See Annex 13.4) within an agreed time frame (and thereafter updating the Manual on a regular basis);
- preparing the project's Budgets/Cash Flow Projections;
- monitoring Program compliance with the Government's Accounting reporting requirements;
- consolidating the Monthly, Quarterly and Annual Financial Statements; selecting accounting policies and accounting standards; determining the need, if any, to include any supplementary notes to the Program's Financial Statements in order to enhance the presentation of a *"true and fair view";*
- preparing Quarterly and Annual Program Financial Statements, as well as reporting on material variances; recommending remedial action, as appropriate, within an agreed time frame;
- ensuring compliance with operating procedures of donors e.g. Procurement, Disbursements, Special Accounts, SOEs, Special Commitments etc); also, liaising with all stakeholders on relevant financial matters and ensuring that the accounting reporting system is responsive to their expectations;
- assessing reports received from internal/external auditors and following up any audit queries/management letters;
- being briefed by the Head of Procurement on procurement issues, as well as evaluating any difficulties being experienced; and
- reviewing information technology issues, including the computerization of accounting records.

Attachment 3

Project Management Report "PMR"

GOB would submit quarterly reports that are prepared for the management of the project and to the World Bank. The exact content and number of reports can be determined as part of project preparation. The following list is consistent with the Bank's Project Financial Management Manual, but the Bank is currently in the process of simplifying its reporting requirements and thus the exact content and format of the PMRs for any given project is subject to agreement between the Bank and the borrower.

1. Financial Statements

- **1-A.** Summary of Sources and Uses of Funds
- **1-B.** Uses of Funds by Project Activity
- **1-D.** Cash Withdrawal
- **1-E.** Cash Forecast
- **1-F.** Special Account Statement

2. Project Progress

Relevant data on project implementation, and narrative explanations of project progress and plans.

3. Procurement Management

- **3-A.** Contract Expenditures Report - Goods & Works
- **3-B.** Contract Expenditures Report - Consultants
- **3-C.** Procurement Management Report - Goods & Works
- **3-D.** Procurement Management Report- Consultants

Attachment 4

Financial Procedures Manual

(Please note that this listing does not purport to be exhaustive):

* **Institutional Arrangements**. Management Structure, Composition, Terms of Reference and Reporting.
* **Chart of Accounts, including Account Coding**. Should capture the project design including disbursement categories and components.
* **Basis of accounting adopted i.e. cash versus accruals**. This section should also discuss how the cash basis accounting is implemented within the governmental system, to the extent that the accounting will be based on existing government processes.
* **Accounting Systems**. Computerized and Manual Accounting Systems. Who is involved, what are the procedures (could refer to software manuals, if any).
* **Planning and Budgeting, including Cash Flow Management**. How will this be handled on the project, and to what extent will these processes be in line with (or separate from) the general government procedures.
* **Withdrawals/Disbursements**. What is the process for preparing and submitting these to the World Bank. Will disbursements be via PMRs or traditional methods (SOEs). What are procedures for preparing the applications, who signs them, etc.
* **Payment and Banking Activities**. Operation of bank accounts; invoice approval and payment procedures (including appropriate supporting documentation and Letters of Credit); cheque signatories; monthly bank reconciliation; transfers etc.
* **Staff, Wages and Salaries**. Including records maintained and payment procedures.
* **Fixed Assets Register**. What information will/does it contain, how will it be maintained (separate from the accounting system or integrated within it), how does the register link to other aspects of internal control (e.g. physical audits, storage of goods, transfer/distribution/retirement of goods, etc.)
* **Legal Covenants**. Discuss main financial clauses, including Article IV (audit) and Schedule 1 (allocation of loan proceeds, disbursement percentages).
* **Project and Financial Reporting**. Including: frequency of reporting; standard formats, accounting standards, accounting policies and variance analysis.
* **Auditing** - internal and external auditors. Attach audit TORs as an Annex.
* **Records Management/Filing Systems**. Including roles and responsibilities.
* **Other relevant aspects**. As described in the Bank's Project Financial Management Manual and as needed under the project.

ANNEX 13.9

Barbados HIV/ AIDS Management, Prevention, and Control Project

Recent HIV/AIDS Prevention Programs in Barbados

Introduction

Historically, National AIDS Programs in the Caribbean were set up under WHO's Global Program on AIDS, in the Ministries of Health. With the transition to the UNAIDS Program in 1996, the global program committed to a multisectoral program involving Ministries of Governmental Organizations, civil society and people living with HIV/AIDS (PLWHA).

Background

Between the years 1995-1998, Barbados the National Advisory Committee on AIDS (NACA) committed itself fully to a multisectoral program designed to transfer ownership of the challenge of HIV/AIDS from government to the individual citizen. To that end, target groups were identified and creative programs established so as to reach a wide cross section of the community. Target groups included primary school children, out-of-school youth, commercial sex workers, religious leaders, parents, and sexually active young people.

Barbados' national program was guided, initially, by the 1992-1997 five-year plan. In 1997, NACA, after extensive consultations with the Ministry of Health's Chief Planner, QEH's AIDS Education Officer, a technical adviser from CAREC and the UNAIDS representative produced the 1998-2002 National Strategic Plan. One of the cornerstones of this Policy would be the inclusion of PLWHA at every level in the program and empowerment of this group which is critical to the growth of the program.

Multi-Sectoral Response to HIV/AIDS in Barbados, 1995-1998

Barbados' Ministry of Education, Youth Affairs, and Culture joined with NACA and the MH in a series of workshops for *primary and secondary school principals, guidance counselors and selected teachers.* These workshops were based on a UNICEF Workbook Program which had been field-tested in Barbados. Subsequent to this, the Ministry of Education has moved towards the incorporation of age-appropriate HIV modules into their curriculum. This program had attracted some funding from the German Government (GTZ) and CAREC.

Peer education was used in a pilot project in the secondary schools, Teenage AIDS Prevention, partially funded by the private sector. This project trained forty peer counselors from ten secondary schools. The significant private sector interest in this project was not pursued but this program is considered one of the most important projects which should be built on to ensure sustainability.

Out-of-school youth were targeted primarily in their communities using a short, seven-minute AIDS video based on a dub song, "*Fatal Attraction..*" In collaboration with service clubs (Optimists, which produced the video, and the Leo Club which provided the "community bridges"), this video was used by the NACA Chair as the basis of community education.

The Ministry of Education, Youth Affairs, and Culture's *Youth Commissioners* were identified as another means of educating out-of-school youth. An initial workshop with the *Youth Commissioners* provided basic education and sensitization. This initiative resulted in a number of well-attended community events at which the AIDS program provided the resource persons and the *Youth Commissioners* ensured community-based audiences.

The *Commercial Sex Workers* program was carried out between two Public Health Inspectors and NACA's Chair. A number of brothels were visited to provide education (and condoms) initially for the proprietors who in turn brought the sex workers together for education as well as encouraging regular health checks and testing. The sensitivity of this issue was brought to the attention of the Attorney General (Ag) at the time. This program also attracted funding from CAREC/GTZ.

A series of workshops was held with the National Conservation Commission so as to educate *beach rangers* and *lifeguards*. It was envisioned that they would have in turn been able to provide education on the beaches.

Religious leaders of both the established Church (through the Barbados Christian Council) as well at the Evangelical Churches (through the Barbados Evangelical Council) were targeted in two workshops in 1995 and 1996. This was followed by a numerable request to the AIDS Program to address churches.

Chair of NACA was invited to address the Anglican Synod, the Barbados Christian Council and met with the Roman Catholic Bishop, Bishop Galt. Harlem's "Balm in Gilead" program provided a follow-up to this initiative as she shared in the events of AIDS Awareness Week in 1996.

Parents were targeted through the National Council of Parent Teachers' Association (NCPTA). A simplified module was presented to them explaining the salient points in the information being presented in the Schools. The Program met with the Central Executive of the NCPTA.

Initiatives designed to reach *sexually active youth* included an initiative which saw the West Indian Cricket Team signing a T-shirt and then the sale of these by NACHA members at Kensington Oval during a Test Match. We also used former Barbadian Cricketers who were on the West Indies Team to do short public service announcements using cricketing analogies, "*glove up before you go out the bat.*"

NACA also joined with Hardcore Promotions to co-produce a Bujo Banton Show, billed around "*Cover the Willy*". The erection of a Tent at the Stadium from which volunteers distributed thousands of condoms between 6:00 p.m. and 1:00 a.m., allowed interaction with thousands of young people who may not otherwise have attended any HIV/AIDS presentation. NACA and AIDS Society of Barbados also had a presence at all the major national festivals where brochures and condoms were distributed. A Kadooment Band was also produced in 1996.

In 1996, an AIDS Awareness Week was introduced. This was intended to increase aware of AIDS, building up to World AIDS Day on December 1. Under this initiative, service clubs and corporate Barbados were targeted in an initiative which saw Service Clubs manning a Food Collection Drive at a number of Supermarkets. This food was earmarked for the AIDS Food Bank. NACA decided to make this an annual event in which the PLWHA would always play an important part.

It was agreed that a television promotion should be done every six months. Its policy of carrying out focus groups within the group being targeted, prior to production of the public service announcements, was instituted. Public sector training was done by the Ministry of Health and NACA across Government Ministries in a vertical fashion in a series of workshops between 1995-1997.

Status of HIV/AIDS Prevention Programs in Barbados

Of all these programs, only that with the Primary Schools has been sustained. The programs for commercial sex workers and out-of-school youth have not been built on. The program with religious leaders was scheduled to have been extended to young pastors and clergy across the spectrum but has not been done. Similarly, the initiative with the NCPTA's has not been continued. Annual workshops for the core of young peer educators in the schools would provide continuity of the program. Two sets of students should be trained – first formers to target the influx of new students entering secondary school every year and third formers to reach the fourth and fifth formers. This would ensure sustainability of the project. The private sector (i.e., Texaco) had shown interest in this proposal. These peer educators would in turn be encouraged to design programs of community outreach to reach the school's neighboring communities. This would be done in collaboration with the Ministry of Social Transformation.

It will be important to ensure monitoring and evaluation for every program, and if successful, attract resources (human and capitol) to ensure continuity. The German Government (GTZ) and CAREC had promised to fund such an evaluation tool which could be applied to several projects.

Advocacy was also seen as a priority area. Under this heading, NACA Chair addressed a wide range of organizations and groups, among them:

Permanent Secretaries of Barbados; Caribbean Ministers of Education; Insurance Association of the Caribbean; Barbados Workers' Union; Barbados Christian Council; Anglican Synod; Barbados Chamber of Commerce; Barbados Association of Professional Engineers; Barbados Family Planning Association; National Council of Parent Teachers' Association; Service Clubs; Nation Newspaper; Staff of Radio Liberty.

Gaps in the program included the following:

- Sensitization of the Cabinet;
- adequate documentation of projects;
- targeted research;
- programs for two key government sectors, tourism and transport; and
- programs targeting men having sex with men.

There continues to be a need to involve PLWHAs in all the programs. The empowerment of this group remains a priority but a difficult task.

There are several important needs:

a) **To ensure continuing representation of PLWHAs at the highest level and in the implementation process;**

b) **To have the National Strategic Plan approved by Cabinet**. This document based on the UNAIDS document format, was compiled by NACA after consultation and with the assistance of the Chief Planner, Ministry of Health, the Health Education Officer, Queen Elizabeth Hospital, the UNAIDS representative and CAREC. The two areas accorded priority were *"Care and Management" and "Legal and Ethical Issues";*

c) **To strengthen existing NGOs, in particular, the AIDS Society of Barbados**. In 1995 a network of people in the field of HIV/AIDS, *"Barbados HIV/AIDS Network"* was formed. It was a network reflecting the Barbados situation and therefore included Government agencies, NACA, NGOs, and individuals in the field of HIV/AIDS. It was launched after initial workshops coordinated by the Ministry of Health and PAHO, and had an initial membership of 64 individuals/organizations. After the initial enthusiasm, this network floundered due to burnout, relocation of members and an inability to sustain the Secretariat functions. Similarly, *Artists Against AIDS,* which was formed in 1996 and after a weekend workshop with NACA held their own workshop in Queen's Park for the public, suffered a similar lack of sustainability. As Barbados moves to a full multisectoral program, note must be taken of the need to attract human resources and funding to strengthen NGOs, which should be a vibrant partner in this program.

ANNEX 13.10

Barbados HIV/AIDS Prevention and Control Project

Guidelines for the Use of Antiretroviral Agents[21]

Table A.13.10-1. Goals of HIV Therapy and Tools to Achieve Them

Goals of Therapy

- Maximal and durable suppression of viral load
- Restoration and/or preservation of immunologic function
- Improvement of quality of life
- Reduction of HIV-related morbidity and mortality

Tools to Achieve Goals of Therapy

- Maximum adherence to the anti-retroviral regimen
- Rational sequencing of drugs
- Preservation of future treatment options
- Use of resistance testing in selected clinical settings

A. Criteria for Selecting Patients for the Initiation of Antiretroviral Therapy (ART)

Initiation or changes in ART should be guided by monitoring the laboratory parameters of plasma viral load (RNA particles—copies—of HIV) and CD4+ T cell count, as well as the clinical conditions of the patient. The following criteria are used for initiation of ART therapy:

- All patients with symptomatic HIV infection, regardless of CD4+ count and viral load levels;
- All patients with CD4+ counts below 350/mm3; and
- All patients with viral load above 30,000 copies/ml by RT-PCR essay (Roche).

B. Measuring Viral Load and CD4+ for ART Decisions

Measurement of plasma viral load should be performed at the time of diagnosis and every three to four months thereafter in the untreated patient (see Table A.13.10-2). CD4+ cell counts should be measured at the time of diagnosis and generally every three to six months thereafter. These intervals between tests are merely recommendations and flexibility should be exercised according to the circumstances of the individual case. Viral load levels should also be measured immediately prior to and again at two to eight weeks after initiation of ART. This second measurement allows the clinician to evaluate the initial effectiveness of therapy, since in most patients adherence to a regimen of potent anti-retroviral agents should result in a large decrease in viral load by two to eight weeks.

[21] From "Safe and Effective Use of Antiretroviral Treatments in Adults" published by UNAIDS, IAS and WHO (Jan.2001), and the Guidelines developed by the Panel on Clinical Practices for Treatment of HIV Infection convened by the Department of Health and Human Services and the Henry J. Kaiser Family Foundation (Feb 5, 2001).

Table A.13.10-2. Viral Load (HIV RNA) Measurements in Monitoring ART

Viral load suggested for therapy initiation	Above 30,000 copies/ml by RT-PCR
Target level of viral load after initiation of treatment	"Below limits of detection" (50 or less copies/ml RT/PCR <400 copies may be acceptable in some settings
Timing the target response	"Below the limits of detection" within 3- 4 months of initiating ART. (In patients with high levels of viral load, maximal suppression may not be for 6-8 months)
Frequency of viral load measurements	At baseline: 2 measurements 3-4 weeks apart Within 1 month therapy started to confirm anti-viral activity of the regimen Every 2 months until viral load is below limits of detection Every 3-4 months thereafter together with CD4 count

The viral load should continue to decline over the following weeks and in most individuals becomes below detectable levels (currently defined as <50 RNA copies/ml) by 16-20 weeks. However, the absence of a virologic response of the magnitude above should prompt the physician to reassess patient adherence, rule out malabsorption, consider repeat RNA testing to document lack of response, and/or consider a change in drug regimen.

Once the patient is on the therapy, viral load testing should be repeated every three to four months to evaluate the continuing effectiveness of therapy. With optimal therapy viral levels in plasma at six months should be undetectable, that is, below 50 copies of HIV RNA per ml of plasma (5). If viral load remains detectable in plasma after 16-20 weeks of therapy, the test should be repeated to confirm the result and a change in therapy should be considered.

C. Monitoring the Efficacy of ART

Clinical improvement and favorable results of CD4+ and viral load tests are critical assessments of the ART efficacy.

Clinical Indicators

- Body weight gain
- Increased lymphocyte count
- Decrease frequency/severity of opportunistic infections
- Decrease occurrence /severity of HIV related malignancies

CD4+ Count

Rise of CD4+ count is indicative of treatment efficacy. A median increase in CD4+ cells of about 100 – 200 cells per year is expected in patients with undetectable viral load. Following initiation of ART the "CD4+ response" is slower than the "viral load response." A reasonable frequency of CD4+ count in patients under ART is every three to six months.

Viral Load Count

- Viral load should be measured within one to three months after initiating ART as a check for its effectiveness.

- When other indicators show unfavorable response to ART, viral load count should be performed.

D. Testing for Drug Resistance

- **Genotyping assays** detect drug resistance mutations that are present in the viral genes (i.e., RT and protease). Genotyping assays can be performed relatively rapidly, such that results can be reported within one to two weeks of sample collection. Consultation with an expert in HIV drug resistance is encouraged to facilitate interpretation of genotype test results.
- **Phenotyping assays** measure the ability of viruses to grow in various concentrations of anti-retroviral drugs. They are generally more costly to perform compared with genotyping assays. Interpretation of phenotyping assay results is complicated by the paucity of data on the specific level of resistance that is associated with failure of different drugs. Again, consultation with an expert may be helpful for interpretation of test results.

E. Use of Resistance Assays in Clinical Practice

- Resistance testing appears to be a useful tool in selecting active drugs when changing anti-retroviral regimens in the setting of virologic failure.
- There are currently no prospective data to support the use of one type of resistance assay over the other (i.e., genotyping vs. phenotyping) in different clinical situations. Therefore, one type of assay is generally recommended per sample; however, in the setting of a complex prior treatment history, both assays may provide important and complementary information.
- The currently favored approach is to reserve resistance testing for cases in which viral load suppression was suboptimal after initiation of therapy, although this may change as more information becomes available on the prevalence of resistant virus in anti-retroviral naïve individuals.

F. Considerations for Discontinuing Therapy

- Patients who have begun highly active ART (HAART) at CD4 T cell counts >350/mm3 may wish to discontinue treatment. There are no clinical data addressing whether or not this should be done or can be accomplished safely.
- Potential benefits include reduction of toxicity, drug-drug interactions, selection of resistant variants, and improvement in the quality of life.
- Potential risks include rebound in viral replication and renewed immunologic deterioration. If the patient and physician agree to discontinue therapy the patient should be closely monitored.

G. Adherence to Therapy in HIV Disease

- A high degree of adherence is necessary for optimal virologic suppression with ART.
- 90-95% of doses must be taken for optimal suppression. Lesser degrees of adherence are often associated with virologic failure.
- Non-adherence in patients on ART is the strongest predictor of failure to achieve viral suppression below the level of detection.
- Imperfect adherence is common. One-third of patients may miss doses.
- Reasons for missed doses: forgetting, being too busy, being out of tow, being asleep, being depressed, having adverse side effects, and being too ill .
- 70% adherence among the homeless was achieved utilizing flexible clinical staff, and

incentives.

- Predictors of poor adherence to HIV medications:
  a) Poor clinician-patient relationship;
  b) active drug and alcohol use;
  c) active mental illness, in particular depression;
  d) inability to patients to identify their medications;
  e) lack of reliable access primary medical care;
  f) medication side effects; and
  g) domestic violence and discriminations.
- Predictors of good adherence to HIV medications
  a) Availability of emotional and practical life supports;
  b) ability of patients to fit the medications into their daily routine;
  c) understanding that poor adherence leads to resistance;
  d) recognition that taking all medication doses is important; and
  e) feeling comfortable taking medications in front of people

H. Adherence to Highly Active Anti-Retroviral Therapy (HAART)

Patient-Related Strategies

1. Inform patient about, anticipate, and treat side effects
2. Simplify food requirements
3. Avoid adverse drug reactions
4. If possible, reduce dose frequency and number of pills
5. Negotiate patient commitment to an understood treatment plan
6. Take time, multiple encounters to explain therapy goals and need for adherence
7. Assess readiness for ART before the first prescription
8. Recruit family and friends to support patient for adherence
9. Develop plan for regimen, food, daily schedule, side effects
10. Provide daily or weekly pill boxes, alarm clocks, pagers, and other aids for adherence
11. Develop adherence support groups

Clinical and Health Team-Related Strategies

1. Establish trust
2. Serve as educator, source of support and monitoring
3. Provide access between visits for questions/problems
4. Intensify monitoring in periods of low adherence
5. Consider impact of new diagnoses on adherence

6. Use nurses, pharmacists, peer educators, volunteers, drug counselors, etc. for reinforcing adherence
7. Provide training for support team related to ART and adherence
8. Add continuity-of-care to improve patient access
9. Use directly observed therapy (DOT)

Table A.13.10-3. Antiretroviral Drug Regimens

NOTE: ART regimes include one choice from column A and once choice from column B. Drugs are listed in alphabetical, not priority, order.

Strongly recommended	**Column A** Efavirenz Indinavir Nelfinavir Ritonavir+Indinavir* Ritonavir/Lopinavir* Ritonavir + Saquinavir* GC@ or	**Column B** Stavudine + Didanosineπ Stavudine + Lamivudine Zidovudine + Didanosine Zidovudine + Lamivudine
Recommended as alternatives	**Column A** Abacavir Amprenavir Delavirdine Nelfinavir + Saquinavir-SGC Neviparine Ritonavir Saquinavir-SGC	**Column B** Didanosine + Lamivudine Zidovudine + Zalcitabine
No recommendation: insufficient data	Hydroxyurea in combination with anti-retroviral drugs Ritonavir + Nelfinavir*	
No recommended: should not be offered	All monotherapies, whether from column A or B** **Column A** Saquinavir-HGC***	**Column B** Stavudine + Zidovudine Zalcitabine + Didanosine Zalcitabine + Lamivudine Zalcitabine + Stavudine

**Zidovudine monotherapy may be considered for prophylactic use in pregnant women with low viral load and high CD4+ T cell counts to prevent perinatal transmission, as discussed under "considerations in the pregnant woman."

*** Use of Saquinavir-HGC (Invirase) is not recommended, except in combination with Ritonavir.

ANNEX 13.11

Barbados HIV/AIDS Prevention and Control Project Prevention and Control Project

Economic and Technical Criteria for World Bank Lending for ART in Barbados[22]

I. Present Status of Barbados Infrastructure and Practices for Providing ART

Antiretroviral Therapy - ART - has been proven effective, under certain circumstances, in delaying the onset of AIDS, reducing opportunistic infections, improving productive life and prolonging life expectancy among HIV-positive persons. However, the country's health system needs a well defined infrastructure for providing ART to ensure these results. The following assessment provides a concise view of the present status of infrastructure in Barbados for providing ART.

Government Commitment. There is a strong political commitment and leadership at the highest level of Government for developing a national effort to treat, control and prevent HIV/AIDS. Besides the obvious concerns of the MH related to the HIV/AIDS situation, there is growing awareness of other government branches on the seriousness of the HIV/AIDS epidemic, and willingness to participate in a national effort to control it.

The MH has been in command of current prevention, control and treatment activities, and now has committed itself as facilitator for other ministries to be involved in a national effort. Although it has a motivated staff to work on AIDS an looks adequately prepared, there seems to be some concern about its future leadership and role when the Prime Minister's Office takes over the responsibility for program implementation.

Access to voluntary HIV counseling and testing (VCT). Pre and post counselling are mainly performed at the QEH Counselling Clinic. The clinic is overcrowded and this negatively affects quality of counselling provided. More, there are no alternatives for expansion of the clinic within QEH building to cope with the rising number of testing requests. The polyclinic network in the island is not fully utilised for access to voluntary counselling and testing.. Some polyclinics perform pre-test counselling, collect blood for HIV testing and send the specimen for testing to QEH. However, in general, when an HIV test is positive, the result is not sent back to the polyclinic. The polyclinic is asked to refer the positive patient to the hospital for follow up. This contributes to a growing cohort of HIV+ persons, which is becoming out of control for the hospital due to inadequate staffing and infrastructure for the demand for care. Yet, the level of organisation and the profile of the personnel within the polyclinics would allow to host voluntary counselling and testing (VCT) facilities.

Enrollment for treatment: The established criteria at the QEH are:

1. A valid Barbados Identification Card
2. HIV patients with CD4 count below 350 cells per mm3. No viral load is taken into consideration.
3. A valid prescription from the HIV/AIDS Clinic Director for adults
4. A valid prescription from the HIV/AIDS Pediatric Director for patients 16 years and under.

Protocol

1. The drugs to be used are available at QEH pharmacy.
2. ARVT drugs would be made available free of cost through the pharmacy attached to the HIV/AIDS clinic only.

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[22] From "Safe and Effective Use of Antiretroviral Treatments in Adults" published by UNAIDS, IAS and WHO (Jan.2001), and the Guidelines developed by the Panel on Clinical Practices for Treatment of HIV Infection convened by the Department of Health and Human Services and the Henry J. Kaiser Family Foundation (Feb 5, 2001).

3. All patients benefiting from free drugs must be known and well documented (name and address) for follow up and accounting purposes.
4. Niverapine will be used for prevention of maternal to child transmission when CD4 count is 350 or above.
5. ARVT will be used for HIV/AIDS pregnant women with CD4 count below 350

Treatment Regimens. The first choice is a triple combination of two *non-nucleoside* reverse transcripatase inhibitors (efavirenz and niverapine) or two *nucleoside* analogues (zidovudine, lamiduvine or zidovudine/lamiduvine) with one *protease inhibitor* (Indinavir or Nelfinavir). Criteria for using these combinations are based on literature reports, drugs available, and cost. However, the main determinant of choosing the triple combination is affordability by the patient The response to treatment has been recorded in terms of : (i) toxicity experienced by patients; (ii) virologic response as measured by viral load counts (very few); and (iii) clinical improvement of symptoms and signs and general status of the patient. The treating doctor's preferences can make cost of ART range from US$ 1,317,oo to US$9, 240.

Follow up of patients includes. CD4 count every three months (4 times/year) and Viral Load every two months (6 times/year). However, this does not occur because financial constraints, especially in the case of the viral load test, which has to be sent to Miami at a cost of US$600 each.

Compliance. Evaluating compliance is done by recalling the patient every two to three months for review of CD4 count, and viral load (when afforded by the patient). Compliance appears as an emerging issue due to low collaboration by patients. This issue has to be properly addressed before expanding access to ARVT to all possible beneficiaries.

Monitoring and evaluation. The treating doctor monitors (i) toxicity experienced by patients; (ii) virologic response as measured by viral load counts (very few); and (iii) clinical improvement of symptoms and signs and general status of the patient. Survival rates are not being used because limited experience so far. Evaluating possible resistance through laboratory and clinical status of the patient is an important part of the therapy protocol.

At present, there is no clear continuum of care of PLWHAs in general, and of psychosocial support in particular from the community to the referral Hospital. Yet, there is clearly a link between the polyclinics and the community. What is clearly missing in the chain is a link between the QEH and the polyclinics.

Capacity to recognize and appropriately manage common HIV related illnesses and opportunistic infections

The 600 bed QEH is the only tertiary care facility in the country. There is also a private hospital with about 30 beds for primary and secondary care. The Pulmonary Unit of the QEH is in charge of the treatment of HIV/AIDS patients. Neither the polyclinics, nor the private sector deal with HIV/AIDS care. All suspected cases from private and public facilities are referred to this unit for care. In 1991, an AIDS Management Team has been set up with multidisciplinary representation: Internists, pediatricians, surgeons, psychologists, nurses, social workers, etc. These people meet once a month to review AIDS cases, treatments and policies. However, in practical terms, apart from those professionals working in QEH, no other health professional is exposed to the daily management of HIV/AIDS infection.

Staffing shortage is a problem to cope with provision of counseling, reception and management of referrals from all, private and public health providers for diagnosis and treatment of HIV/AIDS. Last year, the Pulmonary Unit provided services to 250 HIV persons and has managed 10 to 12 AIDS patients with ART. According to his director (Dr. Timothy Roach), TB as an opportunistic disease is not a problem so far, due to good public health programs and BCG coverage: the island may have six to seven new cases of TB per year.

Blood Safety and HIV Post Exposure Prophylaxis. The existing strategy to ensure blood safety and use of anti-retroviral treatment after exposure have shown success in Barbados over the years. However,

these efforts need to be sustained, and complemented with alternatives to the transfusion of whole blood and blood products, with clear policy guidance and strengthened rigorous infection control practices.

Laboratory services for monitoring immunologic and virologic parameters of HIV infection. and drug toxicity

The QEH laboratory service is well organized and equipped for providing blood, chemistry, parasitology, and microbiology tests. Concerning HIVV/AIDS, it provides adequate quality testing for opportunistic infections, and ELISA for HIV. CD4 testing is available in limited quantities and viral load is not. When ordered by the treating doctor, the blood sample for viral load is sent to Miami for testing, at a cost of US$600. The facilities are now crowded and understaffed for the needs and services being performed. Though the polyclinics are designed to perform basic lab tests, HIV test is available in none of them. This is explained by the government policy to centralize HIV testing in one center for recording purposes.

Assurance of an adequate supply of quality drugs, including drugs for the treatment of opportunistic infections and other HIV related illnesses

The BDS established in 1980 by the MH has implemented best practice procedures supported by appropriate information systems. Good performance was recognized by the WHO, appointing the BDS as a collaborating center for drug supply management.

The drug purchasing process is designed to ensure the availability of drugs for a yearly contracted period (July-June). Once tendering documents are prepared, a bidding notice is posted in the two principal newspapers in the country. The bidding process beginning in November provides a competitive mechanism to purchase the required quality specifications and acceptable past performance at the lower bidders. Eight local wholesalers representing close to 250 international drug companies and local drug laboratory, participate in the bidding.

The bids are presented to the Drug Tender Committee responsible for awarding the contracts to be approved by the Minister of Health. Eventual disagreements from the MH relative to the selection of suppliers are presented to the Cabinet before final decision is made.

The local suppliers are responsible for drug storage and inventory availability, as well as monthly distribution as demanded by public pharmacies and hospitals according to written authorization provided by BDS. This mechanism provides efficient cash flow, reduces storage costs and prevents expiration and obsolescence of drugs.

The BDS has direct management responsibilities on 13 of the public pharmacies located in the polyclinics and district hospitals. The Queen Elizabeth Hospital and the Psychiatric Hospital are supplied with drugs by the BDS on a semi-decentralized scheme. The public pharmacies and most of the country's private pharmacies (close to 80) participate in the distribution and dispensing of drugs. The BDS provides a negotiated mark-up with private pharmacies (32%, including drug distribution to the pharmacies), assuring immediate access and availability to MH patients. The BDS's computerized supply system provides information for the purchasing, patient benefit verification, and private pharmacy reimbursement, inventories controls and point of service dispensing.

Identification of sufficient resources to pay for treatments on a long-term basis

To date, only 15 patients have access to antiretrovirals through the public facilities. These patients pay from their pocket. Some of them manage to seek support from the government welfare program. There are also reports of shipment of antiretroviral drugs trough relatives based abroad.

The government plans to provide ART free of charge to all Barbadians. There is some political dimension for this project since the government already announced in April 2000 that antiretrovirals would be made available to all Barbadians by the end of 2001. Since then, the population is somewhat awaiting the implementation of the announcement. To minimize the cost of the treatments, the government applied to be part of the Accelerating Access Initiative. This has been well received by

UNAIDS, which is willing to work with the Barbadian Authorities within the initiative. Meanwhile, the Government starts some negotiations with certain of the pharmaceutical for price reduction of HIV/AIDS commodities.

In the medium term (when the World Bank loan will be over), the government intends to continue funding the procurement of antiretrovirals through regular funds from its normal budget. According to the Minister of Health, the government prefers to invest on the procurement of those life-saving drugs for the active population than for in any other new health program. The Minister even raised the government is ready to cancel of a project for a new cardiovascular unit in favor of a program on access to antiretrovirals for people living with HIV/AIDS.

Information and training for health professionals on safe and effective use of antiretroviral therapy

At present, those who are aware of safe and effective use of antiretrovirals are the members of the AIDS management team. The current practices on the prescription of triple therapy are not tailored to the socio-economic reality of patients.

Out of the AIDS management team, there is clearly a lack of real knowledge of the standards of care for people living with HIV/AIDS.

Establishment of reliable regulatory mechanisms against misuse and misappropriation of antiretroviral drugs

The current drugs provision and distribution system provides safeguards for proper use of antiretroviral guaranteeing absence of misuse or misappropriation of the drugs.

The following drugs have been part of the last tender and are available in the country: stavudine, nelfinavir, efavirenz, indinavir, zidovudine, and nevirapine. For Zidovudine, a Canadian manufacturer (Apotex) won the bid. This contrasts with the government position to exclusively import HIV/AIDS drugs from the R&D companies.

The current cost of a triple therapy in Barbados varies from 4500 USD to 9500 USD per year. As a matter of comparison, the lowest price for a triple therapy in Uganda within Accelerating Access is 622 USD per year. According to the local distributors of drugs, there is currently almost no markup on antiretrovirals. Given the high cost of these drugs, a 32%-markup will represent an important part of any grant for antiretrovirals. While discussing with some of the distributors, they reported that they are prepared to renegotiate (at a lower fare) their markups with the government if a big program on access to antiretrovirals is implemented. According to the Government, another alternative is to directly involve the BDS in the importation, storage and distribution of antiretrovirals. However, at present, the BDS obviously has not the capacity to take such responsibility.

In summary, main constraints on infrastructure for providing ART are: Funding, insufficient space, and staffing shortage, particularly nursing. However, the MH is refurbishing three government houses, one for an HIV/AIDS patients food bank, another for a "drop in center" (a transient lodging for released hospital patients, or HIV/AIDS patients willing to receive care and guidance, and a third for laboratory services. A third facility (the old building of the nursing school) is being considered to be upgraded/ refurbished for organizing the hospital for AIDS, with some 20-30 beds. The proposed PMPC would supply resources needed to complete the infrastructure that ensures quality and cost effective treatment with ART. The staffing shortage seems a more difficult problem to address because a large number migrate attracted by a good market and salaries in England, USA and Canada mainly. Funding the drug treatment costs (between US$1.3million up to US$9.2 million per year, without including lab testing and follow up) would be a difficult decision if free provision is maintained.

PLWAs do not participate except for a small advocacy group (CARE) organized recently. This is due largely to social stigmatization and lack of confidentiality. However, Civil organizations show interest in

working with AIDS programs and the proposed Government Program has addressed this issue through advocacy and promotion activities.

Surveillance is a major problem. Only the Pulmonary Unit, the laboratory and the MH have records of cases which are handled manually. However, Dr. Roach says that figures are accurate, and quality control and confidentiality are good. CAREC has tried to develop a surveillance system, but the Pulmonary unit is too busy to do it. It seems that staffing shortage is not the only constraint (possibly lack of agreement on some aspects of the approach is also a constraint.

II. Criteria for Assessing Readiness to Scale up ART

GOB's policy is to continue providing ART as a public health measure, and to scale up its initial experience to cover all diagnosed cases. An important part of the WB financed project would be to support creating the infrastructure and develop the know-how needed for this to occur. Prior to doing this, however, it would make a critical assessment of the progress made in improving the environment for ART. The assessment would address technical, medical, infrastructural and financial sustainability questions. A condition for disbursing WD loan proceeds for ART would depend on a positive assessment of these factors.

In this context a team of independent analysts (including : Public Health/HIV/AIDS Program Specialists, a Pharmaceutical Economist, and a Procurement Specialist, financed by the project and agree by the GOB and the WB) would concentrate in assessing:

ART Demand Management in Barbados

a) characteristics of patient enrollment: (i) proposed stage of the disease criteria for accessing ARV (WHO standards); (ii) CD4 plus cell count criteria; viral load at start of treatment criteria; and (iii) what is the criteria for the selection of patients eligible for subsidies?.

b) treatment regimens: proposed dual therapy or triple therapy criteria, as a first line treatment in light of toxicity, virologic non-response, clinical disease progression, and financial affordability.

c) compliance: proposed mechanisms for ensuring good compliance of persons living with AIDS (PLWAs).

d) monitoring and evaluation of survival and immunologic and virological response to therapy and pattern of resistance: (i) proposed mechanisms to monitor and evaluate CD4 plus cell counts; (ii) agreed above baseline and viral load below baseline after one year of treatment.

e) access to antiretrovirals: (i) is the cost of ARV a barrier to treatment?; (ii) what are the proposed mechanisms for procuring and reducing the price of ARV?

ARV Supply Management in Barbados

a) role of ARV in the overall HIV/AIDS prevention and control country program: is the proposed ARV treatment component well complemented with proposed scaling up activities to ensure wider access to a comprehensive care and support package, including IEC among high risk groups and infected persons and their families and communities, voluntary counseling and testing psychosocial support, management of opportunistic infections and palliative care?; what are the proposed mechanisms to expand the geographic access to treatment and monitoring (e.g., expanding the referral system and/or develop a care package for the peripheral centers).

b) capacity to manage and absorb ARV drugs in a clinically controlled situation: (i) Administering ARV drugs requires testing, laboratory, (ii) and tracking infrastructure that is complex and requires a level of skill and experience on the part of physicians for correct case management. Absent this, the use of the drugs raise at yet unknown risk. What is the health care delivery capacity in Barbados?; and what is the practical know-how on the part of physicians and health care professionals to manage ARV?

c) financial feasibility and sustainability: As a public cost, ART would compete for budgetary resources with many other public health programs. Incremental costs of mainstreaming ART would have to be seen as affordable without non-government resources. In this context, is the Government of Barbados planning to allocate more and new funds for ARV treatment access in order not to detract resources from other public health programs and from HIV prevention efforts?, if so, what is the financial proposal or plan?; is the Government contemplating including other stakeholders than government agencies and international donor community for funding wider access to HIV/AIDS drugs (e.g., private companies to buy treatment for their own employees)?.

d) procurement and distribution of HIV/AIDS drugs including ARV into the national pharmaceutical structures: is the Government of Barbados contemplating including the ARVs as part of its essential drug program?; does it have good accountability?; what are the proposed mechanisms for ensuring good storage and distribution control?

III. Analysis of the Financial Sustainability of the Strategy

A usual concern regarding the design of health policies is its sustainability. Financial sustainability refers to the capacity of the health system to provide the future resources required for the appropriate functioning of a given strategy. In the case of ART, ensuring financial sustainability requires an estimation of the future costs of the ARV drugs and other related health care cost and a projection of the expected health care revenues and of costs of other programs.

Estimation of Future Financial Needs

The estimation of the expected costs of ARV treatment should start by a reasonable estimation of the present and future number of eligible patients. Data on HIV infected people are normally missing or underestimate the actual figures, due to the stigma associated with the disease. However, if an ARV treatment is made available free, or at a subsidized cost, previously unrecorded patients are likely to appear. Data on treated patients may therefore not be an appropriate reference figure for projections. There are several modeling approaches that allow making reasonable estimations/projections of future prevalence of HIV/AIDS patients. These models usually require data, estimates or assumptions on the following:

- The incidence of AIDS since the start of the epidemic;
- the average time from HIV infection to AIDS;
- the survival of AIDS patients; and
- the future incidence of HIV infections.

Of course, it has to be taken into account that #1 and #3 have to be changed appropriately to obtain projections of HIV/AIDS patients under the assumption of the introduction of the ARV treatment.

The costs of the ARV drugs—and of the associated health care costs—are easy to compute on the basis of the treatment protocol once the former projections have been obtained. It is much more difficult to forecast the evolution of other costs, namely those related to opportunistic infections and other complications of the disease.

Data from other countries may be acceptable in some cases if local information is missing. For instance, data from clinical trials carried out elsewhere may be used to estimate the changes in the incidence of OIs caused by the introduction of the treatment. However, local studies would be required to assess the patterns of resource use and the unit (monetary) cost of each resource.

The introduction of ARV treatment may reduce the incidence of OI, but the effect on total expenditure is more uncertain, because the increase of survival logically implies an increase in the prevalence. Moreover, it is important to assess the financial and other implications of a reduction in resource use. For

instance, a reduction in hospitalizations is not likely to produce significant financials savings, although it may free hospital beds for other patients.

Projection of Expected Revenues and Expenditure for the Health System

One of the feared effects of introducing an ARV drug program is that it may detract resources from other equally or more important programs. To assess that possibility, financial projections of total health care expenditure and financing should be made. The WHO has developed a tool for that purpose (SIMFIN, Guy Carrin et al. WHO, Geneva).

The projection of health system revenues requires an understanding of the way the system is funded. Projections of GNP and other basic macroeconomic variables may allow a reasonable estimate of the future revenues of the health system if the present financial structure (average tax or social contribution rates) is maintained or if it is modified in a certain way.

Estimations of the likely evolution of the components of health expenditure (other than the ARV drugs program) should also be made, based on past trends and expected changes in demography, coverage, intensity of care, etc.

Comparing projected revenues and expenditures will allow assessing the financial feasibility and sustainability of the proposed ARV drug program and of health policy in general.

If the expected expenditure is larger that the expected revenues, policy makers can either increase the funding of the health care system of decide which programs should be reduced. If none of these options is chosen, some form of spontaneous rationing will take place. The programs more likely to be affected by the scarcity of resources are these, which beneficiaries are more vulnerable, and have less political and social influence.

Opportunity Costs

The introduction (and allocation of resources) of the ARV drugs program has opportunity costs in the form of other programs that will either be eliminated (or reduced) or not introduced. These are ultimately political decisions, but the decision maker should be aware of the benefits foregone by allocating the available resources to ARV drugs program. This would require the economic assessment (by means of cost-effectiveness analysis or similar approaches) of the programs likely to be forgone. The likely volume of resources that ARV drugs treatment may absorb is of such an absolute and relative amount that effects on other programs should not be ignored or overlooked.

Equity Considerations

The equity considerations of introducing ARV drugs treatment should also be considered. If the whole treatment – including diagnostic and monitoring services - is not fully publicly funded and available to everybody, the more disadvantaged groups are not likely to benefit at all from the program. A undesirable but not unlikely scenario, would be one where some basic, universal and highly cost-effective programs—for example, infant immunization—would be reduced, mostly affecting the more disadvantaged population groups—while ARV treatment is only partly subsidized, thus only benefiting middle- and upper-income groups.

Implications for Future World Bank Policy

Any model used to make projections for health system planning is subject to many uncertainties and limitations. The results must be taken as "if...then..." scenarios rather than as predictions or forecasts. Nevertheless, they may help policy makers to make a first assessment of the coherence and feasibility of policies. This seems especially relevant in the present case, where a single intervention has such a relevant resource implication. It is also important to be aware of the high political cost of interrupting a program such as ARV drug treatment, which makes such a decision practically unfeasible.

It seems clear that it makes sense for the WB to provide technical and financial support to the countries for making these previous planning studies, before they commit themselves to implement the program. The same can be said of lending for investments required for its appropriate performance.

It is less obvious the rationale of lending for the countries being able to buy ARV drugs. This may on one hand raise the expectations of other countries of similar and lower income level. If for any reason, the countries are not able to fund the future procurement of ARV drugs, the WB may appear to public opinion as responsible of the discontinuation of the program.

ANNEX 13.12

Barbados HIV/AIDS Prevention and Control Project Prevention and Control Project

Project Processing Budget and Schedule

Project Schedule	**Planned** (At final PCD stage)	**Actual**
Time taken to prepare the project (months)	6 months	
First Bank mission (identification)		
Dominican Republic	09/2000	09/2000
Barbados	02/2001	02/2001
Appraisal mission departure		
Dominican Republic	03/2001	03/2001
Barbados	04/2001	04/2001
Negotiations		
Dominican Republic	04/2001	04/05/09
Barbados	06/2001	
Planned Date of Effectiveness		
Dominican Republic	10/2001	
Barbados	10/2001	

Prepared by: Governments of Barbados led by Minister of Health Phillip Goddard.

Preparation assistance: PHRD Japanese Trust Fund No TF026631.

Name	Specialty
Patricio Marquez	Team Leader, Lead Health Specialist
Girindre Beeharry	Health Economist
Robert Crown	Institutional Development and Operations Specialist
Kundhavi Kadiresan	Institutional Development and Operations Specialist
Son Nam Nguyen	Public Health Specialist
Armando Araujo	Procurement Specialist
Daniel Boyce	Financial Management Specialist
Edward Daoud	Disbursement Specialist
Reynaldo Pastor	Legal Counsel, LEGOP
Eduardo Brito	Legal Counsel, LEGOP
Maria Colchao	Program Assistant
Oscar Echeverri	Public Health Consultant
Alberto Gonima	Management Information Systems, Consultant
Pedro Chequer	HIV/AIDS Specialist, UNAIDS
Steven Colbert	Public Health Specialist, PAHO/WHO
Nina Ferencic	HIV/AIDS Specialist, UNAIDS
Veta Brown	PAHO/WHO Representative for the OECS
James Hospedales	Director CAREC
Uli Wagner	Surveillance Specialist, CAREC

Government of Barbados Team. Rt. Hon. Owen Arthur, Prime Minister; Hon. Phillip Goddard, Minister of Health; Col. Neville Edwards, Permanent Secretary, MH; Dr. Beverly Miller, Chief Medical Officer; Dr. Timothy Roache, Head, AIDS Management Unit; Dr. Carol Jacobs, Chairperson (former), National Advisory Committee on HIV/AIDS; Ms. Denise Taylor, Administrative Officer, MH; Ms. Arlene Husbands, AIDS Coordinator, MH; Ms. Sarah Adamakoh, UWI

Peer Reviewers: Debrework Zewdie, Global HIV/AIDS Coordinator for the World Bank; Keith Hansen, AFRHV; Evangeline Javier, LCSHD; Luiz Loures (UNAIDS). Additional comments and advice were provided by James C. Lovelace, Director, HNP Network.

QER. The panel met on February 16, 2001 and discussed the program proposal with the task team, the country team as well as with other staff. The panel also provided a report with its main findings and recommendations soon after completion of the review. Panel members included:

Panel Chair	: Richard Skolnik
Institutional Issues/Africa Experience	: Alexandre Abrantes
Financial Management	: Robert O'Leary
Procurement	: Armando Araujo
Country knowledge/Community Participation	: Marion Bernard-Amos/ Ty Rose
Technical Quality	: Chris Walker
Economic/Financial Analysis & M&E	: Martha Ainsworth

Comments and advice were also provided by Rene Ruivivar, OPCPS, Suzanne Morris, LOADR; Douglas Arnold, LCOAA, and Ferenc Molnar and Reynaldo Pastor, LOGOP.

ANNEX 13.13

Barbados HIV/AIDS Prevention and Control Project

Documents in the Project File

CARICOM Regional Task Force on HIV/AIDS. Caribbean Regional Strategic Plan of Action, 2000-2004; August 2000

Crown, Robert. Costs and Financing Plan for the Project for the Management, Prevention, and Control of HIV/AIDS in Barbados; March 2001

Echeverri, Oscar. Treatment and Care for Persons Living with HIV/AIDS in Barbados; February 2001

Gonima, Alberto. Design of an HIV/AIDS Surveillance Program, February 2001

Government of Barbados. Comprehensive Program for the Management, Prevention and Control of HIV/AIDS, 2001-2001; January 2001

Jacobs, Carol. Experience of the National Advisory Committee on HIV/AIDS; December 2000

Pimenta, Cristina. Prevention Program for HIV in Barbados; February 2001

Samb, Badara. Conditions for the Generalized Use of Antiretroviral Treatment in Barbados; April 2001

(Unattributed). Factors Affecting Medical Waste Management and HIV/AID;, April 2001

UNAIDS, WHO. Safe and Effective Use of Antiretroviral Treatment in Adults; January 2001

World Bank. Financial Management Analysis of the Project for the Management, Prevention and Control of HIV/AIDS in Barbados,; May 2001

World Bank: Country Procurement Assessment related to the Project for the Management, Prevention and Control of HIV/AIDS in Barbados; May 2001

World Bank. HIV/AIDS in the Caribbean, Issues and Options; March 2001

ANNEX 13.14

Barbados HIV/AIDS Prevention and Control Project

Status of World Bank Group Operations in Barbados

Closed Projects **11**

IBRD/IDA *

Total Disbursed (Active)	0.00
of which has been repaid	0.00
Total Disbursed (Closed)	86.60
of which has been repaid	88.70
Total Disbursed (Active + Closed)	86.56
of which has been repaid	88.70
Total Undisbursed (Active)	0.00
Total Undisbursed (Closed)	1.76
Total Undisbursed (Active + Closed)	1.76

Active Projects

Project ID	Project Name	Last PSR Supervision Rating: Development Objectives	Last PSR Supervision Rating: Implementation Progress	Fiscal Year	Original Amount in US$ Millions: IBRD	IDA	GRANT	Cancel.	Undisb.	Difference Between Expected and Actual Disbursements [a/]: Orig.	Frm Rev'd

CAS Annex B8 (IFC) for Barbados

Barbados
Statement of IFC's
Held and Disbursed Portfolio
As of 11/30/2000
(In US Dollars Millions)

	Held				Disbursed			
FY Approval Company	Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1995 Almond Resorts	0	1.08	0	0	0	1.08	0	0
Total Portfolio:	0	1.08	0	0	0	1.08	0	0

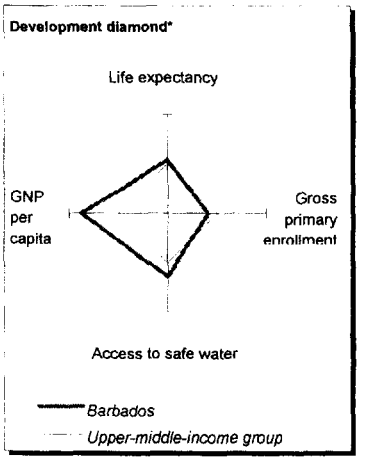
Approvals Pending Commitment

Loan	Equity	Quasi	Partic

Barbados at a glance

9/7/00

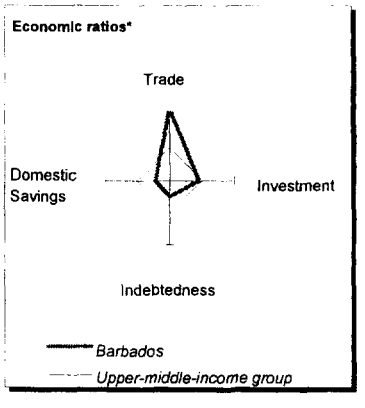
POVERTY and SOCIAL	Barbados	Latin America & Carib.	Upper-middle-income
1999			
Population, mid-year *(millions)*	0.27	509	573
GNP per capita *(Atlas method, US$)*	8,620	3,840	4,900
GNP *(Atlas method, US$ billions)*	2.3	1,955	2,811
Average annual growth, 1993-99			
Population *(%)*	0.2	1.6	1.4
Labor force *(%)*	0.8	2.5	2.1
Most recent estimate (latest year available, 1993-99)			
Poverty *(% of population below national poverty line)*	8	..	..
Urban population *(% of total population)*	49	75	76
Life expectancy at birth *(years)*	76	70	70
Infant mortality *(per 1,000 live births)*	9	31	27
Child malnutrition *(% of children under 5)*	6	8	7
Access to improved water source *(% of population)*	100	75	78
Illiteracy *(% of population age 15+)*	3	12	10
Gross primary enrollment *(% of school-age population)*	90	113	109
Male	90	..	..
Female	91	..	..



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

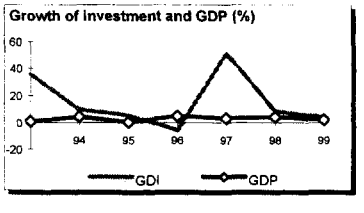
	1979	1989	1998	1999
GDP *(US$ billions)*	0.7	1.7	2.4	2.5
Gross domestic investment/GDP	23.5	19.2	19.3	19.9
Exports of goods and services/GDP	65.4	50.3	53.9	50.4
Gross domestic savings/GDP	12.8	19.1	12.5	10.4
Gross national savings/GDP	15.9	17.4	16.9	14.7
Current account balance/GDP	-5.1	-0.2	-2.4	-5.3
Interest payments/GDP	0.8	2.4	1.3	1.3
Total debt/GDP	23.3	37.8	25.7	..
Total debt service/exports	2.8	11.1	..	..
Present value of debt/GDP	..	..	25.6	..
Present value of debt/exports	..	..	..	..

	1979-89	1989-99	1998	1999	1999-03
(average annual growth)					
GDP	1.9	1.3	4.4	2.5	..
GNP per capita	1.3	0.9	3.4	2.0	..
Exports of goods and services	..	2.8	-1.0	-5.3	..

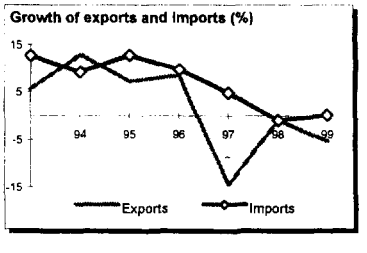


STRUCTURE of the ECONOMY

	1979	1989	1998	1999
(% of GDP)				
Agriculture	9.2	5.2	5.8	6.1
Industry	21.1	18.5	21.6	21.5
Manufacturing	11.4	8.0	9.8	9.3
Services	69.7	76.3	72.6	72.4
Private consumption	71.6	63.0	65.0	67.0
General government consumption	15.6	17.9	22.4	22.6
Imports of goods and services	76.2	50.3	60.6	60.0



	1979-89	1989-99	1998	1999
(average annual growth)				
Agriculture	-1.6	-0.8	-13.3	6.9
Industry	0.8	1.1	10.3	2.1
Manufacturing	-0.9	0.4	3.4	-2.4
Services	2.1	0.8	4.4	2.3
Private consumption	..	3.1	5.8	8.0
General government consumption	..	7.9	8.4	5.5
Gross domestic investment	..	8.5	8.9	4.5
Imports of goods and services	..	6.1	-0.9	0.1
Gross national product	1.6	1.3	3.7	2.4

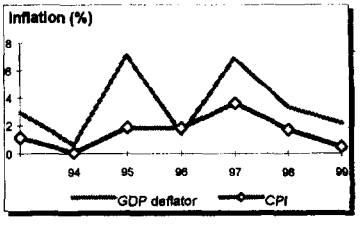


Note: 1999 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

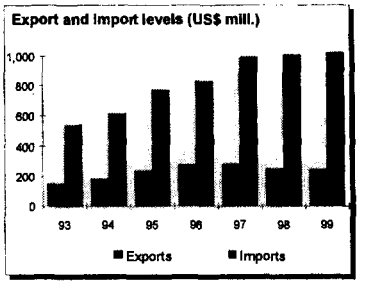
PRICES and GOVERNMENT FINANCE

	1979	1989	1998	1999
Domestic prices				
(% change)				
Consumer prices	13.3	6.1	1 7	0.5
Implicit GDP deflator	12.6	5.3	3.3	2.2
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	..	32.4	31.9
Current budget balance	..	..	4.2	4.0
Overall surplus/deficit	..	..	-1.2	-1.4



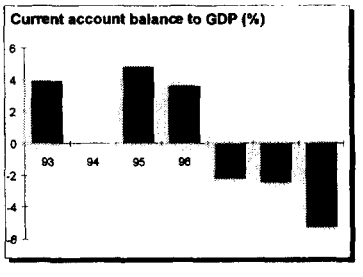
TRADE

	1979	1989	1998	1999
(US$ millions)				
Total exports (fob)	..	.	250	245
Sugar	..	..	29	28
Textiles	..	.	27	26
Manufactures	..	..	107	105
Total imports (cif)	..	..	1,010	1,021
Food	.	.	150	152
Fuel and energy	..	.	46	46
Capital goods	.	..	207	209
Export price index *(1995=100)*	..	..	..	..
Import price index *(1995=100)*	..	..	..	..
Terms of trade *(1995=100)*	..	..	..	..



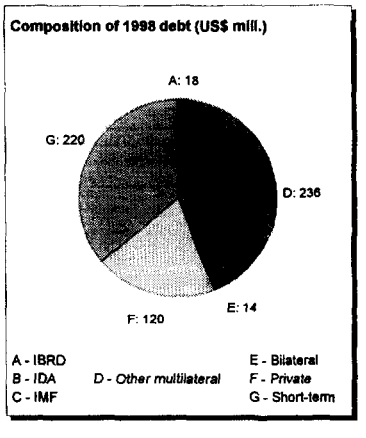
BALANCE of PAYMENTS

	1979	1989	1998	1999
(US$ millions)				
Exports of goods and services	426	887	1,281	1,255
Imports of goods and services	475	863	1,442	1,493
Resource balance	-49	24	-161	-239
Net income	-7	-33	-70	-76
Net current transfers	22	6	174	184
Current account balance	-34	-3	-58	-131
Financing items (net)	39	-40	52	170
Changes in net reserves	-5	42	6	-39
Memo:				
Reserves including gold *(US$ millions)*	..	..	320	359
Conversion rate *(DEC. local/US$)*	2.0	2.0	2.0	2.0



EXTERNAL DEBT and RESOURCE FLOWS

	1979	1989	1998	1999
(US$ millions)				
Total debt outstanding and disbursed	156	644	608	..
IBRD	0	35	18	17
IDA	0	0	0	..
Total debt service	13	102	87	..
IBRD	0	9	5	5
IDA	0	0	0	..
Composition of net resource flows				
Official grants	1	2	4	..
Official creditors	9	6	38	..
Private creditors	-5	-29	-23	..
Foreign direct investment	5	8	15	..
Portfolio equity	0	0	..	..
World Bank program				
Commitments	8	0	0	..
Disbursements	0	3	9	2
Principal repayments	0	6	4	4
Net flows	0	-3	5	-2
Interest payments	0	3	1	1
Net transfers	0	-7	4	-3



DOMINICAN REPUBLIC

HIV/AIDS PREVENTION AND CONTROL PROJECT

TECHNICAL ANNEX

TO THE FIRST PHASE OF THE US$155.0 MILLION
MULTI-COUNTRY HIV/AIDS PREVENTION AND CONTROL
ADAPTABLE PROGRAM LENDING (APL) FOR THE CARIBBEAN REGION

June 5, 2001

CURRENCY EQUIVALENTS

(Exchange Rate Effective June1)

Currency Unit = Dominican Pesos
US$1 = DOP16.1

FISCAL YEAR

January 1 to December 31

ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
APL	Adaptable Lending Program
AZT	Azido-Deoxy Thymidine
CAS	Country Assistance Strategy
CASAD	Santo Domingo Aqueduct and Sewer Corporation
CERSS	Executive Commission for Health Sector Reform
CITS	Referral Centers
CONES	National Higher Education Council
CONEP	National Businessmen Council
COPRESIDA	National HIV/AIDS Council
CORAASAN	Santiago Aqueduct and Sewer
CSW	Commercial Sex Worker
DALY	Disability Adjusted Life Years
DIGECITSS	Sexually Transmitted Infections and AIDS Control Directorate
DOT	Directly Observed Treatment
DPS	Provincial Health Directorate
DR	Dominican Republic
EU	European Union
GDP	Gross Domestic Product
GODR	Government of the Dominican Republic
HAART	Highly Active Anti-Retroviral Therapy
HIV	Human Immune-Deficiency Virus
ICB	International Competitive Bidding
IDB	Inter-American Development Bank
IDSS	Dominican Social Security Institute
IEC	Information, Education and Communication
INAPA	National Institute of Drinking Water and Sewers
LAC	Latin American and Caribbean Countries
LCS	Least Cost Selection
MIS	Management Information System
M&E	Monitoring and Evaluation
MSM	Men Who Have Sex with Men
MTCT	Mother to Child Transmission
NCB	National Competitive Bidding
NGO	Non-Governmental Organization
OSR	Regional Supervisory Office
PAHO	Pan American Health Organization

PCU	Project Coordinating Unit
PEN	2000-2004 National Strategic Plan for HIV/AIDS
PLWHA	People Living with HIV/AIDS
PMR	Project Management Reports
QCBS	Quality and Cost –Based Selection
QER	Quality Enhancement Review
SBD	Standard Bidding Documents
SESPAS	Secretariat of Public Health and Social Assistance
SOE	Statement of Expenditures
STI	Sexually Transmitted Infections
TB	Tuberculosis
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
WB	World Bank
WHO	World Health Organization

Vice President	David de Ferranti
Country Director	Orsalia Kalantzopoulos
Sector Director	Xavier Coll
Sector Manager	Charles Griffin
Sector Leader	William Experton
Team Leader	Patricio Márquez

Dominican Republic
HIV/AIDS Prevention and Control Program

CONTENTS

Annexes

Dominican Republic
HIV/AIDS Prevention and Control Project
Project Appraisal Document

Latin America and the Caribbean Region
Caribbean Country Department

Date: June 5, 2001 | **Team Leader:** Patricio Marquez
Country Manager/Director: Orsalia Kalantzopoulos | **Sector Manager/Director:** Xavier Coll
Project ID: PE-P-071505 | **Sector:** Multi-sectoral
Lending Instrument: Specific Investment Loan (SIL) | **Theme(s):** HIV/AIDS
Poverty Targeted Intervention: [X] Yes [ ] No

Project Financing Data
[x] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other [Specify]

Amount (US$m): 25.0
Proposed terms: [ ] To be defined [ ] Multicurrency
[ ] Standard Variable [x] Fixed Spread Loan in US$

Grace period (years): 17
Years to maturity: 5
Front-end fee on Bank loan: 1%

Financing plan:

Source	Local	Foreign	Total
Government	5.00		5.0
IBRD	15.52	9.48	25.0
Total:	20.52	9.48	30.0

Borrower: Dominican Republic
Guarantor:
Responsible agency(ies):
Estimated disbursements (Bank FY/US$M):

FY	2002	2003	2004	2005	2006	2007
Annual	4.5	6.5	5.1	4.8	3.0	1.1
Cumulative	4.5	11.0	16.1	20.9	23.9	25.0

Project implementation period: 5 years

Expected effectiveness date: 10/15/2001 **Expected closing date:** 12/31/06

Implementing agency: National HIV/AIDS Council/COPRESIDA
Contact person: Dr. Luis Montalvo, Director, COPRESIDA ;
Dr. Jose Rodríguez Soldevilla, Secretary of Health, SESPAS
Address: Edificio Centro de Desarrollo de Recursos Humanos en Salud (CEDERHSA)
Tel: (809) 683-1526 **Fax:** (809) 472-2919 **E-mail:** copresida@hotmail.com

A. Project Development Objective

1. Project development objective (see Annex 14.1)

This project would assist the Government of the Dominican Republic (GODR) in curbing the spread of the Human Immune-deficiency (HIV) epidemic through the scaling up of programs and activities targeted to high-risk groups; expanding awareness about HIV/Acquired Immune-deficiency Syndrome (AIDS) among the general population; and strengthening institutional capacity to ensure the effectiveness and sustainability of the effort.

2. Key performance indicators (see Annex 14.1)

Key outcome indicators for monitoring progress include: (i) the frequency of HIV/AIDS in the Dominican population, particularly among high-risk groups, as measured by the proportion of HIV reported cases/number of HIV tests performed in the general population; (ii) extent of coverage with programs for voluntary counseling, condom promotion, prevention and control of sexually transmitted infections and tuberculosis; (iii) awareness among the population about HIV/AIDS infection and prevention; (iv) proportion of AIDS patients cared for at home; and (v) completeness of a disease surveillance system.

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project (see Annex 14.1)

Document number: 19393-DO **Date of latest CAS discussion**: June 9, 1999

The CAS discusses a number of prerequisites for poverty reduction and sustained growth in the Dominican Republic (DR). Among them is the need for continuing to support social development. Explicit reference is made to an HIV/AIDS project as one of several instruments to increase access by poor people to the benefits of social development and economic growth.

2. Main sector issues and Government strategy

The Issues

The HIV/AIDS Epidemic. The HIV prevalence rate among the adult population is estimated at 2-3%, suggesting that HIV/AIDS is in a transition from a concentrated to a widespread epidemic. Only a fraction of HIV/AIDS cases are reported. The Sexually Transmitted Infections and AIDS Control Directorate (DIGECITSS) of the Secretariat of Public Health and Social Assistance (SESPAS) estimates that approximately 120,000 people in the DR are living with HIV—about nine times the total reported accumulated cases—and that over 16,000 have already died as a consequence of AIDS. In 1998, nine hundred cases of AIDS deaths were reported to SESPAS, making this disease the leading cause of death from infectious diseases. Other studies performed on the general population indicate that AIDS is the principal cause of death among women of reproductive age. [1,2]

The principal means of HIV transmission in the DR is sexual transmission—in particular, heterosexual intercourse, which accounts for about 70% of cases. The majority (81%) of HIV/AIDS cases occur among individuals in their prime reproductive and economic ages, i.e., between 15 to 44 years. The ratio of male to female has varied, and there has recently been a major increase among young women. It is estimated that 4,000 pregnant women who have prenatal checkups are infected with HIV, and may deliver 1,300 infected children in the absence of a program to reduce vertical transmission.[3] It is estimated that

---

[1] F. Cáceres; I. Duarte; A. de Moya; E. Pérez Then, J. Hasbún; and M. Tapia. *Análisis de la Situación y la Respuesta al HIV/AIDS en República Dominicana*, 1998.

[2] Dirección General de Estadísticas, SESPAS. Informe Anual 1998.

[3] PROCETS. Boletín Epidemiológico del Departamento de Vigilancia Epidemiológica. Marzo. 1999.

2.5% of the sexually active population, between 2% and 9% of commercial sex workers (CSW), and 11% of men who have sexual relations with men (MSM) are infected with HIV. Furthermore, 6% of persons who have checkups for sexually transmitted infections (STIs) are infected.

Despite efforts made in the DR to control the epidemic, conditions still exist for it to spread rapidly. These conditions are expressed in high rates of infection of sexually transmitted diseases; high rates of births among adolescent and young women; active migration to and from the country; a growing number of CSW; hidden homosexuality and bisexuality; and stigmatization of the disease that keeps it from being dealt with openly. The existence of a large and hard-to-reach migrant population compound the situation. Over 2 million tourists visit the country each year and there are an estimated 500,000 Haitians residing legally and illegally in the country, most of them young men who migrate to work in the construction and agriculture sectors. Country projections indicate that if current trends continue, HIV prevalence could reach 5% of the adult population by 2005.[4] Studies performed in other parts of the world indicate that when the epidemic reaches these levels, HIV spreads much more rapidly and the country's economic growth is reduced by more than 1%[5] per year.

The reproductive rate[6] of HIV depends upon the time a person remains infectious, the risk of transmission per sexual contact and/or per infected needles, and the rate of acquisition of sexual partners. An HIV-infected person remains infectious about 10 years and his/her capacity to transmit the infection is greatly influenced by behavior. Thus, the challenge facing the DR is to reduce the reproductive rate of transmission by inducing positive behavioral changes in the entire population, but especially in high-risk groups.

The GODR recognizes that the HIV/AIDS epidemic puts the economic and social development of the country in serious jeopardy and considers reducing the rate of HIV transmission a national priority. Apart from having an economic impact on the country due to disability and years of life lost prematurely, HIV/AIDS imposes substantial direct costs on the health system. If the cost of treating an AIDS patient remains constant at the 1998 rate of US$5,000 per year, then the costs of hospital care will increase over 50% from US$4.8 million in 1998 to US$7.4 million in 2005. If anti-retroviral therapy were included, the total cost of treatment would reach nearly US$52.6 million in 2005, or 18.2% of the health budget. The situation is compounded by the emergence of opportunistic diseases associated with HIV/AIDS (some 5,440 cases of tuberculosis due to AIDS are expected for the period 2001-2005). Finally, besides the direct toll on the infected population and on the health system, there is the tragedy of an increased number of orphans—a number that could double from 18,500 in 1999 to nearly 38,200 in 2005.

The Tuberculosis (TB) Epidemic. Tuberculosis is one of the most important public health problems in the DR. The reported case rate in 1999 was 70 per 100,000 population, with a markedly rising trend, as compared with the low rates in Barbados (2.6/100,000) and Jamaica (4.9/100,000). The Pan American Health Organization (PAHO)/ World Health Organization (WHO), however, estimates that the rate is higher than 100 per 100,000 population. The total number of reported cases (5,320) is among the highest in the Latin America and Caribbean region (e.g., Barbados and Jamaica reported 7 and 121 cases, respectively). TB is the principal opportunistic infection and the leading cause of death of HIV/AIDS patients in the country. At the same time, HIV infection has become an important risk for TB patients. Although reliable national figures are not available, some estimates consider that approximately 10% or

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[4] E. Gómez (1996) 'Estimaciones y Proyecciones de la Epidemia de la Infección HIV en República Dominicana, 1986-2000: Prioridades en el Desarrollo de Intervenciones.'

[5] Studies conducted by the University of West Indies suggest that the economic impact of the epidemic will reach around 5% of GDP in Jamaica and Trinidad and Tobago by 2005. If these calculations are to be true, then it can reasonably be surmised that the effect is much higher in the DR, where the prevalence rate is about twice that of the other two countries.

[6] The *reproductive rate* of an infectious disease is the average number of susceptible people infected by an HIV carrier over his/her lifetime. In a population in which HIV has a reproductive rate of less than 1, the epidemic becomes controlled and will tend to disappear or become endemic at low levels.

more of TB patients are HIV+. Therefore, the strengthening of the National Tuberculosis Program constitutes an important contribution to the struggle against HIV/AIDS.

The prevalence of TB and HIV/AIDS also constitutes a serious health problem in Haiti, which borders with the DR. A bilateral plan has been developed by both countries to effectively to control and prevent communicable disease on both sides of the border.

Intrasectoral Fragmentation, Inequitable Access and Coverage, and Institutional Weakness. The heath sector is not poised to respond effectively to the above challenges. The current intrasectoral fragmentation implies that different institutions make policies, set plans, and implement programs more or less independently, resulting in duplication of investments and activities. In principle, SESPAS is responsible for providing health care to 70% of the population. Yet with the 47% of public health spending it controls, SESPAS provides services to only about 45% of the population. The Dominican Social Security Institute (IDSS) controls 29% of public health spending and serves about 6% of the population. The private sector serves about 20% of the population.

Equity is a serious concern; about 20% of Dominicans and 33% of the poor lack or have limited access to health care, particularly in rural and peri-urban areas. Total health care spending represents a modest 5% of GDP per year (below the average in the LAC Region of 7.2%); in comparison with other Latin American countries, public spending on health as a proportion of GDP is among the lowest (about 1.2%). It is also inequitable and inefficient. SESPAS and the IDSS account for 0.8% and 0.4% of GDP, respectively, or 13% and 10% of total health care spending, allowing average per capita spending in the public sector of only US$27, well below the average in the LAC Region of US$97. Direct household expenditures amount to about 2.8% of GDP or 49% of overall health spending; this situation implies that the poorest 40% of the population in addition to suffering a disproportional high burden of disease spend a significant portion of their income on health care, which averages about 9%, as opposed to less than 3% for the non-poor. Expenditures on private health care insurance account for 1% of GDP or 18% of total health spending. Other public and private arrangements, including NGOs, account for the remaining 10% of total health spending.

Important services are neglected, resources are allocated inappropriately, and efficiency is low in the public sector. Public services are mainly curative and located in urban hospitals, depleting resources from primary and preventative services for patients in rural and peri-urban areas. All of the above translates into high user dissatisfaction with government health services. Poor quality medical care is also provided in private settings due to the lack of accreditation standards and monitoring practices to ensure that health providers meet minimum quality standards. Risk selection and exclusion of costly treatments and chronic diseases are common among private health insurers, as commercial insurers, pre-paid group practices, and self-insurance plans operate within a regulatory void.

The Government's Strategy. The GODR's efforts to curb the spread of the HIV/AIDS epidemic are in keeping with the general process of reform in the health sector. Through its Health Sector Reform Program formulated in the second half of the 1990s, the GODR is seeking to improve health and nutrition status of the population, particularly the poor, by facilitating access to quality health services in an efficient and sustainable way. The strategic thrust of the reform program is the gradual introduction to the health sector of elements of political and administrative decentralization, and devising mechanisms to minimize the financial risk of catastrophic health events.

Since 1997, the WB has been supporting a project[7] in support of the reform program. The WB-financed project is complemented by projects financed by the Inter-American Development Bank (IDB), European Union (EU), and the U.S. Agency for International Development (USAID). The WB-financed project is aimed at implementing the following sector strategies:

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[7] Provincial Health Services Project (Report No.17199 DO).

- Establishment of a new legal and operational framework of inter-institutional relations within the sector;
- Deconcentration of sectoral stewardship to Regional Supervisory Offices (OSR) and Provincial Health Directorates (DPS); and
- Reorganization of basic (primary) and specialized (hospital) health services networks following a virtual integration approach.

In March 2001, the GODR promulgated the new General Health Law, which was prepared with the support of the Provincial Health Services Project (Ln.4272-DO). The General Health Law incorporates major changes in the DR's health care organization and financing.

The Government's efforts to stem the further spread of the HIV/AIDS epidemic are in keeping with the general process of reform in the health and other public sectors. As such, the strategic response capitalizes on the opportunity that the reform process offers for making decisions at local level. It is assumed that this approach will make it possible to respond to local needs and make use of the response capacity at provincial and municipal level so that the actions planned for execution can be sustainable.

The Government's response to the HIV/AIDS epidemic incorporates the following elements:

- **Dealing with HIV/AIDS from multiple perspectives—economic, social and cultural—so as to achieve the greatest impact**. In order to prevent and mitigate the impact of the HIV/AIDS epidemic in the country to the greatest extent possible, it is necessary to involve different sectors and actors of the Dominican society.
- **Strengthening and expanding strategies that have been successful and including innovative interventions to address the changing nature of the HIV/AIDS epidemic**. Such strategies include implementation of HIV/AIDS counseling and voluntary testing, control of STIs, reduction in mother-to-child transmission of HIV (MTCT), and home care for the ill provided through the primary care system.
- **Maximizing project impact by focusing on the most cost-effective interventions, typically on that target the frequent transmitters of the virus**. This would help to use available resources, which are insufficient to ensure the financing of an exhaustive package of interventions.[8]

Recent achievements in the realm of HIV/AIDS prevention and control in the DR. These include the following:

- The 1995 promulgation of Law 5593 dealing with HIV/AIDS;
- the preparation and adoption of the 2000-2004 National Strategic Plan for HIV/AIDS (PEN), with the participation of public, private, and community stakeholders, including international donors;
- the launching of HIV/AIDS and STI information, education, and communication (IEC) campaigns targeted to high-risk groups and the general population;
- increased coverage of screened blood, from 80% in 1995 to 95% in 1999, leading to a reduction in the HIV transmission rate due to transfusions of blood and its byproducts from 10% to 1% between 1988 and 1998[9];

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[8] It is estimated that a comprehensive package of services that would include all known prevention measures, surveillance, research, universal provision of palliative care, subsidies for AIDS orphans as well as the provision of highly active anti-retroviral therapy to 50% of infected individuals would cost an unaffordable $254 million annually.

[9] PROFAMILIA. Study among focus groups. Cited by Edward Green and Aldo Conde, "Changing sexual behavior for good," *Global AIDS Link #57*. July/August/September 1999.

- a reduction in the frequency of casual sex and of sex with multiple partners among young people; and,
- increased condom use during casual sexual encounters, as a successful effect of the IEC.[10]

Establishment of COPRESIDA and PEN implementation. The DR's Presidential HIV/AIDS Council known as COPRESIDA was created to spearhead and coordinate the HIV/AIDS strategy at the highest political level on January 8, 2001 (Presidential Decree #32-01). The council is made up of the State Secretary of Health (president), the Director of the IDSS (vice president), an Executive Director, the Technical Secretary to the Presidency, the State Secretary of Education and Culture, the President of the National Higher Education Council (CONES), the Director of the Health Corps of the Armed Forces and the National Police, the President of the National Businessmen Council (CONEP), the President of the nongovernmental organizations (NGOs) coalition against AIDS, and a representative of persons living with HIV/AIDS (PLWHA).

COPRESIDA's key mandate is to coordinate national policy formulation, provide oversight functions and carry out advocacy with regard to HIV/AIDS. COPRESIDA will be in charge of implementing the PEN, attaching greater emphasis on stakeholder participation, improved integration and cross-sector collaboration, and the wider use of effective interventions, such as home-based care, as a means of reducing the pressure on health care facilities.

3. Sector issues to be addressed by the project and strategic choices

The GODR has embarked on health reforms that require substantial political and financial support to bring to fruition. At the same time, it faces social pressures to contain the HIV/AIDS epidemic, within constrained resources. Although it is clear that there is strong political support for issuing national policies and developing action plans to control the epidemic, the challenge is to make these policies operational through a set of priority interventions for HIV/AIDS, STIs, and TB prevention and control. This project is a concrete response to this challenge.

Activities supported by the proposed project are contemplated in the 2000-2004 PEN. The project will provide resources necessary to do the following:

- Building sustainable and proactive institutions to implement the Government's current and future HIV/AIDS strategies and programs;
- scaling up efforts that have been cost-effective in preventing and controlling HIV/AIDS, and undertaking new initiatives to match the changing nature of the epidemic;
- ensure better informed public and private decision-making by establishing a sound basis of analysis and information of disease patterns and trends; and
- supporting activities contemplated under HIV/AIDS Law 5593 that create a more hospitable legal and regulatory framework for the management of HIV/AIDS, and better quality of life and opportunity for PLWHA.

As envisaged in the CAS, the proposed project in conjunction with the WB-financed Provincial Health Services Project and the projects supported by the IDB, EU and USAID, would help to reconfigure the health system, promote integration of public and private services within a decentralized context, and reallocate health expenditures to basic health care for the poor. In addition, the implementation of the proposed project would be closely tied to HIV/AIDS-related activities supported by USAID, UNAIDS, and PAHO/WHO, to ensure complementarity in financial and technical assistance.

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[10] ENDESSA 1996 and ENDESA 1999.

C. Project Description Summary

1. **Project components** (see Annex 14.2 for a detailed description and Annex 14.3 for a detailed cost breakdown)

To support the implementation of the PEN, the project would finance activities grouped under three components:

Component 1: Promotion/Prevention to Reduce HIV Transmission—US$17.20 million. Under this component, the project would support the development of five cost-effective priority interventions:

- IEC activities to reduce HIV/AIDS transmission, with emphasis on high-risk groups;
- condom social marketing programs, with emphasis on high-risk groups
- improved management and treatment of STIs;
- interventions to prevent mother-to child transmission of HIV; and
- quality control of HIV testing in blood bank and laboratories

Component 2: Diagnosis, Basic Care and Support of Individuals Affected by HIV/AIDS—US$4.8 million. Under this component, the project would support the implementation of the following diagnostic and basic care interventions aiming at reducing disability and death due to HIV/AIDS, reducing the reservoir of HIV/AIDS, and mitigating the suffering of children orphaned by HIV/AIDS:

- Organization of voluntary HIV testing with pre- and post-test counseling services;
- support of home care for HIV/AIDS patients;
- establishment of basic AIDS Health Care Units;
- implementation of directly observed treatment (DOT) regimens for TB patients; and
- support to children orphaned by AIDS.

Component 3: Strengthening HIV/AIDS and STI Surveillance; and Project Coordination, Monitoring, Evaluation and Research—US$7.75 million. Under this component, the project would support:

- Improvements in the HIV/AIDS and STI disease surveillance system; and,
- project coordination, monitoring, evaluation and research.

Project Component	Sector	Indicative Costs (US$M)	% of Total	Bank-financing (US$M)	% of Bank-financing
Component #1: Prevention/promotion activities to reduce HIV/AIDS transmission		US$17.20 million	57.4	US$14.3	83.3
Component #2: Diagnosis, basic care and support of individuals affected by HIV/AIDS		US$4.80 million	16.6	US$4.00	83.3
Component #3: Strengthening HIV/AIDS and STI surveillance; project coordination, monitoring, evaluation and research		US$7.75 million	26.0	US$6.45	83.3
Total		29.75	100	24.75	83.3
Front-end fee		0.25		0.25	
Total Financing Required		30.00	100%	25.00	83.3

2. **Key policy and institutional reforms supported by the project**

The proposed project would raise the awareness of HIV/AIDS in the DR and would commit officials and private citizens at the highest level of decision-making to support a national multi-institutional and multi-sectoral mobilization against the epidemic—a mobilization that would support enforcing existing laws and regulations and would encourage institutions, services, patients, families and communities to change their outlook, practices and behavior to prevent and control HIV/AIDS.

The essential focus of the project would be to scale up known and potentially helpful actions to achieve the broadest possible impact on HIV/AIDS prevention and control, using existing institutional relationships and structures. The project would also support the improvement in the quality of care and treatment of PLWHA. The absence of clear regulations favoring privacy and confidentiality, distribution of condoms in prisons, has in some cases, frustrated screening, testing and the prevention of HIV transmission.

3. **Benefits and target population:**

The entire population of the DR will benefit directly from avoidance of HIV infection and AIDS, and from better access to prevention, treatment, care, support and mitigation activities supported by the project. The immediate beneficiaries of the project in terms of reduced exposure to risk and/or increased access to care and support, however, will be the following target populations:

- Street children;
- adolescents in and out of school;
- population with low perception of risk of HIV infection;
- population with signs and symptoms of STIs;
- women who have prenatal checkups;
- commercial sex workers;

- men who have sexual relations with other men;
- health services personnel;
- armed forces personnel;
- other groups at high-risk of HIV infection (inmates, residents of bateyes, inter municipal drivers); and
- PLWHA.

4. **Institutional and implementation arrangements**

Project Implementation. Implementation period: 5 years

Executing agencies. The project will be executed by COPRESIDA, and its Directive Council would serve as an advisory Project Steering Committee. The Director of COPRESIDA would be the Secretary of the Steering Committee, and responsible for the overall coordination of the implementation of PEN and all activities under the project. A Project Coordination Unit (PCU) that would be part of COPRESIDA's organizational structure would support the Director of COPRESIDA. The PCU would be comprised of a Technical Coordination Team, physically located at COPRESIDA, responsible for: (i) leading, coordinating and monitoring project implementation as set forth in the Operations Manual for the project and in coordination with the Provincial Health Services Project; (ii) coordinating technical assistance for the design and implementation of prevention, diagnosis, treatment, care and institutional strengthening activities supported under the project; and (iii) promoting and coordinating inter-institutional and inter-sectoral arrangements for project implementation, including the coordination with HIV/AIDS units in line State Secretariats, and with civil society organizations, private sector institutions, and NGOs (see Annex 14.2-B .

The Administrative-Financial Unit of the Executive Commission for Health Sector Reform (CERSS), that is charge of managing the implementation of the ongoing WB-supported Provincial Health Services Project (Ln. 4272-DO) would also support project implementation in coordination with the PCU's Technical Coordination Team. CERSS was established by Presidential Decree No. 308-97 of July 10, 1997 as a body responsible for integrating government policy-making efforts within a state modernization and reform framework, providing political support for undertaking substantive change within the health sector, leading the reform effort, coordinating international assistance, and managing the implementation of projects financed by international agencies (it currently manages the implementation of WB and IDB-financed projects in the health sector, and the coordination with EU and USAID-financed health projects).

The CERSS' Unit, headed by a Financial and Administrative Director and staffed with professional and support personnel, would be responsible for providing administrative and financial support for all project activities, including the maintenance of accounting records, processing disbursements, maintaining administrative records, contracts, and the carrying out of related activities. This unit would review all contracts and make payments for activities related to the project. To this end, the project would finance the hiring of additional personnel to strengthen the Administrative-Financial Unit of CERSS. During project preparation, the COPRESIDA's PCU staff developed expertise in technical and administrative and financial aspects of investment projects supported by the WB.

Technical and Operational Support. The SESPAS' DIGECITSS, which has broad capacity and expertise for designing and implementing HIV/AIDS prevention and control strategies, programs and activities and for disease surveillance, would provide technical and operational support required during the implementation of the project (see Annex 14.2-C).

International agencies of the United Nations system, such as Joint United Nations Program on HIV/AIDS (UNAIDS), United Nations Children's Fund (UNICEF), and PAHO/WHO, would provide technical assistance for project implementation, as part of their country assistance programs. The PCU would

coordinate with the USAID-supported HIV/AIDS, STI and TB prevention and control activities, and with other donor agencies or governments, to ensure those activities are complementary.

Operations Manual. A draft Operations Manual has been prepared by the COPRESIDA's PCU and sent for WB review. It would be a condition of effectiveness of the project that the COPRESIDA's PCU shall have drawn up an Operations Manual satisfactory to the WB, and be adopted by the Government. It would include the conditions for project implementation, such as environmental guidelines for preparing and implementing project activities, as well as technical norms and administrative, budgetary, disbursements and procurement procedures to be followed during project implementation, which would be reviewed and found satisfactory by the WB. The preparation and adoption of a manual, which contains guidelines and procedures for medical waste handling and disposal related to HIV/AIDS programs, would take place not later than March 31, 2003 (see Section 3.08 of Loan Agreement).

Project Implementation. All public sectors related project activities in the project would be implemented by the respective Line State Secretariats, IDSS, and their HIV/AIDS units, as mandated by the Presidential Decree that established COPRESIDA. The Director of such units in each sector secretariat will oversee the operations in their respective State Secretariats and in the IDSS would be accountable for their project-related activities and results. In addition, State Secretariats and IDSS would actively involve and support their provincial or local level offices to implement the project in their jurisdictions. The Line State Secretariats would present their HIV/AIDS plan for each year to the COPRESIDA's PCU. These plans would be part of the annual implementation plan for the project as a whole. Once approved, financing could follow different paths. For example, in some cases, regular budgets for line State Secretariats may contain earmarked financing for HIV/AIDS prevention and control activities, while in other cases, sets of activities formulated to expand or scale-up ongoing efforts would be financed by the COPRESIDA's PCU.

The civil society organizations, private sector groups, and NGOs would participate in the project in two ways. When preparing their annual plans, the sectoral State Secretariats would involve the related civil society groups/private sector agencies/NGOs in developing their HIV/AIDS plans. For project implementation, civil society organizations, private sector and NGOs could be contracted following criteria and procedures in the Operations Manual. The COPRESIDA's PCU would assist, facilitate and supervise implementation of these activities. The criteria to be used for contracting these organizations would include: technical and efficiency criteria; cost-effectiveness criteria; assessments of their implementation capacity, record keeping arrangements, experience and reputation of the sponsors in technical, organizational and financial matters.

Project Implementation Agreements. For the preparation and implementation of project activities, the Borrower shall enter into an agreement or amend the existing agreement (the Participation Agreements) with the corresponding Participating Entity, and/or cause COPRESIDA and the corresponding Participating Agency (e.g., line secretariats and other public agencies) to enter or amend the existing arrangement between said agencies (the Participation Arrangement), as the case may be, all on terms and conditions satisfactory to the World Bank. Contracts between the COPRESIDA's PCU and civil society organizations, private institutions, and NGOs would be signed following WB's procurement guidelines. Such agreements and contracts reflect the institutional structure of COPRESIDA and aim at fostering a deconcentrated arrangement for project implementation and the participation of other sectoral actors and civil society organization in HIV/AIDS prevention and control, reserving to COPRESIDA's PCU the tasks of coordinating technical assistance and the monitoring of the implementation of project activities.

Arrangements between the COPRESIDA's PCU and participating line State Secretariats and other public institutions. The formulation and implementation of multi-sectoral and interinstitutional HIV/AIDS prevention and control activities would require a great deal of autonomy from COPRESIDA's PCU. Increased autonomy would be linked with greater financial and managerial flexibility by participating institutions and accountability to clearly defined milestones of quality, user satisfaction and

cost-effectiveness. To these ends, upon approval of the corresponding Annual Action Plan by WB, the Borrower shall: (i) enter into an agreement or amend the existing agreement (the Participation Agreement) with the corresponding Participating Entity; and/or (ii) cause COPRESIDA and the corresponding Participation Agency to enter into an arrangement or amend the existing arrangement between said agencies (the Participation Arrangement), as the case may be, all on terms and conditions satisfactory to the WB, including, *inter alia*, the obligation of said Participating Entity or the Participating Agency, as the case may be, to: (i) assist the Borrower in the implementation of the corresponding Annual Action Plan; and (ii) follow the provisions of the Operational Manual and the manual referred to in Part B.3 (f) of the Project in providing said assistance.

Initially, arrangements would be established with the State Secretariats of Education, Labor, Youth, Tourism, and Women Affairs, as well as with CONES, CONEP, and the Armed Forces and Police' s Medical Programs. Said participation arrangements would establish the overall framework for the activities to be carried out under each institution as part of annual implementation plans; such annual implementation plans would be prepared, evaluated and executed in accordance with the Operations Manual for the project. The COPRESIDA's PCU would act as a liaison agency with the WB and, with the support of the CERSS' Administrative-Financial Unit, would be responsible for the procurement and disbursement process pursuant to the WB's applicable rules; in case of non-compliance by any participating institution of any of its obligations the COPRESIDA's PCU may with the agreement of the WB suspend or cancel the financing of any of the activities originally assigned to such institution, and reallocate the respective resources to other institutions. The WB may, on the other hand, decide to exercise its rights set forth in the General Conditions.

Contracts between COPRESIDA's PCU and Civil Society Organizations, Private Institutions, and NGOs. These organizations would be contracted under the project to support the field implementation of interventions targeted at high-risk groups included in annual implementation plans. The signing of contracts following WB procedures detailed in the project's Operations Manual would allow the involvement of NGOs and other civil society organizations in the preparation and implementation of project activities. Contracts and agreements will include the following: (i) objectives and targets; (ii) description of activities; (iii) persons directly responsible for their execution; (iv) timetables; (v) budget; (vi) process and impact indicators; (vii) sources and means of verification; and (viii) supervision and monitoring responsibilities by contracting agencies. The civil society organizations, private institutions and NGOs would be contracted following procedures satisfactory to the WB, including prequalification procedures in national registries, locally advertised, regularly updated and based on qualification criteria, acceptable to the WB.

Accounting, financial reporting, and auditing arrangements. The financial administration of the project (including contracting and disbursement) would be coordinated by the COPRESIDA's PCU, with the support from the CERSS's Administrative-Financial Unit. To facilitate disbursements, a Special Account with a 30-day advance would be established. An independent auditor acceptable to the WB will audit the project annually.

Monitoring and evaluation. The COPRESIDA's PCU would be responsible for project monitoring and evaluation, with support from the HIV/AIDS Units of the line State Secretariats, UNAIDS and PAHO/WHO, as part of their country assistance programs. A well designed and functioning monitoring and evaluation (M&E) system would be critical for the implementation of the project to provide coordinated feedback to the developers, implementators, and policy decision makers at different levels of the system.

There would be two types of M&E activities in the project:

a) **Monitoring of project implementation**. Progress reports regarding project implementation results and expenditure for the preceding six months and a related review of achievements and shortfalls based on established plans and objectives would be sent by the COPRESIDA's PCU to the WB every

six months. The two reports covering the immediate prior calendar semester shall be consolidated into an annual review held by the WB and the COPRESIDA's PCU in the first quarter of each calendar year during project implementation. A mid-term review would be carried out at the beginning of the third year of project implementation to conduct a comprehensive review of the project components. It would include, in addition, an evaluation of the effectiveness of provision of project inputs in achieving key targets for improving program performance using Annex 14.1 details as the basis. The project design would be adjusted, if needed, including realigning budgets among components and activities, on the basis of the mid-term evaluation. Specific surveys can be conducted to obtain data for this purpose. Annual expenditure reviews would be conducted to assess government commitment to HIV/AIDS prevention and control as measured by budgetary allocations and their distribution by activity.

b) **Impact evaluation**. The aim of evaluation is to find out whether the interventions are effective or the program is having the desired impact. The evaluation will include both quantitative and qualitative aspects and be conducted on a yearly basis. The quantitative aspects will rely on new information systems and surveys implemented as part of the various components of the project, currently existing data sources, and primary evaluative data collection efforts. The goal of the qualitative aspect of the evaluation will be to document perceptions of program managers, staff, patients, and local and national leaders. Qualitative information will be collected using site-visit interviews, focus groups, and respondent surveys. A baseline survey to collect information on epidemiological aspects, knowledge, attitudes and sexual behavior, coverage and quality of services, and budgetary allocations for HIV/AIDS and related programs will begin during project preparation and early project implementation. The ex-post evaluation of the overall project will assess if project activities achieved intended results in terms of change in attitudes/behavior, quantity and quality of care for PLWHA, and coverage of the program in the country. The COPRESIDA's PCU will complete an Implementation Completion Report with inputs from the WB, other donors, and the regional agencies. Project evaluation would be conducted by an outside agency.

Supervision. The project is anticipated to require intensive supervision especially in the initial implementation phase because of its multi-sectoral and interinstitutional nature and the fact that this would be the WB's first operation that would operationalize the HIV/AIDS Prevention and Control Multi-Country Adaptable Program Lending (APL) in the Caribbean.

D. Project Rationale

1. Project alternatives considered and reasons for rejection

The following project alternatives were considered and rejected:

An exhaustive versus a limited gamut of interventions. The following areas of intervention were chosen as the priority ones: (i) strengthening of condom distribution and use, control of sexually transmitted diseases[11]; (ii) reducing HIV transmission from mother to child[12]; (iii) voluntary testing and counseling for HIV/AIDS; and (iv) medical care for individuals affected by HIV/AIDS. These interventions do not exhaust the list of possible prevention and control activities. Trying to pursue every single line of activity would have been beyond the collective technical and financial capacity of the various stakeholders. In a simulation exercise carried out in the course of project preparation, it was estimated that some US$254 million would be needed annually to cover an exhaustive list of

[11] The rates of incidence and prevalence of sexually transmitted infections (STIs) are particularly high in the Dominican adult population. Chlamydia is the main cause of infection (15% prevalence rate) among sex workers (TRSX) who have medical checkups. Since 1984, the trend for gonorrhea and syphilis is decreasing; however, it should be pointed out that 75% of strains of Neisseria gonorrhea correspond to those who are resistant to penicillin.

[12] Prevention of vertical transmission to be integrated to existing reproductive health services has been recommended by WHO Consultation Technical Task Team. WHO Technical Consultation on Behalf of the UNFPA/UNICEF/WHO/UNAIDS Inter-Agency Task Team on MTCT of HIV. Geneva 11-13 October 2000.

interventions. Providing this package is unrealistic as it would be tantamount to spending 53% of resources available for the health sector from all sources solely on AIDS prevention and control. An alternative would have been to pursue all known lines of interventions but to make them available to only some of those who need them (i.e., ration by coverage rather than by interventions) in order to respect the budget constraint. The project preparation team felt that this was inadequate because this meant giving the same importance to interventions with wide differences in cost-effectiveness.

Including or excluding highly active anti-retroviral therapy (HAART). The cost of providing HAART to all HIV/AIDS patients in the DR is estimated at US$926 million annually[13]—or twice total annual spending in the country's health sector. Unless the price of HAART goes down substantially, providing such care to all needful patients is clearly beyond the financial means of the country. It was decided that the project would not finance anti-retroviral therapy but that the Government as part of counterpart obligations would provide nevirapine (obtained from the patent-holder or its licensees to prevent the mother-to-child transmission. The project would also provide limited assistance to palliative care and to the clinical management of opportunistic infections[14] so as to mitigate the suffering of AIDS patients and their families.

Vertical or integrated delivery. The selected interventions with cost-effective anti-retroviral drugs will principally be delivered through the primary health care system. The adoption of a primary health care-based approach stems from the need to take into account the process of reform and modernization of the health sector, and of capitalizing on the opportunity that this process offers for making decisions at local level. It is expected that this approach will make it possible to respond to local needs and make use of the response capacity at provincial and municipal level so that the actions planned for execution can be sustainable.

Sectoral versus intersectoral approach. The response of the DR to the HIV/AIDS epidemic has been characterized by a broad partnership involving the GODR, NGOs, religious groups, communities, PLWHA, and local and international donors. The creation of COPRESIDA was an important GODR decision for policy making and implementation through different sectors. The health sector clearly does not have a monopoly on the instruments to promote behavioral changes and to break HIV transmission paths. The proposed project's strategy is to support those efforts that are being conducted outside the strict confines of the health sector and that are demonstrably cost-effective.

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[13] Assuming a prevalence rate of 2.8%, a population of 8.3 million and an intervention cost of $4,000 per patient per year.

[14] Recent studies reveal that, in the absence of HIV infection, the incidence of TB in the country would be around 5% in adults. In the presence of HIV infection, the incidence of TB increases to 14.5%. An estimated 5,440 cases of TB due to AIDS are expected between now and 2005. Besides the effect on costs of medical care due to the increased incidence of tuberculosis associated with AIDS, problems such as the appearance of drug-resistant strains of tuberculosis, making treatment more difficult and costly, also arise.

2. **Major related projects financed by the Bank and/or other development agencies**

BANK-FINANCED PROJECTS			
Sector of Bank-financed projects	**Projects**	**Bank-financed projects latest Supervision (Form 590) Ratings**	
		Implementation Progress	**Development Objective**
HIV/AIDS/STI prevention and control	The World Bank has committed about US$1 billion worldwide in 80 countries since 1986 for HIV/AIDS prevention and control		
Multi-sector and multi-country lending (US$500 million)	Multi-country AIDS Program for Africa; including Kenya and Ethiopia (approved September 12, 2000)	NA	NA
Multi-sector, decentralized implementation of HIV/AIDS prevention and control; broad civil society participation	Brazil AIDS/STD Control Projects I and II (1993 and 1998); India First and Second National AIDS Control Programs (1992 and 1999); Argentina HIV/AIDS Prevention Project (1998); Bangladesh HIV/AIDS Prevention Project (2000);	Satisfactory (S)	S
Integrating HIV/AIDS with STI and TB control, and health sector reform	Haiti First Health Project (1994)	Unsatisfactory (U)	U
	Dominican Republic Provincial Health Services (1998)	S	S
PROJECTS FINANCED BY OTHER DEVELOPMENT AGENCIES			
There are currently about 20 HIV/AIDS initiatives supported by bilateral agencies in the Caribbean; 23 regionally supported; 40 supported through UN agencies; and about 21 through UNAIDS.			

KEY: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

3. **Lessons learned and reflected in the project design**

More than two decades of experience in attempting to control the spread of HIV and treat AIDS victims shows that successful efforts share key features:

- Government commitment in placing the epidemic in open discussion, accepting that a problem exists and that the means of transmission are known, reducing policy barriers and striving for reduction of the stigma associated with infection;
- cooperation and collaboration among different groups and sectors in which all stakeholders including PLWHA, religious groups, industry, NGOs, health care professionals play separate but coordinated roles and recognition that public sector agencies cannot address all of the issues involved;
- decentralized and participatory approaches to prevention and treatment to ensure that responses are tailored to the needs of specific population groups and regions and to ensure sustainability through greater ownership. Adopting a decentralized and participatory approach implies

substantial additional costs and time (capacity building, empowering regions and communities) that must be understood and accounted for;

- the creation of a National AIDS Commission is necessary to anchor government commitment and to coordinate the country's HIV/AIDS response, especially if a decentralized and inter sectoral approach is adopted;
- actions that influence the socioeconomic determinants of behavior that make people vulnerable to infection and that seek to change behavior directly, especially of the young;
- inclusion of treatment and care in country projects and the involvement of PLWHA in policy making and the implementation of activities would lower taboos, raise hope, openness and acceptance of the condition;
- adequate HIV/AIDS surveillance systems must be strengthened for effective monitoring and evaluation of the impact of HIV/AIDS interventions; and
- adopt good experiences in WB financed projects related to implementation procedures that favor flexibility, learning and innovation, and responsiveness to opportunities and demand.

4. **Indications of borrower commitment and ownership**

The GODR has given concrete expression to its commitment to coordinate and multiply efforts to mitigate the HIV/AIDS epidemic by establishing COPRESIDA at the beginning of 2001. COPRESIDA operates under the leadership of a prominent national health and political personality and a multi-sectoral commission, within the office of the President. The preparation of the proposed HIV/AIDS Prevention and Control Project was carried out with the direct involvement of COPRESIDA members in all aspects of the project design. The project closely mirrors the priorities established by the 2000-2004 PEN, which was put together through a participatory process and benefits from a high degree of ownership from all the stakeholders involved.

5. **Value added of World Bank support in this project**

WB value-added is threefold:

- It provides new resources to scale up successful cost-effective HIV/AIDS prevention activities. The WB supported project can readily complement and fill gaps in other sources of support (including the national budget). Amounts may be substantial compared to the current budgetary allocations for the health sectors in the country, providing governments needed "headroom" to both address current needs and to undertake some structural and institutional improvements that may sustain a longer-term HIV/AIDS program.
- The WB is well positioned to make regional and international experiences available to the project.
- It provides the Government with assistance in designing a program that achieves maximum impact at an affordable cost. Since the provision of HIV/AIDS-related services will gradually be assimilated into the basic health plan provided by primary health care units upon project closing, the ability of the country to take upon the financial burden of the program is a critical factor of success.

E. **Summary Project Analysis** (detailed assessments are in the project file, see Annex 14.8)

1. **Economic**. (see Annex 14.4)

[x] Cost-Benefit Analysis

The economic analysis indicates that, in the base scenario, a minimum decrease in the HIV incidence rate of 31% was needed to yield rates of return of 10% or more. The incidence rate is unobservable. The

observable rate of new HIV infections is a very imperfect proxy for the incidence rate in the presence of substantial underreporting. The path of new HIV infections will depend on the initial degree of underreporting and the degree to which the project corrects it. Various scenarios are explored and implications for project monitoring are derived.

Cost-effectiveness data, derived from other countries, were used to suggest which interventions should be given policy priority in the DR. The project will collect the relevant data to enable periodic cost-effectiveness assessments of different sets of interventions. These studies will allow revising the program priorities to ensure proper support for those interventions that have the maximum impact on reducing the spread of the epidemic.

2. **Financial** **(see Annex 14. 5)**

The project will generate incremental recurrent costs that will have to be fully borne by the Government upon project closing. These costs are estimated at around $4 million a year and represent about 0.8% of current public spending on health. It is expected that these costs will be easily absorbed by the GODR, especially since the project will also generate incremental fiscal savings that will go some way towards offsetting these incremental recurrent costs.

3. **Technical**

The project follows internationally accepted best practices for HIV/AIDS responses, as validated by UNAIDS and PAHO/WHO. The project hinges mainly on well tested cost-effective preventive interventions such as condom use, prevention of HIV vertical transmission, supply of safe blood, prevention and control of STIs and TB, and face-to-face IEC for positive behavioral changes, particularly among high risk groups.

The country has a capable and experienced staff working for several years in HIV/AIDS prevention and control programs and has bilateral agencies supporting NGOs in small-scale programs which only can be scaled up with substantial financial support, as is the case in the present project.

Current accepted best practices in technical standards for health infrastructure, especially the handling of medical equipment and supplies and the disposal of medical waste have been adopted in order to minimize environmental impact. The direct involvement of COPRESIDA in the preparation of components ensures their consistency with national technical standards.

4. **Institutional**

Executing agencies. Because the project would be multi-sectoral, participating line State Secretariats would be in charge of implementing their respective activities included in annual implementation plans agreed with the COPRESIDA's PCU. Technical assistance would be provided by the COPRESIDA's PCU and the CERSS' Administrative-Financial Unit to HIV/AIDS Units in the respective Line State Secretariats and other participating organizations on an as-needed basis, mainly for strategic planning, financial management, procurement, and the recruitment of consultants in specialized areas. Because the capacity of some of the implementing agencies must be strengthened, projects would require government commitment of resources and staff for some of the implementing entities. Line State Secretariats, civil society organizations, private institutions, and NGOs, and other private sector organizations have been actively involved in the preparation of the PEN, ensuring their active participation in the project.

Project management. The COPRESIDA's PCU, which enjoys high-level political support, is staffed with well-trained professionals from various disciplines, who have accumulated broad experience and expertise while working in different public and private institutions with a long tradition in dealing with STIs, TB, and HIV/AIDS prevention and control efforts. This would help to ensure that the project is carried out in an effective and efficient manner. In addition, the COPRESIDA's PCU would benefit from the project implementation experience of the CERSS' Administrative-Financial Unit in charge of the implementation of the ongoing Provincial Health Services Project (Ln. 4272-DO). This unit is already

four years old and has a good performance record. The Provincial Health Services Project is ahead of its disbursement schedule. The use of this unit to support the implementation of the proposed project is also justified by the need to keep the response to HIV/AIDS as an integrated part of the Government's strategy to improve health outcomes and access to health services in the DR.

5. Social

The project would deal with sensitive social issues concerning HIV/AIDS and opposition may arise to providing assistance and empowerment to vulnerable groups such as PLWHA, and especially socially marginalized groups such as intravenous drug users, men having sex with men, and inmates. Moreover, PLWHA and their families face continued stigmatization and discrimination. The project is expected to have a very positive social impact by assisting and empowering people and institutions to deal more effectively with the HIV/AIDS epidemic. The project, with guidance from COPRESIDA, will permanently monitor social impact and correct for social issues that may arise during implementation.

6. Environmental assessment Environmental Category [ ] A [X] B [ ] C

The medical waste produced in health care facilities is potentially infectious, yet most health facilities in the DR still manage medical waste like household waste. An auspicious development, however, is the GODB's recent enactment of two laws—the General Law on the Environment and Natural Resources in August 2000 and the General Health Law on March 8, 2001. The enactment of these laws indicates that environmental protection and the improving the management of medical waste have become national priorities. Furthermore, the laws provide a clear legal and institutional framework for addressing the management of medical waste produced in health care facilities.

An assessment of medical waste disposal infrastructure and practice was carried out and found to be adequate for purposes of carrying out the project. Activities under the proposed project are not expected to generate any adverse environmental effect as a large part of the program is geared to support prevention activities. Whatever additional medicals waste generated under the diagnosis and care component would be managed using existing guidelines in the country.

Given the deficient environmental situation observed in public hospitals, with support of the ongoing WB-financed Provincial Health Services Project and a parallel operation supported by the IDB, SESPAS is implementing specific activities, as set forth in an environmental and social impact statement prepared for those projects. These activities, as detailed in Annex 14. 2-D, are: (i) development of policies, norms and enforcement mechanisms to control and manage liquid and solid waste in hospitals; (ii) development of training and environmental education programs on waste management for health authorities and hospital personnel; and (iii) rehabiliation of infrastructure and the installation of incinerators in the main hospitals of the country for the disposal of medical wastes. Building upon this process, the proposed project would support: (1) an assessment of medical care waste handling and disposal related to HIV/AIDS programs and activities under the project; (2) the revision and updating by COPRESIDA (the Presidential Commission for HIV/AIDS), through the SESPAS' DIGECITSS and other specialized institutions, of the existing manual for medical waste handling and disposal; and (iii) the training of health personnel associated with HIV/AIDS programs and activities under the project in the application of these standards to protect high-risk human groups such as patients as well as health staff in the participating facilities.

7. Participatory approach

The preparation of the 2000-2004 PEN, which provides the basis for the project, has been a highly participatory one. Line State Secretariats, multilateral and bilateral agencies, and more than the 30 civil society organizations, private sector institutions, and NGOs dealing with HIV/AIDS in the country participated in the preparation of the operating plans formulated by all provinces.

F. Sustainability and Risks

1. Sustainability

Three factors contribute to increasing the likelihood of program sustainability after project completion: (i) there is a very clear political commitment at the highest level of the GODR: HIV/AIDS is considered a matter of national priority given the enormous and increasing economic and social cost caused by the epidemic; (ii) because the process has been participatory, the beneficiaries and the stakeholders have a great sense of ownership of the PEN, which would likely continue upon project closing; (iii) the project was designed to ensure that its incremental recurrent costs can be and are picked up by the health system.

2. Critical Risks (reflecting assumptions in the fourth column of Annex 14. 1)

Risk	Risk Rating	Risk Minimization Measure
From Outputs to Objective		
There are few effective incentives to use the new services provided or to change behavior towards safer sex practices.	S	The availability of more options and opportunities to receive information about one's individual circumstances, specific alternatives, and eventually care packages will reduce the cost of acting on general knowledge. Continuous monitoring of the impact of activities (particularly of IEC) on behavior change will be used to modify project activities as needed.
Longer term political commitment may erode post project	S	The project will build institutional capacity in various sectoral agencies, assuring a deconcentrated HIV/AIDS management in the long term, reducing the sensitivity of the program to political changes
Once available, demand for services may grow and overwhelm project activities, especially by mobile segments of the population	S	The program has internal flexibility to scale up activities according to demand; in addition, a companion program is being considered for Haiti which may reduce pressure on the DR.
From Components to Outputs		
Project management inadequate and implementation schedule is not respected.	N	Project will be managed by a unit with a proven implementation record; partner implementation agencies are highly motivated
Counterpart financing may not be available in a timely manner, thus slowing implementation	S	GODR is arranging for financing that represents a high proportion of project costs, and is concentrated on the more time-sensitive inputs
Treatment, care and prevention service providers may not be fully sensitive to or at ease with the needs of PLWHA and persons practicing unsafe sex	S	The project has identified health care and other public sector care providers as a target population for IEC and special training covering their attitudes, pre- and post- contact prophylaxis, and sensitivity.
Legal and regulatory frameworks may limit care, treatment, attitude change and counseling options	M	The project begins with the assumption that it activities can be undertaken as planned. If frustrated by regulation and law, COPRESIDA is well placed to seek necessary changes and remedies
Overall Risk Rating	**Modest**	

KEY: Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

3. Possible Controversial Aspects

The proposed HIV/AIDS Prevention and Control Project in the DR may give rise to concerns such as the following:

- Some may argue that the project is not ambitious enough. The US$25 million loan will cover a significant share of prevention efforts but an insignificant share of the needs for care. It must be noted that the WB loan is only one of several sources of financing for the 2000-2004 PEN.

- Governments may be uncomfortable working with socially excluded groups such as commercial sex workers, intravenous drug users, prisoners, or men who have sex with men. Issues such as distributing condoms to youth may raise cultural and religious sensitivities. The involvement of stakeholders experienced in dealing with such issues—especially NGOs and PLWHA—will help overcome such cultural barriers in locally appropriate ways and ensure that no groups are excluded in program implementation

- Although COPRESIDA represents a concrete commitment at the highest decision making level of the GODR, there is need for practical commitments by other line State Secretariats different from health. The project would have to display attractive initiatives for partnership and alliances with other line State Secretariats formally involved in HIV/AIDS prevention and control.

G. Main Loan Conditions

1. Effectiveness Conditions

Adoption by Government of an Operations Manual satisfactory to the WB.

The Borrower has employed independent auditors.

The participation Agreements and/or the Participation Arrangements required for the implementation of the Annual Action Plan for the year 2001 have been executed by the parties involved with project implementation.

2. Other. (classify according to covenant types used in the Legal Agreements)

The main conditions are:

- Implementation of the project in conformance with an Operational Manual;
- maintenance of the COPRESIDA's PCU acceptable to the World Bank; and
- timely allocation of counterpart funds and adequate source for financing recurrent costs.

H. Readiness for Implementation

[ ] 1. a) The engineering design documents for the first year's activities are complete and ready for the start of project implementation.

[ ] 1. b) Not applicable.

[X] 2. The procurement documents for the first year's activities are complete and ready for the start of project implementation.

[X] 3. The Project Implementation Plan has been appraised and found to be realistic and of satisfactory quality.

[ ] 4. The following items are lacking and are discussed under loan conditions (Section G):

I. Compliance with Bank Policies

[X] 1. This project complies with all applicable Bank policies.

[ ] 2. The following exceptions to Bank policies are recommended for approval. The project complies with all other applicable Bank policies.

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Team Leader	CMU Director	Sector Director

Annex 14.1

Dominican Republic HIV/AIDS Prevention and Control Project

Project Design Summary

Hierarchy of Objectives	**Key Performance Indicators**	**Monitoring and Evaluation**	**Critical Assumptions**
Sector-Related CAS Goal	**Sector Indicators**	**Sector/Country Reports**	**(from Goal to Bank Mission)**
Enhance social development by improving the health status of poor people	Reduction in preventable morbidity and mortality among the poor	Health and living standards surveys	Sustained macroeconomic growth. Poor people able to partake of the new growth opportunities.
Project Development Objective	**Outcome/Impact Indicators**	**Project Reports**	**(from Objective to Goal)**
Reduce the spread of the HIV epidemic through the scaling up of programs and activities targeted to high-risk groups; expanding awareness about HIV/AIDS among the general population; and strengthening institutional capacity to ensure the effectiveness and sustainability of the effort	***By project completion:*** -50% reduction in the rate of reported HIV cases -The number of men/women aged 15-49 who report using a condom in their last sexual intercourse with their non-regular partner increases from 30% to 50% -The rate of HIV infections attributed to vertical transmission reduces to 15% -The number of reported sexually transmitted infections (urethritis) in men aged 15-49 reduced by 20% -The number of HIV-infected women less than 20 years old decreases by 50% -HIV-prevalence among women of childbearing age attending prenatal care services decreases to less than 1% by 2004 -85% of detected SS+ cases treated with DOTS -The number of AIDS patients cared for at home increased 30%	Project management and evaluation system DIGECITSS HIV/AIDS surveillance reports Population cohort studies to monitor HIV incidence COPRESIDA data base Reports from NGOs participating in implementation SESPAS local health information system	Education, outreach, and counseling can help people adopt health practices and preventive measures that in turn will reduce the transmission of HIV/AIDS, STI and TB.

Hierarchy of Objectives	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
Output from each component	**Output Indicators**	**Project Reports**	**(from Outputs to Objective)**
1. Reduced HIV transmission rate 2. A reduction in the adverse health and socioeconomic impacts of HIV/AIDS at the individual, household, and community levels 3. Improved understanding of disease transmission factors and epidemic trends 4. A stronger national capacity to respond to the HIV/AIDS epidemic	*By project completion:* - Condoms are available in 80% of hotel and motel rooms - 75% clinics at primary level use the syndromic approach for handling STI cases - 80% of prenatal/well child consultations where HIV/AIDS prevention messages are delivered - 80% of adolescents who are knowledgeable about HIV prevention - 90% of institutional deliveries where HIV testing and prevention counseling occur - Number of civil society organizations participating in HIV/AIDS prevention and promotion - 60% of secondary schools with HIV/AIDS education incorporated in curricula. - 90% of public hospitals provide mother-to-child prevention services - 40% increase of orphaned children receiving support from the project. - All State Secretariats represented in COPRESIDA have incorporated HIV/AIDS prevention and mitigation activities in their regular work plans and implementing them. - The unit responsible for trend and situation analysis and evaluating impact of PEN is operational.	Project management and evaluation system DIGECITSS HIV/AIDS surveillance reports Population cohort studies to monitor HIV incidence COPRESIDA data base Reports from NGOs participating in implementation SESPAS local health information system	Highest-level political support for COPRESIDA and DIGECITSS is maintained. Continued TA from international donors. Multisectoral response. There is effective uptake of the new services provided and actual behavioral changes towards safer sex practices. Non-stigmatizing, culturally acceptable interventions bring about lasting behavior change. Health care providers accept guidelines. Home care acceptable to PLWHA and families. Capacity built through the project is sustained. Information from M&E used for planning at all levels.

Hierarchy of Objectives	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
Project Components/Sub-components:	**Inputs:**	**Project Reports, Project Management and Evaluation Reports:**	**(from Components to Outputs)**
Component 1: Prevention/promotion activities to reduce HIV/AIDS transmission • Information, education, and communication (IEC) activities • 100% condoms program • Blood banks' quality control of HIV testing • Prevention of mother-to child HIV transmission • Syndromic management of STIs	• Posters, brochures, manuals, radio jingles, TV spots, training. • Audiovisual equipment, training, brochures, transport, condom supplies, surveys material • Training, HIV lab tests, reagents, glassware, training, transport • Space conditioning for counseling, training, HIV testing/counseling, nevirapine, alternatives for breastfeeding formula • Training, HIV testing/counseling • Laboratory test, treatment kits, brochures.	• DIGECITSS HIV/AIDS surveillance reports • Population cohort studies to monitor HIV incidence • COPRESIDA data base • Reports from NGOs participating in implementation • SESPAS local health information system	• Project management is adequate and implementation is undertaken as scheduled. • Counterpart funding is available as needed. • Legal and regulatory environment is unbiased against high-risk groups and the provision of advice to minors. • Willingness of communities to discuss and confront HIV/AIDS and STI. • Improvement in distribution systems and social marketing of condoms.
Component 2: Diagnosis, basic care and support of individuals affected by HIV/AIDS • Voluntary testing and counseling • Home care of HIV/AIDS patients • Basic health units for AIDS patients • DOTS Treatment for TB patients • Support to orphans	• Space conditioning for counseling, audiovisuals, training, HIV testing/counseling, education materials • Training, manuals, transport, nursing supplies • Medical equipment, audiovisuals, training, education materials, drugs for treating some opportunistic infections • Sputum smear test, training, education materials • Technical assistance and training for program development	• DIGECITSS HIV/AIDS surveillance reports • Population cohort studies to monitor HIV incidence • COPRESIDA data base • Reports from NGOs participating in implementation • SESPAS local health information system	• Availability of capacity in participating institutions to establish testing and counseling centers, support home care initiatives, care of HIV/AIDS and TB patients, support orphans. • Willingness among participating institutions to reallocate resources as needed.

Hierarchy of Objectives	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
Project Components/Sub-components:	**Inputs:**	**Project Reports, Project Management and Evaluation Reports:**	**(from Components to Outputs)**
Component 3: Strengthening HIV/AIDS and STI Surveillance System; and Project Coordination, Monitoring, Evaluation, and Research • Epidemiological surveillance • Project coordination, monitoring, evaluation • Surveys and research to contribute necessary technical information for continued project implementation and adjustments to enhance its impact.	Technical assistance, training, survey materials, operating hardware and software for information system development	• DIGECITSS HIV/AIDS • Surveillance reports • Population cohort studies to monitor HIV incidence • COPRESIDA data base and MIS-NGOs participating in implementation	Minimal political interference in research and surveillance.

Annex 14.2-A

Dominican Republic HIV/AIDS Prevention and Control Project

Detailed Project Description

To help implement the 2000-2004 National Strategic Plan for HIV/AIDS (PEN), the proposed project would support activities grouped under three components:

- Component #1: Prevention/Promotion Activities to Reduce HIV/AIDS Transmission;
- Component #2: Diagnosis, Basic Care and Support of Individuals Affected by HIV/AIDS; and
- Component #3: Strengthening of the HIV/AIDS and STI Surveillance System, and Project Coordination, Monitoring, Evaluation, and Research.

Component 1: Prevention/Promotion Activities to Reduce HIV/AIDS Transmission—US$17.2 million

Component 1 of the project would support the development of five priority interventions, each of which is discussed further below.

- Information, education, and communication (IEC) activities to reduce HIV/AIDS transmission, with emphasis on high-risk groups;
- condom social marketing programs, with emphasis on high-risk groups;
- improved management and treatment of STIs;
- interventions to prevent mother-to child transmission of HIV; and
- quality control of HIV testing in blood banks and laboratories.

Information, Education, and Communication (IEC) Activities to Reduce HIV Transmission, with Emphasis on High-Risk Groups. IEC programs and mass media campaigns would be implemented as means to reach all segments of the Dominican population, particularly high-risk groups, in order to raise awareness and understanding about HIV/AIDS and STIs, promote behavioral changes to avoid the spread of HIV; seeking voluntary testing and counseling; and reducing stigmatization of HIV infected persons.

Awareness of the existence of HIV/AIDS is fairly common in the general population in the DR. According to a 1996 survey, 92% of women and 100% of men reported that they knew of HIV/AIDS and at least one means for preventing its sexual transmission.[15]. However, the perception of individual risks is low and attitudes towards PLWHA remain very negative. These factors would be taken into account in the design of IEC activities, which in the end have to aim at positive behavioral changes to improve perception of risk and its avoidance and to reduce biases against PLWHA.

To reduce HIV transmission, sex education, including prevention of HIV/AIDS and STI, would be introduced in the secondary schools curricula in collaboration with the State Secretariat of Education and Culture. Face-to-face education programs for high-risk groups, particularly commercial sex workers, PLWHA, adolescents, street children, drug users, and STIs patients would be developed in collaboration with line State Secretariats that have direct or indirect responsibilities with these target groups.

To make IEC activities through mass media cost-effective, specific audiences to which messages would be targeted would be chosen from among priority target groups. Experts in IEC would design campaigns

[15]D. Gwatkin, et al. (2000) 'Socio-Economic Differences in Health, Nutrition and Population: Dominican Republic.' World Bank.

for each priority group, addressing the issue of possible impact on awareness and behavioral change with each proposed campaign and materials to be used (e.g., posters, pamphlets, brochures, manuals, press notes, radio jingles, and TV spots).

The campaigns and materials produced with project support would be coordinated between COPRESIDA and Line State Secretariats. Agreements to be signed between COPRESIDA and each State Secretariat would specify the sharing of inputs and costs, time of exposure and coverage of target audiences.

The expected outputs under this subcomponent are:

- advocacy campaigns to supportive and key policy makers, religious leaders and the press;
- incorporation of HIV/AIDS and STI prevention into education policies and programs;
- implementation of sex education programs, including HIV/AIDS and STI prevention, and programs with a face-to-face methodology;
- design and production of IEC material on sex education aimed specifically at target population groups;
- teachers training to act as facilitators in school sex education programs;
- activities to raise awareness and understanding of HIV/AIDS and STI transmission and promote safer sexual practices;
- targeted interventions among specific sub-groups at greater risk of contracting and/or spreading HIV including homosexual and bisexual men, intravenous drug-users, commercial sex workers, adolescents, inmates, truck drivers, and others, as well as activities oriented to other vulnerable groups such as women and low income groups;
- information on HIV/AIDS and STI prevention available to hotels, motels, nightclubs, and entertainment places;
- informing and educating men and women to change their behavior and attitudes about HIV/AIDS and STI risks;
- empowering women by teaching negotiation skills around condom use, and about reproductive health.

Condom social marketing programs, with emphasis on high-risk groups. There is universal knowledge about the effectiveness of the condom method for preventing STIs and HIV/AIDS, but this has not led to a change in behavior regarding its use. This is demonstrated by the low rate of condom use in casual sexual relations. Of persons who stated they had had sexual relations with more than one person in the last 12 months, only 29% used condoms in their last encounter. Condoms are seen among couples more as an element of suspicion than a means of protection, and there is general resistance to the use of condoms.

Distribution and access to condoms have improved significantly in recent years, through different commercial and personal service outlets (e.g., pharmacies, grocery stores, barbershops, beauty salons), based on the novel distribution strategies of several NGOs and the private commercial sector. However, community distribution networks have exhibited an irregular flow of condoms, most of them donated by international donor agencies [United Nations Population fund (UNFPA) and USAID] to NGOs dealing with HIV/AIDS and those involved in reproductive health. The unstable situation in the area of condoms is also affected by the appearance on the local market of new commercial brands and of subsidized condoms destined for neighboring countries and that end up in the DR.

In the country, there is no a national condom policy to guide matters related to condom quality, availability and distribution.

Currently, there are some activities that are being carried out to promote condom use. However, these efforts have been hampered by the lack of political will to address the negative perceptions about condom. As a result, condom use is still a taboo subject.

Although there is a law that obliges casual sex establishments (e.g., motels, brothels) to make condoms available, they do not comply with this law. Mechanisms to enforce the stipulations in AIDS Law 5593 have not yet been identified by the responsible agencies.

The project would support the scaling up of Government's efforts to promote condom use, particularly among high-risk groups. The outputs from this subcomponent will include:

- Mass communication, face-to-face contact, condom fairs and other promotional activities, and formal and informal sex education programs to promote condom use and its acceptability as an effective HIV/AIDS and STI prevention alternative, and to reduce cultural and social barriers to their use.
- Extension of the successful "100% Condoms" campaign addressed to commercial sex workers to other high-risk groups such as members of the armed forces, inmates, inter-municipal drivers, and migrant workers and people living in "*bateyes*".
- Establishment of a national policy on condom distribution with the participation of all sectors, determining the system and conditions for providing them according to the group that demands them.
- Development of a regulation framework for the public, private and NGO distribution system (defining a distribution network and identifying who would be part of the network).
- Development of subsidy policies for providing easier accesses to condoms, particularly for low-income households (e.g., price reduction or free distribution).
- Design, implementation and monitoring of a system to control quality and expiration dates of condoms.
    - Establishment of a system to monitor and control condom availability in casual sex establishments (e.g., motels, brothels), applying the corresponding articles of the HIV/AIDS Law 5593.

Improved Management and Treatment of STIs. Having an STI increases the risk of contracting HIV nine-fold. Notwithstanding progress in statistical reporting of STIs, reliable information on the prevalence of STIs in the DR is still lacking. Throughout the country, there are only 10 specialized centers for managing STIs. Access to drugs for treating STIs is limited, and incorrect treatment provided by pharmacies is a common practice, leading to the spread of disease agent strains that are resistant to treatment. In addition, STI services carry a stigma in the DR, mainly because commercial sex workers use them. Few counseling services for preventing STIs are integrated with general medical care services. Although a significant number of staff has been trained in the management of STI syndromes, the inadequate supply and logistics of STI drugs leads to inefficiency and ineffectiveness of STI control services.

Project would support the development of the syndromic approach for STI management of symptomatic patients to allow the rationalization of treatment according to pre-determined clinical criteria: Expected outcomes include:

- Strengthening of diagnosis, treatment, and reporting of STIs in health care facilities, through
- training in STI case management, and provision of re-agents, pre-packed treatments kits,
- including the necessary drugs for treating symptomatic vaginitis, genital ulcer disease and
- pelvic inflammatory diseases, condoms, educational materials and other supplies;

- social marketing programs to promote use of kits for treating syndromes associated with STI;
- establishment of referral centers (CITS) for frequent transmitters of STIs; and
- strengthening of capacity of provincial directorates for supervising STI services.

Prevention of Mother-to-Child Transmission of HIV. Currently, about 2,700 of the 134,000 children born each year in the DR are born to women infected with HIV. Of these children, approximately 930 are born infected with HIV. Interventions including prophylaxis with anti-retrovirals together with nutritional baby formula could significantly decrease the number of babies infected with HIV. However, very high costs preclude a wide use of azido-deoxy thymidine (AZT) in pregnant women infected with HIV to prevent transmission to children. Currently, only one Social Security hospital (the IDSS maternity hospital) offers AZT to pregnant women. The supply of diagnostic tests, counseling, HIV prophylaxis for infected women, training and the supply of nutritional baby formula can cost the country approximately US$1,933 per infection prevented. Replacing breastfeeding with baby formula also carries risks, the most frequent being unsafe drinking water.

Preliminary results from a pilot program being carried out in two maternity services of Santo Domingo (Maternidad La Altagracia, Maternidad de los Mina, and Armed Forces and Police Hospital), and of Puerto Plata North Region (Ricardo Limardo Hospital) indicate that giving pregnant women the anti-retroviral drug nevirapine (accepted by the WHO Technical Task Force on HIV/AIDS as a cost-effective anti-retroviral)[16] as a prophylactic in a single dose before the delivery of a child, and giving the newborn a single dose per day for three days, holds promise as a cost-effective means of preventing mother-to-child (or vertical) transmission of HIV: 80% of children born to HIV+ mothers in the pilot program are negative for HIV. In addition to providing nevirapine (to be provided by the Government as part of its counterpart funds obligation; the Government would obtain nevirapine from the patent holding pharmaceutical company through a grant program), the pilot program offers advice on alternatives to breastfeeding.

The project would support the expansion of the pilot program in Santo Domingo to the maternity services in six provinces in the DR where sentinel surveillance is being carried out by DIGECITSS: San Juan, San Francisco, La Romana, Puerto Plata, Barahona, and Pedernales. Provided that results are cost-effective, national policies on preventing the vertical transmission of HIV would be issued for public and private maternal and child health care services, and the expansion of such efforts would be pursued to the extent that SESPAS could afford it.

Expected outputs under this component include:

- Evaluation of the clinical and economic impact of prophylaxis with nevirapine and baby formulas
- in preventing transmission from mothers to babies;
- development of a national plan and standards for the regimes for reducing vertical transmission;
- implementation of voluntary HIV testing and counseling in maternity centers;
- training programs for nursing and medical staff;
- development of a logistical system for distributing and timely provision of nevirapine; and,
- development of infant feeding counseling programs.

[16] WHO Technical Consultation. "New Data on the Prevention of Mother-to-Child Transmission of HIV and their Policy Implications". Geneva 11-13 October 2000.

Quality Control of HIV Testing in Blood Banks and Laboratories. The country has approximately 300 laboratories and 60 blood banks and/or transfusion services that perform HIV testing with an acceptable level of quality and 3 referral laboratories to confirm positive testing. The diagnosis of a number of opportunistic HIV-related illnesses is deficient. Blood screening to detect agents that are sexually transmitted and/or though contact with blood (syphilis, hepatitis, HIV, among others) has had a positive impact on controlling the transmission of these illnesses. In the early stages of the HIV epidemic, 10% of the incidence of AIDS cases was from blood transfusions. Currently, less than 1% of accumulated cases have contracted the infection through this means.

The project would support the Government's effort to maintain the level of efficiency achieved to date and to increase the levels of coverage, both in support of HIV diagnoses and in the screening of donated blood. The outputs from this subcomponent include:

- Strengthening of the quality control system of laboratories and blood banks, including the certification of reagents authorized by SESPAS;
- anonymous HIV testing with pre- and post-test counseling would be established for blood donors and other persons seeking the test, and trained would be provided for blood banks counselors;
- strengthening quality control in laboratory testing to diagnose HIV and other STIs;
- training programs on diagnosis and quality control for staff of private and public clinical
- laboratories and blood banks;
- encouraging voluntary blood donations and monitoring blood screening to ensure the
- supply of safe blood;
- reactivation of the external system for evaluating performance of laboratories and blood
- banks;
- strengthening of supervision of laboratories in accordance with HIV/AIDS Law 5593;
- strengthening and support of referral mechanisms to confirm positive tests for HIV and
- other STIs; and
- procurement of low-cost reagents for diagnostic tests syphilis, gonorrhea, chlamydia,
- hepatitis, and others, and opportunistic agents associated with HIV/AIDS infections.

Component 2: Diagnosis, Basic Care and Support of Individuals Affected by HIV/AIDS—US$4.8 million

Under this component, the project would support the implementation of the following diagnostic and basic care interventions aiming at reducing disability and death due to HIV/AIDS, reducing the reservoir of HIV/AIDS, and mitigating the suffering of children orphaned by HIV/AIDS:

- Organization of voluntary HIV testing with pre- and post-test counseling services;
- support of home care for HIV/AIDS patients;
- establishment of basic AIDS Health Care Units;
- implementation of directly observed treatment (DOT) regimens for tuberculosis (TB) patients; and
- support to children orphaned by AIDS.

Organization of Voluntary HIV Testing and Pre- and Post-Test Counseling Service. To enforce the HIV/AIDS Law 5593 mandating that all HIV testing should be preceded by previous counseling and the test report should be also accompanied by counseling, the project would support the organization of voluntary HIV testing with pre and post counseling in those services offering prevention of vertical transmission of HIV, and in the eight centers for basic care located in areas with high HIV/AIDS prevalence:

- Santo Domingo Center (Padre Billini Hospital);
- Santo Domingo West (Herrera Hospital);
- San Pedro de Macorís (Antonio Musa Hospital);
- Santiago (José Maria Cabral Hospital);
- Barahona (Jaime Mota Hospital);
- San Francisco de Macorís (San Vicente de Paul Hospital); and
- Puerto Plata (Ricardo Limardo Hospital);
- La Romana (SESPAS Hospital)

These centers would open these services to the public and would promote voluntary HIV testing and counseling. The main constraints for organizing these units are inadequate space and equipment, as well as number of trained personnel for counseling. The project would support the rehabilitation and refurbishing of physical infrastructure, purchase of equipment, and training of staff.

Support of Home Care of HIV/AIDS Patients. Care of HIV/AIDS patients require simple but precise and reliable compliance with indications and drug administration. Most care activities can be carried out at home with appropriate training of staff and support services in neighboring hospitals or referral centers. Benefits and savings rendered with appropriate home care to HIV/AIDS patients are important justifications for including this intervention for project support. Home care also reduces the stigma and taboo in the community where patients live.

The project would support home care for HIV/AIDS patients. Home care would be separate but coordinated with hospital care. The project would support the development and printing of training manuals, training for health staff at local and provincial levels, counseling for relatives of the patients, and basic clinical tools for patient check ups and laboratory testing.

Establishment of Basic AIDS Health Care Units in selected hospitals. Provincial and local hospitals are reluctant to offer hospital care when needed to HIV/AIDS patients, and usually refer them to the Integrated Care Unit of the Santo Domingo's National Sanitary Center.

To allow hospital care to be provided to HIV/AIDS patients close to the patient's place of residence, family, and friends, with project support, SESPAS would make available basic hospital care for HIV/AIDS patients. To this end, Basic AIDS Health Care Units would be established in the following hospitals located in areas of the country with the highest prevalence of HIV/AIDS cases:

- Santo Domingo Center (Padre Billini Hospital) and Santo Domingo West (Herrera Hospital) serving about 2 million people and with an estimated 10% prevalence of HIV/AIDS among adults;
- San Pedro de Macorís (Antonio Musa Hospital) covering about 150,000 people and many high-risk groups in free trade zones and tourism centers where STIs are highly prevalent;
- Santiago (José Maria Cabral Hospital), with about 500,000 people, with a large segment living in poverty and increasing migration from neighboring Haiti;
- Barahona (Jaime Mota Hospital), with about 80,000 people and a growing number of HIV cases,

- especially in young adults;
- San Francisco de Macorís (San Vicente de Paul Hospital), with about 120,000 people and about 20 deaths by AIDS per year; and
- Puerto Plata (Ricardo Limardo Hospital) with about 100,000 people, where AIDS is the first cause of death among young women (15- 49 years of age).

The project would support the rehabilitation and refurbishing of physical infrastructure in hospital wards, training of health personnel, HIV testing with pre and post counseling, development of best practice guidelines for managing opportunistic diseases, testing, and cost-effective treatment of opportunistic diseases, group therapy for HIV/AIDS patients and families, mourning management, basic general hospital care. No anti-retroviral treatment would be financed by the project, except for prevention of vertical HIV transmission under the prevention of mother-to-child transmission of HIV/AIDS subcomponent described above.

The development of a national policy regarding the provision of drugs for opportunistic infections, and the establishment of a logistical system to make the supply of drugs for prophylaxis and treatment of some opportunistic infections associated with HIV/AIDS more efficient would also be supported.

In coordination with the ongoing Provincial Health Services Project, support would be provided in participating hospitals for conducting an assessment of medical care wastes handling and disposal related to HIV/AIDS programs and activities, preparation of a manual to address proper handling and disposal of medical wastes, and training of health personnel.

Implementation of Directly Observed Treatment (DOT) for Tuberculosis (TB) Patients. TB is the principal opportunistic infection and the leading cause of death of HIV/AIDS patients in the country. At the same time, HIV infection has become an important risk for TB patients. Although reliable national figures are not available, some estimates consider that approximately 10% or more of TB patients are HIV+. To enhance TB prevention and control activities, the project would support the implementation of DOTS for TB patients, starting with a few provinces and expanding throughout the country, giving priority to the areas where HIV/TB co-infection constitutes a serious health problem. Under this component, in coordination with ongoing activities supported by USAID and PAHO/WHO, the project is expected to strengthen the following:

- Provision of care for high-risk groups: inmates, people living in beteyes, and persons requesting
- HIV testing.
- the laboratory network in priority provinces of the country;
- the supervision and evaluation capacity of the National Tuberculosis Program;
- joint activities between TB and STD/AIDS programs;
- health worker training, as well as training for workers in other sectors that participate in TB
- control; and
- activities by the TB Programs of the Dominican Republic to control TB in border areas with Haiti.

Support to Children Orphaned by AIDS. To provide support to children affected by AIDS, existing community organizations (such as "Villa Bendicion," and "Aldeas SOS") would be contracted under the project to run 2 or 3 pilot initiatives concentrating on schooling and health of children orphaned by AIDS following different models, promotion of efforts to reduce stigma and misperceptions about orphans, and strengthening of support networks within the children's communities, including psychosocial support and life-skills development. Replications would be considered on the basis of results of evaluation of experience with such initiatives.

Component 3: Strengthening HIV/AIDS and STI Surveillance System, and Project Coordination, Monitoring, Evaluation and Research—US$7.75 million

Under this component, the project would support:

- Improvements in the HIV/AIDS and STI disease surveillance system; and
- HIV/AIDS program coordination, monitoring, evaluation and research activities.

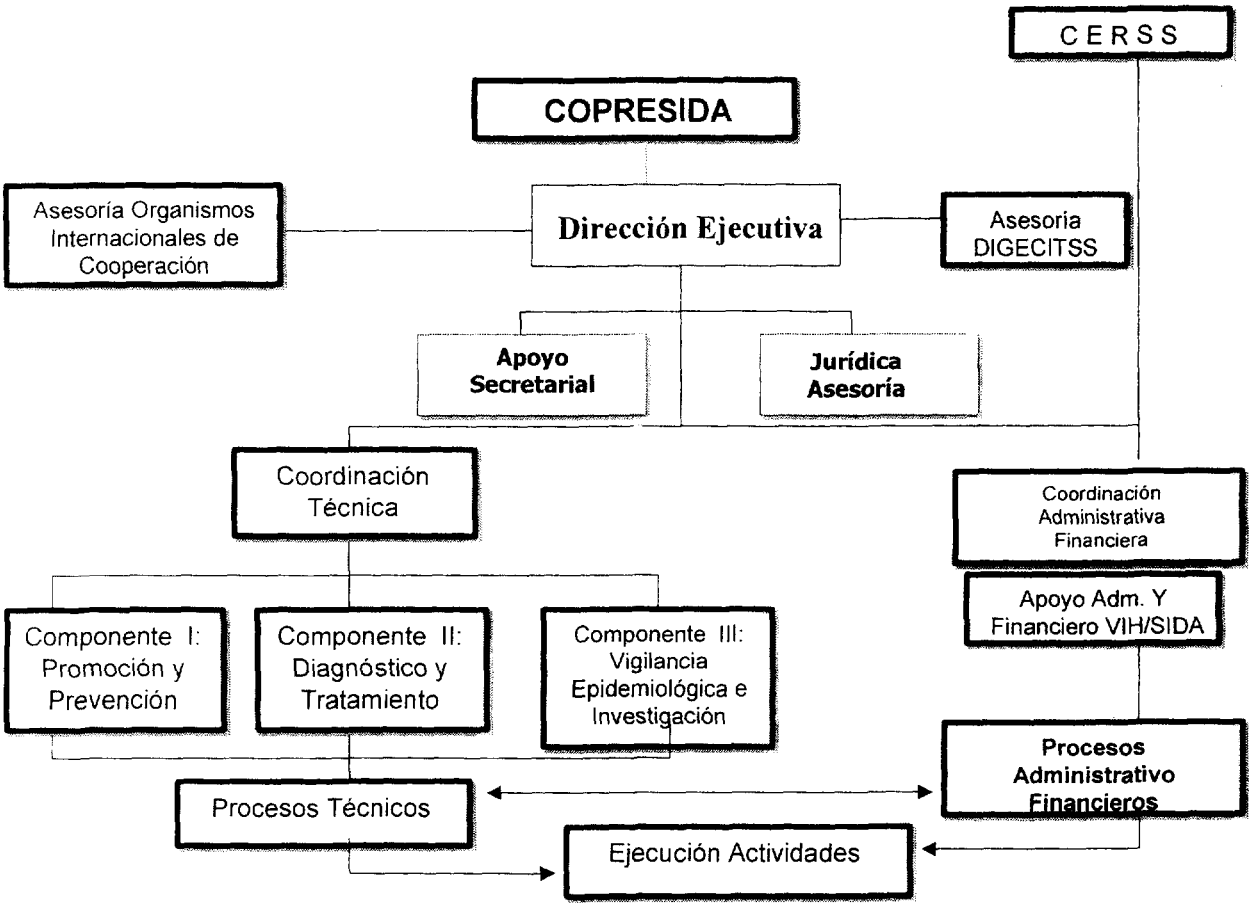
Strengthening HIV/AIDS and STI Disease Surveillance System. The project would support the strengthening of the SESPAS' surveillance system to increase the knowledge of the health situation in general, and of the HIV/AIDS/STI situation in particular, to improve decision-making and resource allocation. Priority would be given to the development and implementation of a second generation HIV surveillance system according to UNAIDS recommendations. Specifically the project would support: (i) the development of standardized protocols for undertaking cross-sectional surveys of behavior, including collection of data on site and population characteristics, focusing on high-risk groups and in the general population; sentinel HIV sero-surveillance among pregnant women, urban and rural, focusing on younger age groups; and surveillance of TB and other HIV/AIDS related illnesses; (ii) the expansion of participating health facilities, laboratories and blood banks for HIV sentinel surveillance and expansion/upgrading of the HIV/AIDS and STI case notification system; (iii) the development of a HIV/AIDS information system and respective information technology (IT) platform; and (iv) the integration of multi-sectoral databases with a management information system to improve collection of vital registration data, support HIV-AIDS-STI situational analysis, case management and decision making.

Project Coordination, Monitoring, Evaluation, and Research Support would be provided to strengthen technical and managerial capacity for strategic planning, project coordination, financial management, communication, dissemination of best practices for target interventions, establish and manage networks of technical expertise in HIV/AIDS, STI and TB to inform policy decisions, and implementation at all levels. Project would also support the development of monitoring and impact evaluation systems to enable the COPRESIDA's PCU to monitor and evaluate performance of project implementation, including conducting baseline, mid-term, and impact evaluation, and assessment of yearly budgetary allocations by Government to support and sustain the scaling up of HIV/AIDS programs. The undertaking of studies would also be supported to increase DR's capacity for research on HIV/AIDS (e.g., national study of STD transmission, study on syndromic STD case management, HIV prevalence studies among high-risk groups, assessment cost and impact of interventions, behavior case trend assessments, among others).

Annex 14.2-B

Dominican Republic HIV/AIDS Prevention and Control Project

Organizational Chart of COPRESIDA



Annex 14.2-C: Inter-Institutional Arrangements of Project Implementation

Ambitos de Acción y Actores por Componente

Componente I: Promoción y Prevención

Actores / Ambitos de Acción	UCP	COPRESIDA	DIGECITSS	Direcciones Regionales Provinciales	Hospitales Maternidades Unidades APS	ONGs Organizaciones Sociedad Civil	Org/Agencias Internacionales de Cooperación
1.1.- Formación educac./información para cambios de comportamiento a grupos de riesgo. Promoción del uso de condones	*Define líneas de trabajo *Define mecanismos de ejecución (contratos, adquisiciones) *Programa intervenciones (POA) anuales *Asigna y canaliza recursos para ejecución *Adquisiciones (condones, equipos audiovisuales) *Procesa contratos, convenios *Monitorea procesos evaluación resultados *Asesora a ejecutores locales (admin. Y financiera)	*Apoyo político *Participación activa de sus integrantes en sus respectivos ámbitos de acción (a nivel local) *Solución de duplicaciones	*Apoyo técnico *Asistencia operacional	*Monitoreo, ejecución, apoyo control financiero *Contrataciones (en algunos casos)		*Ejecutan acciones y programas por contratos, por producto *Aportan contraparte (en algunos casos)	*Asistencia técnica *Información actualizada *Alerta sobre duplicaciones *Acciones complementarias
1.2.- Reducción de la Transmisión Vertical VIH	*Programas intervenciones (POA) *Asigna y canaliza recursos para ejecución *Realiza adquisiciones (medicamentos, equipos) *Contrata servicios por producto *Monitorea procesos *Evalúa resultados	*Impulsa participación activa de SESPAS/ IDSS/ FFAA y Policía Nacional	*Asistencia técnica en la conducción y operación de los procesos	*Supervisión y monitoreo de las actividades locales	*Organizan funcionamiento de los servicios (asignación y capacitación de personal) *Reportan actividades *Monitorean resultados		*Asistencia técnica *Información actualizada *Facilitación de adquisiciones
1.3.- Reducción de transmisión VIH por Sangre y Derivados	*Define intervenciones anuales (POA) *Asigna y canaliza recursos *Realiza adquisiciones (reactivos, equipos de lab.) *Contrata servicios por producto *Monitorea procesos, evalúa resultados	*Impulsa participación de Cruz Roja, Bancos de Sangre Públicos y Privados	*Colaboración asistencia operacional	*Colaboración operacional	*Colaboran en la organización y funcionamiento de los servicios	*Ejecutan programas previamente consensuados	*Asistencia técnica *Información actualizada *Facilitación de adquisiciones
1.4.- Reformulación y Fortalecimiento del Control de ITS (Manejo Sindrómico)	*Define intervenciones anuales (POA) *Asigna y canaliza recursos *Realiza adquisiciones (terapia preempacada, condones) *Contrata servicios por producto *Monitorea procesos *Evalúa resultados	*Apoyo político	*Participación activa en definición de acciones; apoyo logístico; supervisión y monitoreo; evaluación de resultados	*Colaboración y apoyo de las actividades	*Organizan y monitorean sus servicios		*Asistencia técnica *Información actualizada *Facilitación de adquisiciones

Participación Interinstitucional en la Implementación del Proyecto

Ambitos de Acción y Actores por Componente

Componente II: Diagnóstico y Tratamiento

Actores / Ambitos de Acción	UCP	COPRESIDA	DIGECITSS	Direcciones Regionales Provinciales	Hospitales Maternidades Unidades APS	ONGs Organizaciones Sociedad Civil	Org/Agencias Internacionales de Cooperación
2.1.- Mejoramiento y ampliación de puestos consejería pre-post prueba VIH	*Asigna, canaliza recursos de acuerdo al POA *Contrata servicios por producto *Adquiere equipos, muebles *Monitorea acciones *Evalúa resultados	*Promueve compromiso de SESPAS/IDSS/FFAA y Policia Nacional en los niveles central, intermedio y local	*Apoyo técnicamente definición y ejecución de las acciones (esp. contenidos de la capacitación del personal *Participa en la evaluación de los resultados	*Apoyo de CRSS para supervisión *Monitoreo *Apoyo logístico	*Organiza los servicios consejería *Capacit. personal *Contrata adecuación de ambientes *Supervisan y apoyan funcionamiento *Reportan actividades	*Apoyan promoción de los servicios.	*Asesoría técnica *Información actualizada.
2.2.- Instalación y funcionamiento de Unidades de Atención Básica a pacientes e infectados VIH/SIDA	*Asigna y canaliza los recursos de acuerdo al POA *Contrata adecuaciones P.I. *Contrata servicios por producto *Realiza adquisiciones (equipos, medicamentos enf. oportunistas, reactivos) *Monitorea acciones *Evalúa resultados	*Promueve compromiso de SESPAS/IDSS/FFAA y Policía Nacional en los niveles central, intermedio y local	*Apoyo técnicamente definición y ejecución de las acciones (esp. contenidos de la capacitación del personal *Participa en la evaluación de los resultados	*Apoyo de CRSS para supervisión *Monitoreo *Apoyo logístico	*Organizan las unidades de Atención Básica *Supervisan y apoyan funcionamiento *Reportan actividades	*Apoyan promoción de los servicios.	*Asesoría técnica *Información actualizada.
2.3.- Fortalecimiento de proyectos/progra. de cuidado en el hogar de pacientes e infectados VIH/SIDA	*Asigna y canaliza los recursos de acuerdo al POA *Contrata servicios por producto *Monitorea acciones *Evalúa resultados	*Promueve compromiso de SESPAS/IDSS/FFAA y Policía Nacional, especialmente a nivel local	*Participa en definición de contenidos de capacitación a capacitadores	*Supervisión y apoyo a las acciones propuestas *Reporte de actividades	*Participación de capacitación y supervisión *Realiza su capacitación a familiares *Dan seguimiento a pacientes en los hogares *Reportan actividades	*Acciones complementarias para consolidación y permanencia de los programas *Participación en evaluación de resultados	*Asesoría técnica *Información actualizada.
2.4.- Apoyo a Huérfanos	*Asigna y canaliza los recursos de acuerdo al POA *Contratos a ONGs y otras entidades sin fines de lucro para ampliar conocimiento del problema y realizar acciones de mitigación (padrinazgos, bonos, etc.)	*Promueve el apoyo de organizaciones de la sociedad *Coordina acciones complementarias con otras instancias gubernamentales	*Apoya técnicamente la elaboración de normas y definición de contenidos de capacitación para el personal de los servicios	*Supervisa acciones de ONGs; en sus jurisdicciones	*Coordinan con ONGs	*Ejecutan acciones por contrato *Canalizan contrapartes	*Coordinación para fortalecer acciones y evitar duplicaciones

Participación Interinstitucional en la Implementación del Proyecto

Ambitos de Acción y Actores por Componente

Componente III: Vigilancia Epidemiológica, Investigación y Desarrollo Institucional

Actores / Ambitos de Acción	UCP	COPRESIDA	DIGECITSS	Direcciones Regionales Provinciales	Hospitales Maternidades Unidades APS	ONGs Organizaciones Sociedad Civil	Org/Agencias Internacionales de Cooperación
3.1.- Fortalecimiento del Sist. de Vigilancia Epidemiológica VIH/SIDA/ITS orientado a sustentar decisiones políticas macro (inteligencia epidemiológica) en COPRESIDA y a viabilizar las acciones de control inmediato en terreno	*Asigna, canaliza recursos de acuerdo al POA *Coordinación Proyecto Sist. Prov. Salud en DIGECITSS y Dirección de Epidemiología de SESPAS para aprovechar desarrollo del sist. de información gerencial. *Asigna equipo informático complementario para red Wan *Contrata desarrollo de softwares *Contrata capacitación de personal técnico de la SESPAS (DIGECITSS; Dir. Epidemiología) *Monitorea procesos *Evalúa resultados	*Promueve participación de SESPAS/IDSS/FFAA y Policía en el desarrollo del sistema. *Analiza y difunde información relevante. *Toma decisiones para de ámbito nacional	*Participa activamente en definición y ejecución de los procesos técnicos. *Asesora en los contenidos de la capacitación del personal a nivel nacional *Participa en la actualización y rediseño de normas, procedimientos e instrumentos	*Supervisan fortalecimiento del sistema en todas las unidades de salud y puestos centinela	*Supervisan y monitorean elaboración envio reportes		*Asesoría técnica *Información actualizada. *Apoyo a la capacitación
3.2.- Apoyo de investigaciones y del Comité de Bioética para sustentación de políticas de COPRESIDA en este campo	De acuerdo al POA: *Asigna y canaliza recursos para apoyo a comité de bioética. *Asigna recursos (grants): para promoción de investigaciones socio-antropológicas, operacionales y biomédicos	*Promueve y apoya la participación interinstitucional en el desarrollo de este campo *Da el aval a la comisión de bioética *Analiza las contribuciones y las incorpora en la definición de lineamientos de políticas de investigación en VIH/SIDA *Promociona la difusión de resultados de la investigación	*Contribuye en la definición de temáticas de investigación *Analiza resultados		*Incorporan nuevos conocimientos en sus actividades	*Rediseñan programas y proyectos a la luz de resultados	*Asistencia técnica *Promoción de capacitación *Información sobre el "el estado del arte" en este campo
3.3.- Mejoramiento de la capacidad de gestión y operación para la lucha interinstitucional contra el VIH/SIDA (entidades públicas y privadas que conforman el COPRESIDA)	*Asigna recursos (POA) *Apoya capacitación en planificación de diseño de "proyectos y programas institucionales" *Fortalece instancias de gestión operación existentes o promueve su creación dentro de las entidades del COPRESIDA *Monitorea procesos *Evalúa resultados	*Viabiliza los apoyos y enfatiza en los compromisos interinstitucionales para ejecución de acciones					*Contribución al desarrollo institucional de entidades públicas y privadas del COPRESIDA

Annex 14.2-D

Dominican Republic HIV/AIDS Prevention and Control Project

Medical Waste Management Assessment in the Dominican Republic

The recent enactment of two new laws in the DR are an encouraging sign that the GODB is committed both to protecting the environment and to reducing the risks posed by the improper management of medical waste. These laws provide a new framework for managing infectious and other medical waste that poses health risks to patients and health care staff, as well as to people who are exposed to such waste outside health facilities.

The solid waste produced in health facilities is potentially hazardous, infectious, contagious, or toxic, producing the risk of the spread of diseases.

The proposed HIV/AIDS Prevention and Control Project, building on the World Bank-financed Provincial Health Systems Project, would support activities related to the handling of medical waste from patients infected with HIV/AIDS in the Dominican Republic. Specifically, it would support (1) an assessment of medical care waste handling and disposal related to HIV/AIDS programs and activities; (2) the development and adoption of a manual to address proper handling and disposal of medical waste; and (30 the training of health personnel associated with HIV/AIDS prevention and control programs and activities supported under the project.

The following sections of this document:

- Describe what constitutes medical waste and discusses the management of medical waste;
- Provide an overview of the new legal and institutional framework for addressing the problem of medical waste in the DR;
- Discuss investments financed under the ongoing WB-financed Provincial Health Systems Project in the Dominican Republic; and
- Identify how the proposed HIV/AIDS Prevention and Control Project will contribute to addressing the problem of medical waste in the Dominican Republic.

A. What Constitutes Medical Waste

Medical waste is defined as any material disposed of by a health facility, whether it be in solid, liquid, or gaseous state. Health facilities are understood to be public hospitals, private centers, clinical laboratories, pharmacies, etc.

According to the international standards dictated by the WHO, medical waste falls into the following categories:

General medical waste. This category includes paper and byproducts, plastic and glass products, and non-infectious materials.

Special biomedical waste. This is infectious or other waste produced by a health facility that poses health risks both within the health facility and beyond it.

Infectious biomedical waste. This includes blood, secretions, needles, syringes, vaccines, and pointed or sharp materials that may have been contaminated with infectious agents. Preventive measures in handling and final disposal of such waste are important.

Chemical waste. This includes disinfectants and other chemicals used for examinations, research, cleaning, etc.. Special regulations are required for the handling and final disposal of such chemical waste.

Radioactive waste. This is waste contaminated with radioactive substances used in diagnostic examinations or special therapeutic procedures. The elimination of radioactive waste requires specialized procedures because of its hazardous nature.

Anatomical waste. This consists of corpses or human remains from births, abortions, mutilations, or surgical operations. Anatomical waste poses a great risk spreading infection. Both forensic medicine regulations and ethical considerations are important in the handling of such waste.

Internationally accepted standards establish a total production of medical waste between 3.3 and 11 pounds per bed per day. Eighty -percent of this consists of general medical waste and the remaining 20% consists of special biomedical waste, approximately 14% of which corresponds to infectious waste. A study performed in 1992 by the Universidad Autónoma de Santo Domingo, based on the analysis of a sample of 29 public and private health facilities in the DR, found that the production of medical waste per bed per day was 5.5 pounds.

Internationally accepted standards for the % ages of waste produced by various components of health facilities are as follows: food service (50%); hospitalization service (18%); maternity service (8%); emergency service and orthopedics (8%); surgery (5%); and administrative, diagnostic and other services (11%). The 1992 study of 29 public and private health facilities in the Dominican Republic found the following distribution of waste production by type of service: (25.6%); kitchen (20.8%); surgery (11%), and outside consultation (9.2%).

B. Approaches to the Management of Medical Waste

This management of medical waste requires special care that requires the provision of information and training to the staff of a health facility that are involved in the various aspects of waste production and management. The waste management process has several phases, which control waste from the point of production to its final disposal, as detailed below:

- **Classification**. Classification of waste at the point of production (i.e., separating infectious and hazardous waste from the conventional waste stream with the goal of reducing the amount of waste that needs to be specially treated) makes it possible to reduce the volume of infectious waste and minimize treatment costs.
- **Internal collection**. Internal collection refers to the use of special containers, designed for the type of waste to be handled, placed near where the waste is produced and used only once.
- **Internal transfer**. The shortest route between the point of production and intermediate storage of waste should be selected for the internal transfer of waste. Waste containers should be checked to ensure that they are closed. Special measures should be taken to protect the staff involved in transfers.
- **Storage**. The storage place where the containers with waste are held before the treatment and/or final disposal of the waste should be equipped with hermetically sealed containers.
- **External transport**. The transport of waste from the point of intermediate storage to the waste treatment point should be done using special vehicles that can be disinfected.
- **Treatment.** Waste treatment includes methods, techniques, or procedures that change the characteristics of waste, reducing or eliminating the possibility that the waste will affect people's health or the environment.

The WHO has identified several procedures for medical waste treatment:

- **Incineration**. Incineration involves burning waste in a medium under controlled conditions to oxidize the carbon and hydrogen present in the waste. This method reduces the volume of solid waste by 80-95%. Although incineration can produce environmental toxins such as dioxin if adequate

controls are not adopted, it is often recommended because it is the only waste treatment method applicable to all types of biomedical waste.

- **Steam sterilization**. This method involves submitting the waste to steam inside an Autoclave, at an adequate temperature and pressure and for a determined time.
- **Gas sterilization**. This method consists of destroying pathogens present in waste by placing them in a compressed air chamber in which sterilizing agents are introduced, such as ethylene oxide or formaldehyde.
- **Chemical disinfection**. This process involves treating waste with liquid chemical disinfectants.
- **Other methods of sterilization.** Other methods of waste treatment that are less commonly used are including exposure to ultraviolet radiation or microwaves.

C. The Dominican Republic's New Legal and Institutional Framework for Handling Medical Waste

The enactment of the General Law on the Environment and Natural Resources in August 2000 and the enactment of the General Health Law on March 8, 2001, that was prepared with support of the World Bank-financed Health Services Project, are an auspicious development in the DR. The enactment of these laws indicates that environmental protection and the improving the management of medical waste have become priorities for the GODR. As discussed below, the laws also provide a clear legal and institutional framework for addressing the management of potentially hazardous, infectious, contagious, or toxic waste produced in health facilities.

General Law on the Environment and Natural Resources

The purpose of the General Law on the Environment and Natural Resources was to establish guidelines for the conservation, protection, improvement, and restoration of the environment and natural resources, thus assuring their sustainable use and to create institutions to take the lead in addressing issues related to the protection of the environment and natural resources.

The General Law on the Environment and Natural Resources created the State Secretariat of Environment and Natural Resources as the lead agency for environmental management. In addition, it designated the National Council for the Environment and Natural Resources as the body responsible for programming and evaluating policies and for a biodiversity conservation strategy. This council is composed of the State Secretariats of Environment and Natural Resources, of Agriculture and Livestock, of Public Health and Social Assistance, Education, Public Works, Armed Forces, Tourism, Industry and Commerce, Foreign Affairs, Labor, along with the Municipal League, the Natural Resources Institute, and regional representatives of NGOs, peasant organizations, universities (public and private), and the national business sector.[17]

Responsibility for the handling and disposal of waste water is distributed by territoriality: the Santo Domingo Aqueduct and Sewer Corporation (CASAD) of the National District; the Santiago Aqueduct and Sewer (CORAASAN) of the province of Santiago; and the National Institute of Drinking Water and Sewers (INAPA) in the country's other provinces.

Several special offices and commissions created by decree also have objectives related to environmental preservation, including the Commission for the Study of Causes of Environmental Pollution (Decree 2596-72); National Council of Radiology Protection (Decree 413-91); National Commission to Monitor Agreements of the United Nations Conference on the Environment and the development of the "Land

[17] Prior to the enactment of the General Law on the Environment and Natural Resources in August 2000, the responsibility for environmental protection in the Dominican Republic was shared by several institutions. They included the State Secretariat of Public Health and Social Assistance (SESPAS); the Dominican Social Security Institute (IDSS); city councils; the State Secretariat of the Armed Forces; and the General Bureau of Forestry.

Summit" (Decree 340-92); Office for the Reform and Modernization of the Drinking Water and Sanitation Sector (Decree 203-98); National Institute of Environmental Protection (Decree 216-98); and the Coordinating Commission of the Natural Resources and Environment Sector, created by Decree 152-98.

General Health Law

The General Health Law enacted on March 8, 2001, incorporates major changes in the DR's health care organization and financing. Provisions of the General Health Law pertaining to the management of medical waste, which supersede provision of previous laws dealing with this topic,[18] are summarized below.

SECTION IV—Solid Waste

Art. 46. The State Secretariat of Public Health and Social Assistance (SESPAS), in coordination with the State Secretariat of Environment and Natural Resources and other relevant institutions, shall prepare the official regulations that govern the disposal and management of solid waste whose use, collection, treatment, holding, recon version, industrialization, transport, storage, elimination, or final disposal may be hazardous to the population's health.

Art. 47. The institutions of the health system and all those health facilities which, due to their operations, utilize toxic or radioactive materials or substances, contaminants or other substances that may spread elements which are pathogenic or harmful to health, should have waste elimination systems developed in terms of the pertinent regulation prepared by the SESPAS, in coordination with the State Secretariat of Environment and Natural Resources and other relevant institutions. Medical waste shall be stored separately, technically treated in the establishment of origin and/or delivered to the corresponding municipality or institution, as the case may be, for transport and proper final disposal.

Art. 48. Health authorities must inform the State Secretariat of Environment and Natural Resources about those establishments or places which constitute a hazard to the health or life of the population due *to* undue, unhygienic accumulation of solid waste, so that said Secretariat may order them to be cleaned and may execute the corresponding administrative and safety measures.

SECTION V—Disinfection and other Measures

Art. 67. Those substances or objects that, by favoring the spread of diseases and causing harm to people's health, are considered hazardous shall be handled, sterilized, or destroyed by their owners or those in charge, or by the health authority itself, following the instructions and regulations that are prepared for this purpose by the health authority, in coordination with the relevant environmental authority and without jeopardizing compliance with prevailing environmental regulations and measures.

Paragraph. SESPAS shall collaborate with the State Secretariat of Environment and Natural Resources on the preparation of a list of hazardous substances and products, on the constant updating of this list, and on the preparation of regulations governing the waste management of these substances.

Art. 68. The owners, directors or heads of health or medical care facilities and other places where human groups stay or pass through, should avoid the spread of transmissible diseases within their establishment or towards the community, and shall be responsible for ensuring that the establishment has the necessary elements to avoid such spread, and that the staff of their agency carry out prophylactic practices in a timely and proper manner.

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[18]Prior to the enactment of the General Health Law, medical waste problems were addressed by a diversity of codes and laws, including the National Public Health Code (1956) and general health care guidelines contained in Health Law 456-38; Law 1459-38 on Health Procedures; the 1956 Labor Code; and Law 1896-62 on Social Security and General Hospital Regulations (Decree 351-99).

Art. 100. SESPAS is responsible for equipping the institutions or health establishments and, together with the advisory unit of the National Commission for the Accreditation of Clinics and Private Hospitals, for accrediting these institutions, ensuring the application of rules related to the minimum requirements which, according to their classification, said institutions should meet, with regard to physical installations, equipment, personnel, organization and operation, to ensure that the user receives a proper level of care, even in the case of disasters.

Paragraph I. In coordination with the corresponding institutions of the national health system, SESPAS shall regulate, by resolution, the equipping, operation and accreditation of health establishments and promote quality assurance, which shall be carried out through the assessment of public and private establishments, by rules and mandatory minimum criteria, and of their staff.

Paragraph II. SESPAS shall establish the general regulatory guidelines based upon which the duties assigned in this article shall be complied with.

Art. 101. The professionals or technical directors of health establishments in which natural or artificial radioactive material, or equipment designed for the emission of ionized radiation for diagnostic, medical therapy or dental purposes or for scientific research, is used should seek a permit from SESPAS that endorses their activities, without jeopardizing the duties of the State Secretariat of Environment and Natural Resources in this regard.

Art. 102. The boards of directors and the administration of health establishments shall be responsible for ensuring that staff correctly and properly performs their duties, so as not to expose the health or life of patients to unnecessary risk due to the lack of technical or therapeutic elements for reasons of unhealthy environmental conditions.

Art. 106. Health laboratories shall be directed by an expert in the subject who is duly accredited in the corresponding discipline and who shall be responsible for the establishment's progress, compliance with biosafety regulations, suitability of operations, and precision and quality in reports issued on the results of analyses.

Paragraph. Authorized staff who perform analyses or special testing in public, private, civilian, military, and other laboratories, should adjust their work to the technical regulations stipulated by the Laboratory and Blood Bank Divisions of SESPAS. Said staff shall be subject to technical control of the quality of their analyses of the aforementioned divisions.

SECTION VI - Blood Banks, Blood Transfusion Services, And Serology Control

Art. 107. The drawing of human blood, the fractionating and industrial transformation of human blood, and the practice of any of the activities mentioned in this article, may only be performed in blood banks and in blood derivative plants authorized SESPAS, which shall define, through the corresponding regulation, the rules for the installation, operation and control of these establishments, in coordination with pertinent institutions.

Paragraph I. The supply and transfusion of blood and its derivatives constitutes an act of legal and ethical responsibility. Doctors shall be the health professionals trained and authorized to therapeutically prescribe human blood, its components and derivatives, in accordance with the disease to be treated.

Paragraph II. The institutions of the National Health System shall ensure that their blood banks perform mandatory testing of blood and its derivatives, according to the prevailing international regulations of WHO, as well as pre-transfusion compatibility testing. No product may be transfused without the respective quality certification. SESPAS shall ensure compliance with this provision.

Paragraph III. A duly accredited staff member in terms of the nature of such banks and centers shall direct blood banks and hemotherapy centers.

Paragraph IV. The technique of aphaeresis, as a means of fractionating to obtain blood derivatives, may only be used by blood banks that are qualified and expressly authorized by authority of SESPAS. This should correspond to a concrete program, associated with the country's needs, in accordance with the regulation prepared by SESPAS, and in coordination with institutions specialized in this subject.

D. Related investments financed under the World Bank Provincial Health Systems Project in the Dominican Republic

In 1999, SESPAS, requested that the Executive Commission for the Reform of the Health Sector (*Comisión Ejecutiva para la Reforma del Sector Salud,* or CERSS), through the WB-financed Provincial Health Systems Project and a parallel project financed by the IDB, support the provision of technology for the treatment and final disposal of waste in the main health facilities around the country. As a result, the Provincial Health Systems Development Project has invested nearly US$1 million in the DR to date, to strengthen the medical waste management capacity of SESPAS' health care facilities. The vast majority of the resources (apart from about US$50,000 devoted to civil works) has been used to helped several hospitals purchase incinerators to treat medical waste and to support training of staff in the operating of this equipment and the management of medical waste:

- **Purchase of incinerators by hospitals for the purpose of treating medical waste.** Incinerators, along with peripheral equipment (identified containers) and services related to training in the operation and maintenance of equipment, have already been purchased and installed in several hospitals. They include the San Vicente de Paul Hospital in Duarte Province, Luis Bogaert Hospital in Valverde Province, Pascasio Toribio Piantini Hospital in Salcedo, Jaime Mota Hospital in Barahona, as well as the Armed Forces Central Hospital, Nuestra Señora de la Altagracia Maternity Hospital, Los Minas Maternity Hospital, Moscoso Puello Hospital, Robert Reid Cabral Children's Hospital, and the Luis E. Aybar Complex in the city of Santo Domingo. Of the incinerators installed, however, only two are operating at full capacity, and it is expected that the rest will be fully operational by June 2001. This situation is due in part to the fact that the staff trained to operate the equipment at some hospitals have left or taken on other functions.

- **Training.** Training courses in the operation and maintenance of the medical waste incinerators and in managing medical waste within the hospital were carried out successfully in all hospitals:

  Training in the operation and maintenance of the medical waste incinerators was provided to at least three people per hospital. It included training relate to the features of the equipment (e.g., electrical installation, gas-oil connection, ash removal) and the operation of the equipment (e.g., startup, shutdown of the installation, operating regulations, safety checks),

  Training in the management of medical waste within the hospital was provided to hospital staff (20 per establishment). This course was generally well accepted, both in terms of attendance and participation, and it has raised expectations about improving the way in which medical waste is managed. At most hospitals, attendance was complete, with between 25 and 30 people, including mid-level and higher level staff, on average per course. The exception was Los Minas Hospital, where only about 10 people (mostly maintenance staff) attended. At Luis E. Aybar Hospital, about 50 people attended, including nursing students who were very interested in the subject. In some cases, technical staff, especially from central services departments attended the course at different hospitals. At several hospitals, the instructors were asked to repeat the talks at another time so that staff that was not able to attend the first time could then do so.

A key challenge in the DR's health facilities is to devise mechanisms to keep the trained personnel who work in the waste collection and storage process. Furthermore, it was confirmed during the training process that the problem of handling such waste in health facilities is considered a housekeeping problem—so medical and paramedical staff does not participate in the waste management process.

Hospitals' Strong and Weak Points in Addressing the Problem of Medical Waste

The Provincial Health Systems Development Project assessment team reported prior to the installation of the incinerators in 2001 that there is no management of medical waste by hospitals in the DR, with the exception of Robert Reid Children's Hospital, where waste selection is beginning to be performed and some clear criteria exist. In general, hospitals in the DR exhibit the same strengths and weaknesses in addressing the problem of medical waste:

Weak points in addressing the problem:

- All waste at the hospital is treated in the same way.
- There is no differentiation of medical waste by types, based on their danger and/or the social alarm produced, except for the separation of needles and sharp objects in some hospitals.
- The only type of waste that is treated differently is a placenta, which in some centers is washed manually to keep fluids from dripping (La Altagracia Maternity Hospital) and in others ends up in septic tanks (Pascasio Toribio Hospital).
- Where bags are used for waste, they are only one color;
- Where bags are used, they are not as thick as is advisable (>55 m.), so they often break.
- In most cases, sufficient means for possible waste separation are lacking. There are no proper trash containers.
- There are no special containers for sharp or pointed objects.
- The staffs that generate waste lack proper training in the elements of correct management. The bags are so overfilled that they cannot be closed. Capped and uncapped needles are thrown in the bags. In some emergency units, needles can be observed on the floor.
- Waste collection personnel are unaware of minimum safety standards for waste management. In some cases, they do not use gloves or they use inadequate ones, and they do not wear specific clothing for the task. Bags are not handled correctly (e.g., bags are sometimes carried on the shoulders).
- The transport of waste from the units to the waste dump is sometimes done in vehicles, sometimes not.
- In waste dumps, it is common to find a large quantity of waste that has been thrown out without use of plastic bags.
- With the exception of centers whose installations have a municipal storage container, waste storage sites are in poor conditions. They lack doors and allow the access of children and animals. They lack cleaning hoses and/or fire extinguishers.

Strong points in addressing the problem:

- There is awareness in hospitals of the issue of waste, both by personnel and management. Awareness is not as strong among janitorial and trash collection staff, especially because they are unaware of the risk.
- There is an important potential among persons interested in participating in and doing something about waste management.
- There is external awareness about the current way in which waste is eliminated, both among the public and authorities.

- A credible process has begun, aimed at improving waste management. The installation of incineration plants in the seven hospitals is a sign of this.
- A draft plan for Hospital Hygiene Standards developed by SESPAS has been put in place.

Conclusions

The Provincial Health Systems Project assessment team concluded that implementation of a waste policy for any hospital in the DR will come up against two essential difficulties: (i) material means, and (ii) the awareness and preparation of staff. The assessment team made the following recommendations currently under implementation with respect to improving the preparation of staff:

- **Create a Waste Management Commission in each hospital**. Each hospital's Waste Management Commission should include staff from different occupations who participate in the hospital's daily operations or in that environment—i.e., an epidemiologist, a nurse, a janitor, and an engineer—and should be charged with preparing a Waste Plan for the hospital that establishes waste generation points, collection routes, storage points, and waste management responsibilities for various parties.

- **Offer hospital staff training in waste management**. Staff should be offered a three to four hours training course on waste management that is tailored to their particular needs. For example, maintenance and janitorial staff are at special risk in handling waste. Nursing staff and nursing students (very important) could benefit from training related to the generation of medical waste.

- **Involve outside consultants.** Outside consultants should be involved in the presentation of training courses and subsequently to provide support to the Waste Management Commission in: (i) the establishment of an initial work plan, (ii) follow-up/correction, and (iii) final evaluation.

E. The Proposed HIV/AIDS Prevention and Control Project

As suggested earlier, public health problems generated by the management of medical waste affect the hospital population—that is, medical and paramedical staff, patients (and visitors), and service employees—but also affect the population outside the hospital. One of the main concerns regarding medical waste in the DR is the possible transmission of diseases such as HIV/AIDS or hepatitis B through wounds caused by contaminated needles. The population groups at greatest risk from this are: (i) patients and health personnel; (ii) staff of hospital support services (trash collectors, treatment plant operators, etc.); and (iii) patients at high risk of contracting infections (e.g., people with diabetes, people with AIDS; drug addicts).

The HIV/AIDS Prevention and Control Project, building upon and complementing the activities supported under the Provincial Health Services Project, contemplates interventions under Component 2 to reduce HIV/AIDS transmission, aimed at protecting high-risk human groups such as patients and health staff within and outside hospitals, preserving the environment by establishing proper systems and processes for the management and treatment of contaminated hospital waste. Specifically, it would support: (i) an assessment of medical care waste handling and disposal related to HIV/AIDS programs and activities under the project; (ii) the revision and updating by COPRESIDA (the Presidential Commission for HIV/AIDS), through the SESPAS' General Directorate of Sexually Transmitted Infections and AIDS (DIGECITSS) and other specialized institutions, of the existing manual for medical waste handling and disposal; and (iii) the training of health personnel associated with HIV/AIDS programs and activities under the project in the application of these standards to protect high-risk human groups such as patients as well as health staff in the participating facilities.

The manual would address procedures for health center staff with regard to the handling, transport, treatment, and final disposal of medical waste, as well as the provision of required equipment and inputs.

with special attention to the handling of sharp and pointed objects (the main risk of viral contamination inside hospitals), beginning at the point where the waste is generated, through the use of receptacles for the collection, storage, and disposal of sharp and pointed objects. The receptacles for sharp objects should be synthetic fiber containers, with a hermetically sealable translucent cover to keep liquids from spilling. They should have rounded edges to avoid cuts to staff involved in handling and should be identified with international coding for biohazard us waste. Differentiated routes within the health establishment should be defined to transport the special containers, physical identification of routes, as well as inputs and training for the staff responsible.

The above-mentioned activities should be complemented by the provision of hospital waste treatment equipment financed under the Provincial Health Services Project and the parallel IDB project, which include the training of staff assigned to this work, with regard to the operation and maintenance of such equipment. This treatment should ensure that the local governments of each locality could carry out the final disposal of residual waste, without any risk to their staff or to the environment.

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Annex 14.3

Dominican Republic HIV/AIDS Prevention and Control Project

Estimated Project Costs

Project Cost By Component	Local	Foreign	Total
	US $ million		
Promotion and prevention to reduce the rate of HIV/AIDS transmission	9.65	7.45	17.10
Diagnostic, basic care, and support to individuals affected by HIV/AIDS	3.87	0.88	4.75
Strengthening HIV/AIDS and STI Surveillance System and Project Coordination, Monitoring, Evaluation and Research	6.91	.75	7.66
Total Baseline Cost	20.43	9.23	29.51
Physical Contingencies			.09
Price Contingencies			.15
Total Project Costs	20.43	9.23	29.75
Front-end fee		0.25	0.25
Total Financing Required	20.43	9.48	30.00

Project Cost by Category	Local	Foreign	Total
	US $ million		
1. Civil Works	1.60		1.60
2. Goods (other than anti-retroviral drug nevirapine, baby formula supplements, vaccines, anti-TB drugs, condoms and non-durable goods)	6.16		6.16
3. Vaccines, anti-TB drugs and Condoms	0.50	3.90	4.40
4. Consultants' Services			
(a) Information, Educational & Communication Campaign	1.80	.50	2.30
(b) Other Services under the project	3.90	3.90	7.80
5. Training	1.96	0.60	2.56
6. Project Administration Costs	3.10		3.10
7. Front end Fee		0.25	0.25
8. Unallocated	1.50	0.33	1.83
Total Project Costs	20.52	9.48	30.00
Total Financing Required	20.52	9.48	30.00

Annex 14.4

Dominican Republic HIV/AIDS Prevention and Control Project

Cost-Benefit or Cost-Effectiveness Analysis Summary

A. Preamble

The economic justification for some form of public intervention (financing, provision, regulation or mandates) in HIV/AIDS prevention derives from two main considerations: (i) the HIV/AIDS epidemic generates negative externalities and, as such, is unlikely to provoke an adequate purely private response: private agents invest less in HIV/AIDS prevention than they would if they internalized those externalities (the market failure argument); (ii) HIV/AIDS inflicts significant costs (lost productivity and increased need for health care) upon families. Paying for care out-of-pocket is liable to impoverish families and uninsured poor families simply cannot afford such care; the epidemic is therefore likely to increase the discrepancy in health status between the rich and the poor (the equity argument). A discussion of criteria to guide public financing decisions can be found in Musgrove (1999), Jack (2000) and Musgrove (2000)[19]. Once it has been established that some form of public intervention is justified, a cost-benefit analysis can be helpful in determining the feasibility of the proposed investment and a cost-effectiveness analysis can help set priorities among the possible interventions.

B. Cost- Benefit Analysis

Summary of Benefits and Costs

The cost of the program runs at about $30 million over a 5-year period and the proposed objective is to reduce the rate of newly reported HIV infections by 10% by the end of the project implementation period. Since the project will improve the reporting system, it is expected that the *observed* number of new cases could actually increase in the first few years even while true incidence, which is less readily observable, is expected to decline. The discrepancy between newly reported cases and incidence is due to underreporting. As the reporting system improves, the discrepancy is expected to decrease significantly. Since the benefits of the project are linked to a reduction in incidence, the cost-benefit analysis was conducted with incidence rather than newly reported infections as the target parameter. The analysis was framed to answer the following question: what is the minimum reduction in incidence required to obtain rates of return above 10%. By making various assumptions about the degree of underreporting, it is then possible to hypothesize how the unobservable reduction in incidence translates into an observable reduction in newly reported infections.

Two hypothetical scenarios of the evolution of HIV/AIDS prevalence and incidence were constructed. The first (with-project scenario) assumes a decrease in HIV incidence by 50% over the lifetime of the project. The second (without-project scenario) constancy of the HIV incidence rate. The difference between these two scenarios then yields the number of HIV infections averted due to the project. Table A14.4-1 presents a scenario where the incidence rate decreases linearly to half its original value over a five-year period. Table A14. 4-2 shows what would have happened if the incidence rate had stayed at its initial level.

The following assumptions, some of which are educated guesses, are made: (i) the 'natural' population growth rate for the period is 1.6%; (ii) incidence is taken to be 51.5 per million in year 0; (iii) the number of deaths due to AIDS in year t is calculated as 0.53% of prevalence in year t-1; and (iv) prevalence in year t is equal to prevalence in year t-1 + incidence in year t – AIDS deaths in year t.

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[19] P. Musgrove (1999) 'Public spending on health care: how are different criteria related?' *Health Policy*, 47: 207 – 223. W. Jack (2000) 'Public spending on health care: how are different criteria related? a second opinion' *Health Policy*, 53: 61-67. P. Musgrove (2000) 'Cost-effectiveness as a criterion for public spending on health: a reply to William Jack's 'second opinion.'' *Health Policy*, 54: 229-233

Table A14.4-1: Incidence rate halves over 5-year period

Year	Population	Incidence	Prevalence	Deaths due to AIDS	Incidence rate per million
0	8,293,000	427	165,860		51.5
1	8,425,688	391	165,370	881	46.4
2	8,560,499	353	164,845	878	41.2
3	8,697,467	314	164,283	875	36.1
4	8,836,626	273	163,684	872	30.9
5	8,978,012	231	163,046	869	25.8

Table A14.4.2: Incidence rate unchanged

Year	Population	Incidence	Prevalence	Deaths due to AIDS	Incidence rate
0	8,293,000	427	165,860		51.5
1	8,425,688	434	165,413	881	51.5
2	8,560,499	441	164,976	878	51.5
3	8,697,467	448	164,548	876	51.5
4	8,836,626	455	164,130	874	51.5
5	8,978,012	462	163,721	871	51.5

From tables A14.4-1 and A14.4-2, the number of infections averted due to the project can be derived. In turn, it is possible to obtain rough estimates of the productivity losses and cost of treatment thus averted with the use of the following parameters: (i) on average, averting HIV infection 'buys' an individual ten more years of productive life; (ii) average annual productivity is valued at 1999 GDP per capita (US$1,910); (iii) a patient who gets infected will live for 10 years with adequate care; (iv) the average annual cost of care per patient is US$384[20]; (v) the consumption benefits of a lower HIV prevalence are not factored in.

Table A14.4-3: Estimating project benefits

Year	Infections averted	Years of life saved	Productivity losses averted ($)	Averted cost of care ($)	Total benefits ($)
1	43	434	828,793	166,626	995,419
2	88	882	1,684,107	338,585	2,022,692
3	134	1,344	2,566,579	516,003	3,082,582
4	182	1,820	3,476,859	699,012	4,175,872
5	231	2,312	4,415,611	887,746	5,303,357
Total	**679**	**6,792**	**12,971,949**	**2,607,973**	**15,579,922**

The valuation of productivity losses obviously is a lower bound on the value of lives lost to the disease. The stream of benefits is supposed to last 12 years after project closing[21]. The rates of return associated with the project were calculated using the assumptions discussed above.

[20] This is calculated as $210 + 3 x current health spending per capita ($58), which mirrors the hypothesis made in the cost estimation exercise for the Caribbean as a whole (see Caribbean HIV/AIDS Control APL PAD).

[21] Because of discounting, the present value of the benefits tapers off rapidly over time.

Table A14.4-4: Internal Rates of Return

Year	Costs	Benefits	Net Benefits
1	5,510,510	995,419	(4,515,091)
2	7,076,550	2,022,692	(5,053,858)
3	5,043,400	3,082,582	(1,960,818)
4	4,199,348	4,175,872	(23,476)
5	4,373,751	5,303,357	929,606
6...17	0	5,303,357	5,303,357
IRR = 22.5%			

Sensitivity analysis / Switching values of critical items:

The objective of the analysis was to find what is the minimum reduction in incidence needed to ensure a rate of return above 10% (given all the other assumptions above hold). A switching value analysis was conducted for this and other critical parameters. The results of this analysis are summarized in Table A 14.4-5 below.

Table A14.4-5: Switching Values for Key Parameters

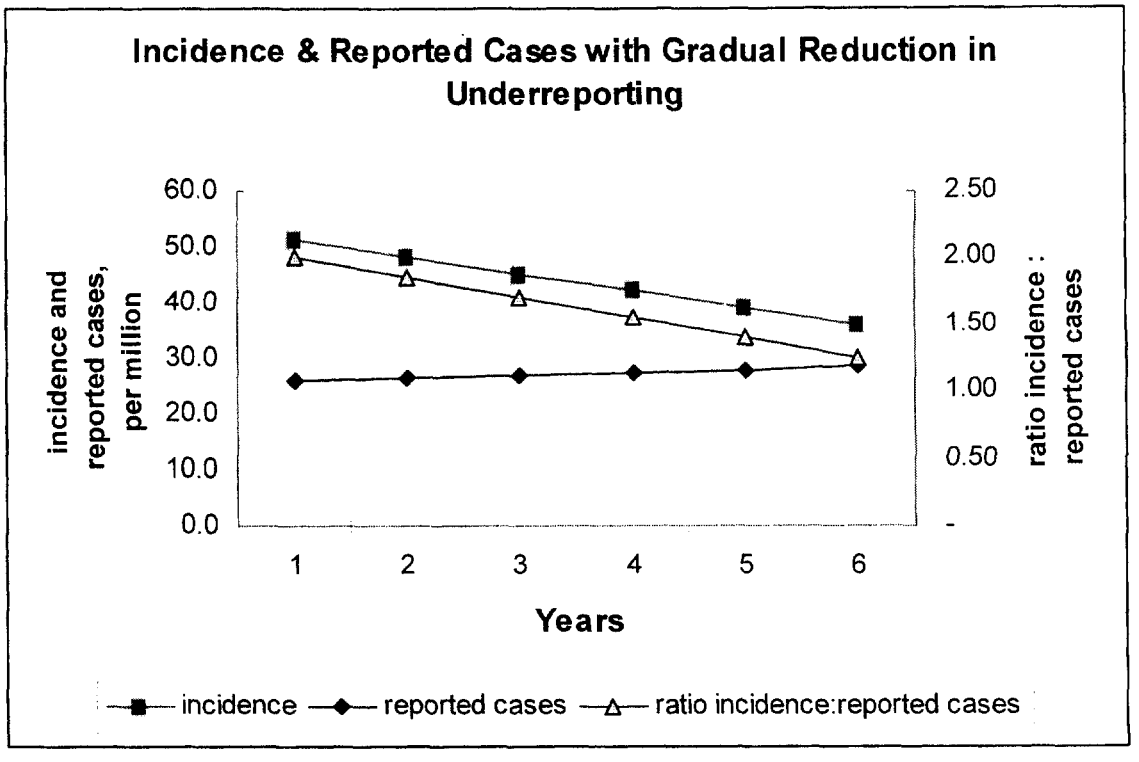
Parameter	Base case	Limit value of parameter that yields an IRR above 10%
Incidence rate	Reduction of 50% over project lifetime	Reduction of 31% over project lifetime from 51.5 per million to 35.8 per million
Annual cost of care for patient	$384	Even if the averted care costs are zero, the rate of return is 17% since the productivity losses averted alone generate sufficient benefits.
Average number of years patient needs care	10 years	Idem: even if the averted cost of care goes to zero, the rates of return is 17%
Average number of years lived if infection is avoided	10 years	5.25 years
Productivity valuation	$1,910 per year	$1,000 per year

In addition, if the stream of costs stays the same but the stream of benefits is delayed by one year then the rate of return drops to 18%, and if the stream of benefits is delayed by two years, the IRR drops to 15%. The returns to the project are therefore robust to significant negative biases against project feasibility.

It was shown that if all the assumptions above hold true, then a minimum reduction of 31% in the incidence rate is required to generate sufficient benefits to yield rates of return of at least 10%. It was also indicated that there is significant underreporting in the DR and that newly reported HIV infections is, initially at least, a poor proxy for incidence. It is therefore expected that the project monitoring indicators will pick up the sum of the effects of better reporting (which will translate as an increase in the number of newly reported cases) and of better prevention (which will translate as a decrease in the number of newly reported cases). In other words, the reduction in the rate of newly reported cases will be substantially lower than that in the incidence rate.

The graph below depicts a situation where (i) the incidence rate decreases by 31% (which corresponds to the limit reduction to ensure rates of return of 10% or above); (ii) the ratio of reported cases to incidence increases linearly from 1:2 in year 1 to 1:1.25 by the end of the project. The figure below indicates that, given the above assumptions, an 11% *increase* in the rate of newly reported cases (measurable) is compatible with a 31% *decrease* in the incidence rate.

Figure A14.4-1: Incidence and Reported New Infections



The path of reported cases is naturally extremely sensitive to the assumptions about the degree of underreporting and the degree to which the project is able to reduce the extent of underreporting. The table below summarizes different scenarios of beginning- and end-of-period underreporting ratios that are compatible with a 31% reduction in the incidence rate (to ensure adequate returns) and a 10% reduction in the rate of newly reported infections (stated project objectives).

Table A14.4-6: Different scenarios of beginning- and end-of-period underreporting ratios

Reduction in incidence rate	Reduction in observed new cases	Incidence: Reported Cases ratio in year 0	Incidence: Reported Cases ratio in year 5
-31%	-10%	2	1.55
-31%	-10%	1.9	1.46
-31%	-10%	1.8	1.39
-31%	-10%	1.7	1.31
-31%	-10%	1.6	1.24
-31%	-10%	1.5	1.16
-31%	-10%	1.4	1.08
-31%	-10%	1.3	1

Note that the smaller the correction in underreporting, the smaller the gap between the paths of incidence and reported new infections. In other words, if the project does not do a very good job in correcting for underreporting (whatever the initial level is), then the reduction in observed new cases needs to be close to 30% if the project is to yield adequate returns. If the project dramatically improves reporting, then even an increase in the observed rate of new infections is quite compatible with adequate returns. The implication for the project is the need to carry out occasional studies to assess the degree of underreporting. This information will prove critical in determining project success.

C. Cost-Effectiveness Analysis

Once it is decided that a set of interventions warrants public intervention in the form of financing, provision, regulation or mandate, then information about cost-effectiveness is useful to determine to prioritize among those interventions.[22]. The table below, adapted from Jha et al. (2001)[23] summarizes ranges of values from the literature relating to the cost-effectiveness of some of the most frequent interventions in HIV/AIDS prevention.

Table A14.4-7: Cost-effectiveness ratios for different groups of interventions

	Sex worker interventions	STI management	Voluntary counseling and testing	Anti-retrovirals in pregnancy	IEC to change risky behavior[24]	Anti-retrovirals [25]
Cost per HIV infection averted	$8-12	$218	$249-346	$276	$1,324	--
Cost per DALY saved	$0.35-0.52	$9.45	$12.77-17.78	$10.51	$66.2	$720-$2,355

The proposed project gives clear financing priority to those interventions that are most cost-effective (especially interventions targeted at sex worker and other high-risk groups such as the military, the police, prisoners and sugar-cane workers - see Annexes 14.1 and 14.2). As such, it is expected to achieve maximum impact in reducing the spread of the epidemic. The project priorities are also closely aligned with those suggested by Ainsworth et al. (2000)[26].

Fifty-eight percent of the project corresponds to the categories identified in the above table. The rest corresponds to initiatives whose cost-effectiveness ratio remains to be established (support to orphans, surveillance, research, monitoring and evaluation, safety of blood supply, etc). If the parameters[27] in the table above apply to the DR[28], then it can be shown that the cost-effectiveness of the components of the project, which support interventions of known cost-effectiveness ratios, is $87 per HIV infection averted.

The project will enable the collection of relevant cost and effectiveness data to enable the periodic calculation of the cost-effectiveness of the interventions being supported and allow policymakers to update the national strategy to combat the spread of the epidemic.

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[22] There is an ongoing debate about the use of cost-effectiveness to guide public financing decisions. Public financing decisions should be made on the basis of market failure arguments. Jack (see footnote 1) suggests that the correct approach to public financing decisions would be to carry out a full cost-benefit analysis to include the external benefits and the costs of raising public revenues. Hammer (in J. Hammer, (1997) 'Prices versus protocols in public health care' *World Bank Economic Review*, 11 (3)) also argues against the use of cost-effectiveness in guiding public finance decisions on the grounds that if there is private demand for an intervention, then publicly-subsidized provision substitutes for private demand so that the net health effect is typically smaller than in the absence of public demand. Cost-effectiveness is not used here to guide public financing decisions but to order the interventions once it has been decided that they should benefit from some form of public intervention.

[23] P. Jha et al. (2001) 'The evidence base for interventions to prevent HIV infection in low and middle-income countries.' Background paper of the Commission on Macroeconomics and Health, the World Health Organization.

[24] UNAIDS

[25] UNAIDS - Brazil Program

[26] M. Ainsworth and W. Teokul (2000) 'Breaking the silence: setting realistic priorities for AIDS control in less-developed countries'Lancet. 356: 55-60. The authors single out increased condom use, treatment of STIs, safe injecting behavior and drugs to prevent mother-to-child transmission as interventions of known effectiveness in preventing HIV infection and AIDS.

[27] Using the higher end of the ranges.

[28] Cost-effectiveness parameters are sensitive to the scale of the activity and the stage of the epidemic.

Annex 14.5

Dominican Republic HIV/AIDS Prevention and Control Project

Financial Summary
(US$ million)

	Implementation Period				
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Total Financing Required					
Project Costs					
Investment Costs	3,000	4,257	1,957	1,157	997
Recurrent Costs	3,210	3,977	4., 043	4,049	3,101
Total Project Costs	6,210	8,234	6,000	5,206	4,098
Front-end Fee	250				
Total Financing	**6,460**	**8,234**	**6,000**	**5,206**	**4,098**

Financing					
IBRD/IDA	5,706	6,879	4,666	4,116	3,363
Government	1,120	1,264	1,243	999	374
Front-end Fee	250				
Total Project Financing	**7,076**	**8,143**	**5,909**	**5,115**	**3,737**

Annex 14.6

Dominican Republic HIV/AIDS Prevention and Control Project

Procurement and Disbursement Arrangements

Procurement Arrangements

Procurement for the proposed project would be carried out in accordance with World Bank "*Guidelines: Procurement Under IBRD Loans and IDA Credits*", published in January 1995 (revised January/August 1996, September 1997 and January 1999); and "*Guidelines: Selection and Employment of Consultants by World Bank Borrowers*" published in January 1997 (revised in September 1997 and January 1999), and the provisions stipulated in the Loan Agreement.

Procurement Responsibility

The Administrative-Financial Unit of the CERSS, responsible for managing the implementation of the Project Provincial Health Services Project, in coordination with COPRESIDA' s Project Coordination Unit (PCU), will implement procurement activities for the project. This arrangement will allow COPRESIDA to take advantage of the already established capacity, accumulated experience, and good staff performance in the CERSS' Unit. The CERSS' Unit, in coordination with the COPRESIDA' s PCU, will be directly responsible for the overall procurement regulation and supervision activities assuring compliance with procedures agreed with the WB.

Procurement Methods

A procurement plan will be prepared along with the annual work plan. The annual action and procurement plan for each year would be submitted by the Borrower to the WB for approval, not later than October of the previous year and would use a pre-defined standard format which would list as a minimum: (i) works, goods and services to be procured for the following calendar year; (ii) their value; (iii) the method of procurement; and (iv) the timetable for carrying out the procurement. If needed, the plan could be revised and re-submitted. A format for a typical plan was agreed at the negotiation of the project. The procurement plan for the first year has been approved.

The methods to be used for the procurement described below, and the estimated amounts for each method, are summarized in Table A14.6-1. The threshold contract values for the use of each method are fixed in Table 14.6-3. Both, methods and thresholds will be reviewed and adjusted, if necessary, every year when the new plan is presented to the WB.

a) **Procurement of Works.** : Works procured under the project will include the rehabilitation and refurbishing of the PCU offices and in some of the participating agencies supporting project implementing, as well as of selected health facilities, totaling US$1,600,000, equivalent. It is not foreseen any major civil work contracts for this Project. Therefore, these small works may be procured on the basis of at least three quotations in response to written invitations to qualified contractors, which will consist of a detailed description of the works, including basic specifications, the required completion date, a basic form of agreement acceptable to the World Bank, and relevant drawings, when applicable.

b) Works estimated to cost less than US$350,000 equivalent per contract, up to an aggregate amount not to exceed US$1.6 million, may be procured under lump-sum, fixed-price contracts awarded on the basis of quotations obtained from 3 qualified domestic contractors in response to a written invitation.

c) **Procurement of Goods**. Goods (other than vaccines, anti-tuberculosis drugs and condoms) procured under this project will include specialized laboratory equipment and supplies, pharmaceutical products, vehicles, computer and office equipment, and educational, information and communications publications totaling US$8.0 million equivalent. to the extent possible,

(i) Contracts for goods (other than the anti-retroviral drug nevirapine, baby formula, vaccines, anti-tuberculosis drugs and condoms) will be grouped into bidding packages of US$250,000 equivalent or more and procured following International Competitive Bidding (ICB) procedures, using World Bank-issued Standard Bidding Documents (SBDs).

(ii) Contracts for goods (other than the anti-retroviral drug nevirapine, baby formula, vaccines, anti-tuberculosis drugs and condoms) with estimated values below US$250,000 equivalent, per contract and up to an aggregate amount of US3, 200,000 may be procured using National Competitive Bidding (NCB) procedures using standard bidding documents agreed in advance with the World Bank.

(ii) Contracts for goods (other than the anti-retroviral drug nevirapine, baby formula, vaccines, anti-tuberculosis drugs and condoms) which cannot be grouped into larger bidding packages and estimated to cost less than US$100,000 per contract, up to an aggregate amount of US$2,790,000 may be procured using National/International shopping procedures based on at least tree quotations received in response to a model request for quotations which will include detailed technical specifications, required delivery date, guarantees and conditions and a basic form of agreement satisfactory to the World Bank.

(iv) Vaccines and anti-tuberculosis drugs up to an aggregate amount of $1,905,000, may be procured through direct contracting of PAHO; and condoms up to an aggregate amount of $945,000 may be procured from the UNFPA and should comply with Clause 3.9 of World Bank Guidelines, up to an aggregate amount of US$7.2 million. Request should have been included in the Annual Procurement Plan.

d) **Selection of Consultants**. Consulting services will be contracted under this project in the following areas of expertise: education-information-communication campaigns, social marketing of condoms, training of health personnel, prevention, care, support of HIV/AIDS, STIs and TB patients, quality assurance of blood banks and laboratories, HIV/AIDS and STI surveillance and research, management information systems, monitoring and impact evaluation. These services are estimated to cost US$12.7 million equivalent and would be procured using WB Standard Request for Proposals.

e) **Firms**. Most contracts for consultant services including design and production of information educational campaigns, social marketing of condoms, training of health personnel, prevention, care firms would be selected using Quality and Cost-Based Selection (QCBS). Other small and simple contracts estimated to cost less than US$100,000 equivalent that would be selected based on the Least Cost Selection (LCS) up to an aggregate amount of US$4.0 million equivalent.

f) **Individuals.** Specialized advisory services would be provided by individual consultants selected by comparison of qualifications of three candidates and hired in accordance with the provisions of paragraphs 5.1 through 3.5 of the Consultant Guidelines, up to an aggregate amount of US$1.8 million.

g) **NGOs.** NGOs will be contracted to assist in the implementation of the project, focusing on high-risk groups (e.g., commercial sex workers, inmates, street children, people living in *bateyes*), and including training, monitoring and evaluation. The NGOs will be selected through a national competitive process by QCBS considering as criteria, in addition to the uniqueness of Egos-voluntary work, non-profit organization--their experience and knowledge of the local reality, the complexity of their operations and reputation, management and financial capacity.

Project Management. COPRESIDA's PCU staff and other operational costs will be financed following WB guidelines up to an aggregate amount of US$3.1 million.

Review of Procurement Actions

Review of Procurement Plans. Every year a detailed annual action plan, which will include a procurement plan, shall be furnished to the World Bank before October for its review and approval. This plan will include: a firm list of contracts to be procured in the next fiscal year; estimated contract costs; schedule for bidding; and method of procurement or of selection of consultants. The plan shall be consistent with the above provisions and procurement methods for goods, works and the selection of consultants. Once approved the plan is binding and changes will require review and approval by the World Bank.

During the fiscal year, if changes are required in the procurement plan a revised version should be submitted to the World Bank for its review and.

Prior-Review Thresholds

The proposed thresholds for prior review are based on the procurement capacity assessment of the project implementation unit and are summarized in Table A14.6-2.

Assessment of the Agency's Capacity to Implement Procurement

Presidential Decree 32-01 created COPRESIDA on January 8, 2001, to implement policies and strategies to Prevent and Control HIV/AIDS. Several private and public institutions integrate the Council and it is presided by the State Secretary of Public Health and Social Welfare. COPRESIDA also has an Executive Director who will be responsible for the Project Coordination Unit of the project. The PCU will be comprised of a Technical Unit responsible for the technical implementation of the project. The CERSS' Administrative-Financial Unit will be responsible for the procurement of goods and services required for the implementation of the project.

The assessment reviewed the organizational structure of the proposed PCU and the coordination mechanisms between the COPRESIDA's PCU, CERSS's Administrative-Financial Unit, and other participating agencies.

The measures identified in the agreement to minimize risks include: (i) assurance of appointment of additional qualified staff to support the procurement team of the CERSS' Unit; (ii) establishment of separate control mechanisms; (iii) development of coordination mechanisms between the CERSS' Unit, COPRESIDA's PCU, and participating institutions. The PCU will present a detailed plan to implement these measures by April 2001. It should involve: (i) approval and number of qualified staff acceptable to the World Bank to be assigned to the CERSS'Unit; (ii) detailed structure of control mechanisms and coordination arrangements between the CERSS' Unit and the COPRESIDA's PCU; (iii) annual procurement plan; and (iv) description of procurement monitoring and filing system. The project's Operations Manual will clearly specify these procedures and operations flow.

The financial system in the CERSS' Unit is being converted at the present time to comply with PMR. Once the system is converted, it will be expanded to cover the HIV/AIDS project. Consequently the Program is ineligible for PMR-based disbursements on procurement reporting grounds. The overall project risk for procurement is AVERAGE considering the experience and good performance of the CERSS' procurement team and assuming that additional support to this unit will be provided, both human resources and equipment.

Regional Procurement Advisor approved the Capacity Assessment on March 13, 2001.

Procurement Plan, Monitoring and Filing

The Borrower developed a draft procurement plan for the first year of program implementation that provided the basis for the aggregate amounts for the procurement methods (per Table A14.6-1). No later than October 31, the Borrower will prepare a procurement plan as part of the annual implementation plan and, if necessary, the procurement methods and thresholds would be adjusted accordingly.

The project's Operations Manual describes the procurement monitoring and filing systems which should be available to the WB supervision missions and auditors upon request.

Frequency of Procurement Supervision

In addition to the prior review supervision to be carried out from WB offices, the capacity assessment of the CERSS's Unit recommended one full supervision mission to visit the field to carry out post review of procurement actions, six months after implementation and then one every 12 months. Based on the overall risk assessment (AVERAGE) the post-review field analysis should cover a sample of not less than one in five contracts signed.

Financial Management and Disbursement System

The CERSS' Unit, in coordination with the COPRESDIA'S PCU, will maintain records and accounts adequate to reflect, in accordance with sound accounting practices, the resources and expenditures in connection with the execution of the project. For the execution of the proposed project, the financial and accounting system installed in the CERSS's Unit for managing the implementation of the ongoing Provincial Health Project would be used. Within the first year of implementation, the CERSS's Unit would begin to prepare and submit to the World Bank, on a quarterly basis, consolidated Project Management Reports (PMR), linking project expenditures to key monitoring indicators of project activities.

a) **Financial Management Assessment.** For the proposed project, and to be in compliance with WB requirements per OP/BP 10.02, a WB Financial Management Specialist carried out an assessment of the project's financial management system. The work was based on applicable World Bank guidelines, which included the "Project Financial Management Manual" (World Bank, February 1999), and the WB's Toolkit for FM Assessments. The financial management assessment reviewed the project's accounting system, internal control, financial management staffing, planning, budget and financial reporting systems (including for the preparation of PMRs), and auditing arrangements. The conclusion of this review was that the financial management system meets the World Bank's minimum requirements, but certain actions are required for the project to be fully prepared for implementation. These actions mainly involve the establishment of specific procedures and accounts for the HIV/AIDS project, as well as certain capacity enhancements. It is important to emphasize that CERSS' Unit is currently implementing the Provincial Health Services Project. COPRESIDA, as the overall coordinator of the project, must ensure that current arrangements are customized for the HIV/AIDS project and included in corresponding project's Operations Manual. The key items from the Action Plan for the full establishment of the financial management (FM) system are detailed at the end of this section.

b) **Accounting, Auditing, and Financial Reporting**. The operations of the proposed project will be recorded following cash basis accounting under International Accounting Standards (IASC, issued by the IASC and adopted for the cash basis). For each fiscal year, these records and accounts, including those for the Special Account, will be audited in accordance with appropriate auditing principles consistently applied (International Auditing Standards issued by IFAC), by independent auditors acceptable to the WB (an international private firm appointed in accordance with applicable World Bank guidelines for the selection and appointment of auditors). Auditors will be appointed before effectiveness and if possible, be contracted for the life of the project. The audit report will be sent to the WB not later than four months after the end of each fiscal year. During the time that the

Provincial Health Project is still being implemented, it is expected that the same auditor will be employed for both projects; however, a separate audit report will be required for each project. These audits will include all expenditures with respect to which withdrawals from both the Loan Account and the Special Account were made. The CERSS' Unit, in coordination with the COPRESIDA's PCU, would ensure that records, accounts and supporting information are available for review by World Bank supervision missions and to the auditors as required.

c) **Disbursements.** Disbursements of loan proceeds would be via traditional World Bank disbursement methods (especially, Statements of Expenditure - SOEs), until such time that the project is able to create accurate and comprehensive Project Management Reports (PMRs) on a timely basis. The PMRs include financial, physical, and procurement monitoring information. As of March 2001, the CERSS could not provide, with reasonable assurance, accurate and timely information on the status of the project as required by the WB under the Financial Management Initiative, in the form of a Project Management Report (PMR). The CERSS's Unit, in coordination with the COPRESIDA's PCU would take actions to integrate the production of the quarterly PMRs into the new management information system (MIS), in order to eventually allow for PMR-based disbursements. The accuracy of information reported in SOEs or PMRs would be verified by the auditors, and by WB supervision missions. Details on the operation of the above mechanisms would be included in the project's Operations Manual; its adoption by the Government would be a condition of loan effectiveness.

In order to facilitate disbursements the Borrower will open a Special Account at the Central Bank with an authorized allocation of US$1 million covering four months of eligible expenditures. Upon effectiveness, the Borrower will withdraw US$500,000 from the Loan account representing 50% of the authorized allocation. When the aggregate amount of funds withdrawn from the Loan account and outstanding Special Commitments reach a total amount of US$6 million the Borrower may withdrawn the remaining balance of the authorized allocation amounting to US$ 500,000. Replenishments will be submitted monthly and are supported by full documentation except for the following expenditures that may be claimed on the basis of Statements of Expenditure (SOEs):

- All civil works with the exception of first 2 contracts for works costing US$350,000 equivalent or more costing less than US$350,000 and goods contracts costing less than US$250,000 equivalent.
- Consulting services – firms: contracts costing less than US$ 100,000 equivalent.
- Consulting services – individuals: contracts costing less than US$ 50,000 equivalent.
- Incremental operating costs and training (all contracts)

The Borrower for review by visiting Bank supervision missions and the project's external auditors will retain all documentation.

d) **Budgeting Process and Flow of Funds**. An annual budget would be prepared by the CERSS' Unit, in coordination with the COPRESIDA's PCU, on the basis of annual investment plans. Local financing (counterpart funds) for the proposed project would be included under the government budget. Loan funds would be channeled directly (i) to project management, via a Special Account, which would be established in the Dominican Republic Central Bank and jointly managed by COPRESIDA and CERSS. For local expenditures, funds would be transferred periodically (for no more than 30 days of expenditures) from the Central Bank to the project's bank account in the Banco de Reservas de la República Dominicana (commercial bank). All disbursements to suppliers would follow national procedures, which would have to be sufficiently well documented to meet World Bank requirements. The CERSS' Unit would be responsible for budget consolidation and funds control to report in the dates and format established. Initial amount of the Special Account and maximum use would be made of a country's existing practices and reporting formats, which in fact at present are operational for the on-going Provincial Health Services Project.

Additional Items from the Agreed Action Plan

The project will be required to have a complete, functioning financial management system in place before loan effectiveness. This would include the financial section of the Operational Manual (including an appropriate Chart of Accounts for the project), customization of CERSS' MIS to fit project reporting requirements, staffing, and the contracting of auditors. In addition, the loan agreement would include a clause specifying the date by which the project could begin to submit regular, quarterly PMRs.

Table A14.6-1: Project Costs by Procurement Arrangements [a/]

(in US$ million equivalent)

Expenditure Category	Procurement Method				Total Cost
	ICB	NCB	Other	N.B.F	
1. Works	()	()	1.60 [b/] (1.50)		1.60 (1.50)
2. Goods (other than the anti-retroviral drug nevirapine, baby formula supplements, vaccines, anti-TB drugs, condoms and non-durable goods)		3.20 (2.50)	2.90[c/] (2.10)		6.10 (4.60)
3. Vaccines, anti-TB drugs, condoms	1.00 (.80)	0.50 (0.30)	2.90 [d/] (2.20)		4.40 (3.34)
4. Consultants' Services [e/] (a) Information, Educational and Communication Programs			2.31 (1.84)		2.31 (1.84)
(b) Other consultants' services under the Project			7.80 (7.80)		7.80 (7.80)
5. Training			2.61 (1.84)		2.61 (1.84)
6. Project Administration Costs			3.10 (2.00)		3.10 (2.00)
7. Front-end Fee			0.25 (0.25)		0.25 (0.25)
8. Unallocated			1.83 (1.83)		1.83 (1.83)
Total [f/]	**1.00** (0.80)	**3.70** (2.80)	**25.30** (21.40)		**30.0** (25.0)

Note: N.B.F. = Not Bank-financed (includes elements procured under parallel co-financing procedures, consultancies under trust funds, any reserved procurement, and any other miscellaneous items). Figures in parenthesis are the amounts to be financed by the Bank loan/IDA credit

Footnotes:

a. Thresholds and procurement methods may be adjusted each year upon presentation of an annual procurement plan no later than July 1st of each year.

b. Three quotations

c. Shopping (National and International)

d. Vaccines and Anti-tuberculosis drugs may be procured directly from PAHO up to $1,905,000; and condoms may be procured directly from the United Nations Fund for Population Activities (UNFPA) up to US$945,000.

e. Consultant Services: Details provided in Table A 6-2

f. May not add exactly due to rounding

Table A14.6-2: Consultant Selection Arrangements

(in US$ million equivalent)

Consultant Services Expenditure Category	Selection Method							Total Cost (including contingencies)
	QCBS	QBS	SFB	LCS	CQ	Other	N.B.F.	
A. Firms	6.9 (6.0)	 ()	 ()	4.0 (4.0)	 ()	 ()	 ()	10.9 (10.0)
B. Individuals	 ()	 ()	 ()	 ()	 ()	1.8 (1.5)	 ()	1.8 (1.5)
Total	6.9			4.0		1.80		12.70
	(6.0)	()	()	(4.0)		(1.50)	()	(11.5)

Note: QCBS = Quality- and Cost-Based Selection
QBS = Quality-based Selection
SFB = Selection under a Fixed Budget
LCS = Least-Cost Selection
CQ = Selection Based on Consultants' Qualifications
Other = Selection of individual consultants (per Section V of Consultants Guidelines), Commercial Practices, etc.
N.B.F. = Not Bank-financed.
Figures in parenthesis are the amounts to be financed by the Bank loan.

Table A14.6-3: Thresholds for Procurement Methods and Prior Review[a]

Expenditure Category	Contract Value (Threshold) US $ thousands	Procurement Method	Contracts Subject to Prior Review US $ millions
1. Works	>350,000 <350,000	NCB Three Quotations	First 2 contracts None (post review)
2. Goods			
	>250	ICB	All
	>100 < 250	NCB	Post Review
	<100	Shopping	Post Review
	Irrespective of Value	Direct Purchase[b]	All
3. Services Consultant Firms	>100	QCBS	All
	>50 <100	Least Cost Selection / Any Selection Method	All
Individuals	> 50	See Section V of Guidelines	All (TOR, contract, CV)
	< 50	See Section V of Guidelines	None, (post review)

a. These thresholds and procurement methods will be reviewed each year upon presentation of a procurement plan, no later than October 31 of each year.
b. For procurement of antituberculosis vaccines from specialized agencies of United Nations provided they have been included in the Annual Procurement Plan.

Overall Procurement Risk Assessment:

High	
Average	**X**
Low	

Frequency of procurement post-review supervision missions proposed: One after six months of effectiveness and one every 12 months thereafter, reviewing a sample of 1 in 5 contracts signed.

Table A14.6-4: Allocation of Loan Proceeds

Expenditure Category	Amount in US$ million	Financing Percentage
1. Works	1.50	85%
2. Goods (other than the anti-retroviral drug nevirapine, baby formula supplements, vaccines, anti-TB drugs, condoms and non-durable goods)	4.60	75%
3. Vaccines, anti-TB drugs and condoms	3.34	80% until expenditures under this Category have reached US$2.50 million, and 50% thereafter
4. Consultants' Services: (a) Information, educational and communication programs (IEC) (b) Other services under the Project	 1.84 7.80	 80% 100%
5. Training	1.84	75%
6. Project Administration Costs	2.00	80% until disbursements under this Category have reached an amount of $1,000,000; and 50% thereafter
7. Front-end Fee	0.25	
8. Unallocated	1.83	
Total	25.00	

Table A14.6-5: Disbursement Schedule

(US$ Million equivalent)			
Semester Ending		**Appraisal Estimate**	**Cumulative**
FY 2002	December 01 June 02	4.5	4.0
FY 2003	December 02 June 03	6.5	11.0
FY2004	December 03 June 04	5.1	16.1
FY 2005	December 04 June 05	4.8	20.9
FY 2006	December 05 June 06	3.0	23.9
FY 2007 (a)	December 06	1.1	25.0

(a) Refers to the expected disbursement in the last semester of project implementation.

Annex 14. 7

Dominican Republic HIV/AIDS Prevention and Control Project

Project Processing Budget and Schedule

Project Schedule	Planned (At final PCD stage)	Actual
Time taken to prepare the project (months)	6 months	
First Bank mission (identification)	09/2000	09/2000
Appraisal mission departure	03/2001	03/2001
Negotiations	04/2001	04/2001
Planned Date of Effectiveness	10/2001	10/2001

Prepared by: Government of the Dominican Republic led by State Secretary of Health, Dr. Jose Rodriguez Soldevilla, and the Director of COPRESIDA, Dr. Luis Montalvo.

Preparation assistance: PHRD Japanese Trust Fund No. TF026627

Name	Specialty
Patricio Marquez	Team Leader, Lead Health Specialist
Girindre Beeharry	Health Economist
Kundhavi Kadiresan	QA Specialist
Reynaldo Pastor	Legal Counsel
Armando Araujo	Procurement Specialist
Xiomara Morel	Sr. Financial Management Specialist
Daniel Boyce	Financial Management Specialist
Marta Ospina	Procurement Specialist
María Colchao	Program Assistant
Mary Dowling	Team Assistant
Oscar Echeverri	Public Health, Consultant
Alberto Gonima	Management Information Systems, Consultant
Ernesto Guerrero	HIV/AIDS Specialist, UNAIDS
Fernando Sacoto	Public Health Specialist, Consultant
Fausto Andrade	Public Health Specialist, Consultant

Peer Reviewers: James C. Lovelace, Director, HNP Network; Debrework Zewdie, Global HIV/AIDS Coordinator for the World Bank; Keith Hansen, AFRHV; René Ruivivar, OPCPS; Evangeline Javier, LCSHD; Luiz Loures (UNAIDS).

QER. The panel met on February 16, 2001 and discussed the program proposal with the task team, the country team as well as with other staff. The panel also provided a report with its main findings and recommendations soon after completion of the review. Panel members included:

Panel Chair:	Richard Skolnik
Institutional Issues/Africa Experience:	Alexandre Abrantes
Financial Management:	Robert O'Leary
Procurement:	Armando Araujo
Community Participation:	Marion Bernard-Amos/ Ty Rose
Technical Quality:	Chris Walker
Economic/Financial Analysis & M&E:	Martha Ainshworth

Suzanne Morris, LOADR; Douglas Arnold, LCOAA, and Ferenc Molnar, LOGOP, also provided comments and advice.

Government Team

Area of Specialty	Consultants
General Director	Luis Emilio Montalvo
Technical Coordination	Jaime de la Rosa
Interinstitutional Coordination	Clara Iglesias de Montalvo
Administrative Assistant	Felicidad Díaz Lao
Office Technology Support	Wellington Marcelo López
Information, Education, Communication,/Condoms	Gisela Ventura
Labs and Blood Banks	Santiago Collado Chastel
Vertical Transmission	Eddy Pérez Then
Syndromic Management of STI	Salvador Quiñonez
Voluntary Counseling/Testing	Ivelisse Garris
Home Care and support to Orphans	Elizabeth Tapia
Basic Care Units	Maria Isabel Tavarez
Epidemiological surveillance	Elizabeth Gomez
Legal Framework	Erick Raful
State Secretariats Study	Tomiris Valerio
Private Sector Study	Sofia Khoury
Other Participants	
General Orientations	Dr. Ernesto Guerrero (ONUSIDA)
Institutional Orientation	Dr. Willam Hernández (DIGECITSS)
Epidemiological Surveillance	Dra. Adela Ramírez (DIGECITSS)
Epidemiological Surveillance	Dra. Jafmary Feliz (DIGECITSS)
Labs and blood Banks	Lic. Clotilde Peña (DIGECITSS)
Epidemiological Surveillance	Dra. Elizabeth Gómez
Multisectoral Participation	Dr. Miguel Campillo
"Bateyes"	Lic. Ruben D. Burdiez
	Ing. Migel Gerardino (CERSS)
Legal Framework and Environmental Impact	Lic. Keryma Marra (CERSS)
Collaborating Institutions	
Tuberculosis, Investments in HIV/AIDS and Institutional Coordination	U.S. Agency for International Development (USAID), PAHO/WHO
NGOs and investments in HIV/AIDS	AIDS Action
United Nations General Orientation	Thematic Group, United Nations
Condoms	Centro de Investigación y Orientación Integral (COIN)
Religious Sector	Evangelic University
Youngsters and "Bateyes"	Sociocultural Action Coordination (CASCO)
Youngsters and other audiences	Family Planning Association (ADOPLAFAM)
"Bateyes"	Sugar State Council (CEA)
"Bateyes"	MOSCTHA
"Bateyes"	IDEFA
Blood Banks and Youngsters	Red Cross
Men sex with Men	Friends Always Friends (ASA)
Institutional Orientations (NGOs)	National Health Institute (INSALUD)

The Office technology and secretarial staff from COPRESIDA assisted consultants in preparing their documents.

Annex 14. 8

Dominican Republic HIV/AIDS Prevention and Control Project

Documents in the Project File

A. Project Implementation Plan

Project Implementation and Procurement Plan, March 1, 2001

Draft Operational Manual, March 26, 2001

B. Bank Staff Assessments

Aide Memoire and Back-to-Office Report of Identification Mission, September 2000

C. Other

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4. de Moya, Antonio: Tapia, Margot, Soriano, Scarlet; Rowinsky, Peter; García, Felipa; Stephens, Ricardo; Brazobán, Petronila, y Scharboy, Víctor. Enfoque Cultural de la Prevención del VIH/SIDA para el Desarrollo Sostenible en Republica Dominicana. Santo Domingo, 1998.
5. Consejo Nacional para el Estudio del SIDA (CONASIDA), Programa de Control de Enfermedades de Transmisión Sexual y SIDA (PROCETS). Diagnóstico Provincial y Municipal; Situación de Respuesta de los Servicios de Prevención y Control de las Infecciones de Transmisión Sexual (ITS/VIH/SIDA). Santo Domingo, 1999.
6. Consejo nacional de SIDA (CONASIDA). Plan Estratégico Nacional de ITS/VIH/SIDA 2000- 2003. Santo Domingo, Noviembre 1999.
7. Peres-Then, Eddy; Rondon, Michel. Tuberculosis como Problema de Salud Materna Infantil en la Republica Dominicana. CENISMI, Serie de Reuniones Técnicas, Santo Domingo, 1999.
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10. Pérez-Then, Eddy. Infección por el VIH y el Síndrome de Inmunodeficiencia Adquirida como Problema de Salud Materno Infantil en la Republica Dominicana. CENISMI, Serie de Reuniones Técnicas, Santo Domingo, 2000.
11. Pérez-Then, Eddy. Resultados del Tratamiento de Pacientes Tuberculosos con Cepas Sensibles y Resistentes a las Drogas Antituberculosas. CENISMI, Serie de Publicaciones Técnicas. Santo Domingo, 2000
12. Secretaría de Estado de Salud Pública y Asistencia Social, Dirección General de Control de Infecciones de Transmisión Sexual y SIDA. Estrategia Nacional de Información, Educación y Comunicación para la Prevención del VIH/SIDA en República Dominicana. Santo Domingo, 2000.

13. Presidencia de la República, Comisión Presidencial del SIDA (COPRESIDA). Informe al Presidente de la República. Santo Domingo, Nov. del 2000.

14. Secretaria de Estado de Salud Pública y Asistencia Social, Dirección General de Información y Estadísticas de Salud. Año 1 No. 1. Estadísticas de Salud, Diciembre del 2000. Santo Domingo, 2000.

15. UNAIDS (Joint United Nations Programme on HIV/AIDS. Report of the Meeting on the Evaluation of the UNAIDS HIV Drugs Acces Initicative. Geneva, May 2000.

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*Including electronic files.

Annex 14.9: Statements of Loans and Credits (as of 02/27/2001)
Dominican Republic HIV/AIDS Prevention and Control Project

Closed Projects 24

IBRD/IDA *

Total Disbursed (Active)	144.50
of which has been repaid	0.53
Total Disbursed (Closed)	545.90
of which has been repaid	440.00
Total Disbursed (Active + Closed)	690.46
of which has been repaid	440.51
Total Undisbursed (Active)	158.10
Total Undisbursed (Closed)	0.00
Total Undisbursed (Active + Closed)	158.10

Active Projects

Project ID	Project Name	Last PSR Supervision Rating DO	IP	Fiscal Year	Original Amount in US$ Millions IBRD	IDA	GRANT	Cancel.	Undisb.	Difference Between Expected and Actual Disbursements [a] Orig.	Frm Rev'd
P035494	DO- BASIC EDUCATION	S	S	1996	37	0	0	0	20.1	18.3	15.9
P007015	DO- PROV.HEALTH SERV.PRJ	S	S	1998	30	0	0	0	14	-8.3	0
P063201	EMERGENCY OPERATIONS	S	S	1999	111.1	0	0	0	42.5	23.1	17.3
P035733	ENVIRONMENT POLICY	S	S	1998	3	0	0	0	1.8	1	0
P068753	Global Distance Learning Network	S	S	2001	3.4	0	0	0	3.4	0.1	0
P007020	IRRIG LAND & WATERSH	S	S	1995	28	0	0	0.3	21.9	15.9	12
P035722	NATIONAL HWY. PROJ.	S	U	1997	75	0	0	0	39.2	28.5	17.2
P052736	TELECOM REG. REFORM	S	S	2000	12.3	0	0	0	10.3	4.9	0
P059510	WASTEWATER DISPOSAL IN TSM CNTERS (LIL)	S	S	2000	5	0	0	0	5	0	0
Overall result				Result	304.8	0	0	0.3	158.1	83.5	62.3

CAS Annex B8 (IFC) for Dominican Repub

Dominican Repub
Statement of IFC's
Held and Disbursed Portfolio
As of 11/30/2000
(In US Dollars Millions)

		Held				Disbursed			
FY Approval	Company	Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1998	Flamenco Bavaro	13.61	0	0	20.34	13.61	0	0	20.34
2000	Hospiten	2	0	0	2	1.5	0	0	1.5
1993	Hotel Flamenco	2.3	0	0	0	2.3	0	0	0
2000	Rica	12	0	3	0	9	0	3	0
1995/96	Smith-Enron	0	0	0	0	0	0	0	0
	Total Portfolio:	29.91	0	3	22.34	26.41	0	3	21.84

Approvals Pending Commitment

		Loan	Equity	Quasi	Partic
2000	CODACSA	25000	1600	0	35000
	Total Pending Commitment:	25000	1600	0	35000

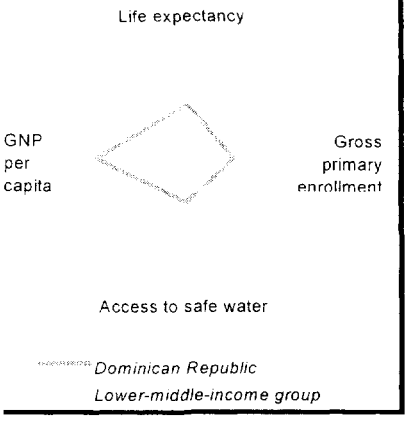
Annex 14.10: Dominican Republic at a Glance

Dominican Republic at a glance

9/7/00

POVERTY and SOCIAL	Dominican Republic	Latin America & Carib.	Lower-middle-income
1999			
Population, mid-year *(millions)*	8.4	509	2,094
GNP per capita *(Atlas method, US$)*	1,910	3,840	1,200
GNP *(Atlas method, US$ billions)*	16.0	1,955	2,513
Average annual growth, 1993-99			
Population *(%)*	1.8	1.6	1.1
Labor force *(%)*	3.0	2.5	1.2
Most recent estimate (latest year available, 1993-99)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	64	75	43
Life expectancy at birth *(years)*	71	70	69
Infant mortality *(per 1,000 live births)*	40	31	33
Child malnutrition *(% of children under 5)*	6	8	15
Access to improved water source *(% of population)*	71	75	86
Illiteracy *(% of population age 15+)*	17	12	16
Gross primary enrollment *(% of school-age population)*	94	113	114
Male	94	..	114
Female	94		116

Development diamond*

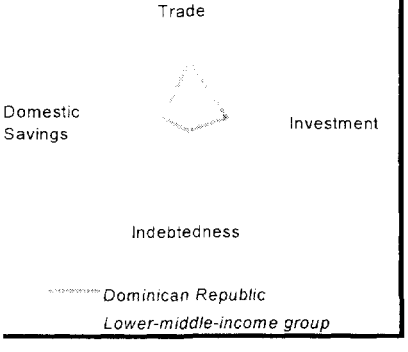


KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1979	1989	1998	1999
GDP *(US$ billions)*	5.5	6.7	15.9	17.0
Gross domestic investment/GDP	25.4	28.5	26.2	27.7
Exports of goods and services/GDP	20.6	33.5	46.9	46.6
Gross domestic savings/GDP	19.0	17.4	17.2	19.3
Gross national savings/GDP	23.7	24.6	24.1	25.1
Current account balance/GDP	-6.0	-4.0	-2.1	-2.9
Interest payments/GDP	1.4	1.4	1.0	..
Total debt/GDP	29.2	60.4	28.0	..
Total debt service/exports	24.3	13.7	4.2	..
Present value of debt/GDP	.	..	26.1	.
Present value of debt/exports	..	..	46.2	.

	1979-89	1989-99	1998	1999	1999-03
(average annual growth)					
GDP	3.4	5.1	7.3	8.3	6.7
GNP per capita	0.8	3.0	5.3	6.2	5.0
Exports of goods and services	5.7	11.6	3.3	12.3	-0.7

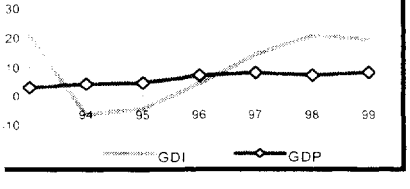
Economic ratios*



STRUCTURE of the ECONOMY

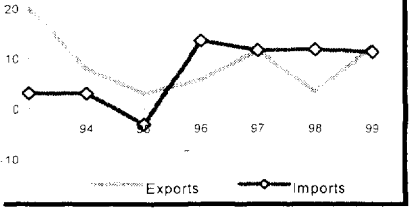
	1979	1989	1998	1999
(% of GDP)				
Agriculture	18.7	13.8	11.5	11.3
Industry	30.0	31.9	33.6	34.3
Manufacturing	16.9	17.7	17.4	16.5
Services	51.3	54.3	54.9	54.3
Private consumption	73.4	77.0	74.6	72.6
General government consumption	7.6	5.6	8.2	8.2
Imports of goods and services	27.0	44.5	55.9	55.0

Growth of investment and GDP (%)



	1979-89	1989-99	1998	1999
(average annual growth)				
Agriculture	1.3	3.0	1.1	6.8
Industry	3.6	5.9	9.4	10.5
Manufacturing	3.1	4.0	6.2	6.7
Services	4.0	5.0	7.4	7.2
Private consumption	2.6	3.8	2.5	9.9
General government consumption	3.6	18.1	11.0	12.2
Gross domestic investment	2.9	6.2	20.7	19.5
Imports of goods and services	2.7	10.7	11.7	11.2
Gross national product	3.1	4.9	7.2	8.2

Growth of exports and imports (%)

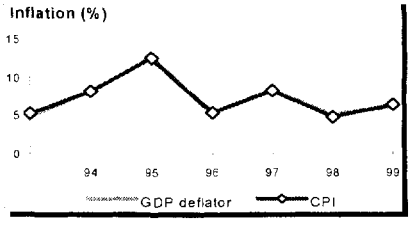


Note: 1999 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

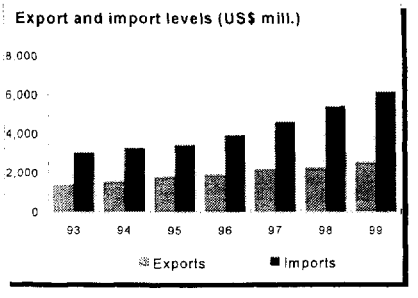
PRICES and GOVERNMENT FINANCE

	1979	1989	1998	1999
Domestic prices				
(% change)				
Consumer prices	9.2	45.4	4.8	6.5
Implicit GDP deflator	10.2	23.1	5.0	6.3
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	..	15.8	15.3
Current budget balance	.	..	3.3	4.1
Overall surplus/deficit	..	..	0.9	-0.5



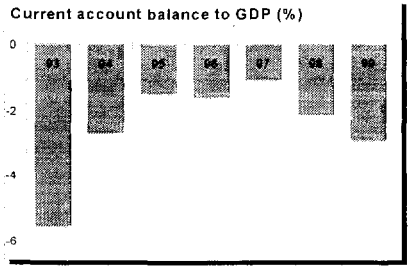
TRADE

	1979	1989	1998	1999
(US$ millions)				
Total exports (fob)		1,275	2,288	2,542
Raw sugar	.	88	103	84
Gold	..	43	81	65
Manufactures	..	103	232	239
Total imports (cif)	..	2,801	5,386	6,123
Food	..	55	292	330
Fuel and energy	..	507	713	991
Capital goods	..	429	1,190	1,286
Export price index *(1995=100)*	..	..	.	.
Import price index *(1995=100)*	..	..	..	..
Terms of trade *(1995=100)*	.	..	..	.



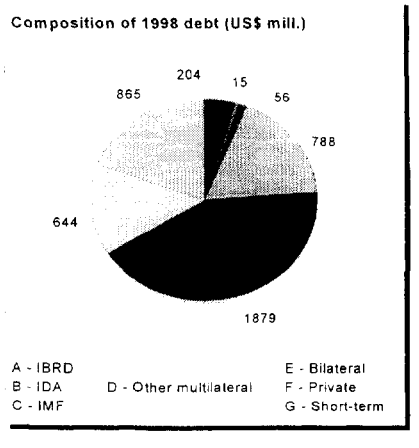
BALANCE of PAYMENTS

	1979	1989	1998	1999
(US$ millions)				
Exports of goods and services	1,135	2,241	7,482	8,125
Imports of goods and services	1,484	2,982	8,917	9,592
Resource balance	-349	-741	-1,435	-1,467
Net income	-188	-313	-890	-953
Net current transfers	206	788	1,987	1,921
Current account balance	-331	-265	-338	-500
Financing items (net)	287	180	437	694
Changes in net reserves	45	86	-98	-194
Memo:				
Reserves including gold *(US$ millions)*	..	123	659	881
Conversion rate *(DEC. local/US$)*	1 0	6.3	15 3	16 4

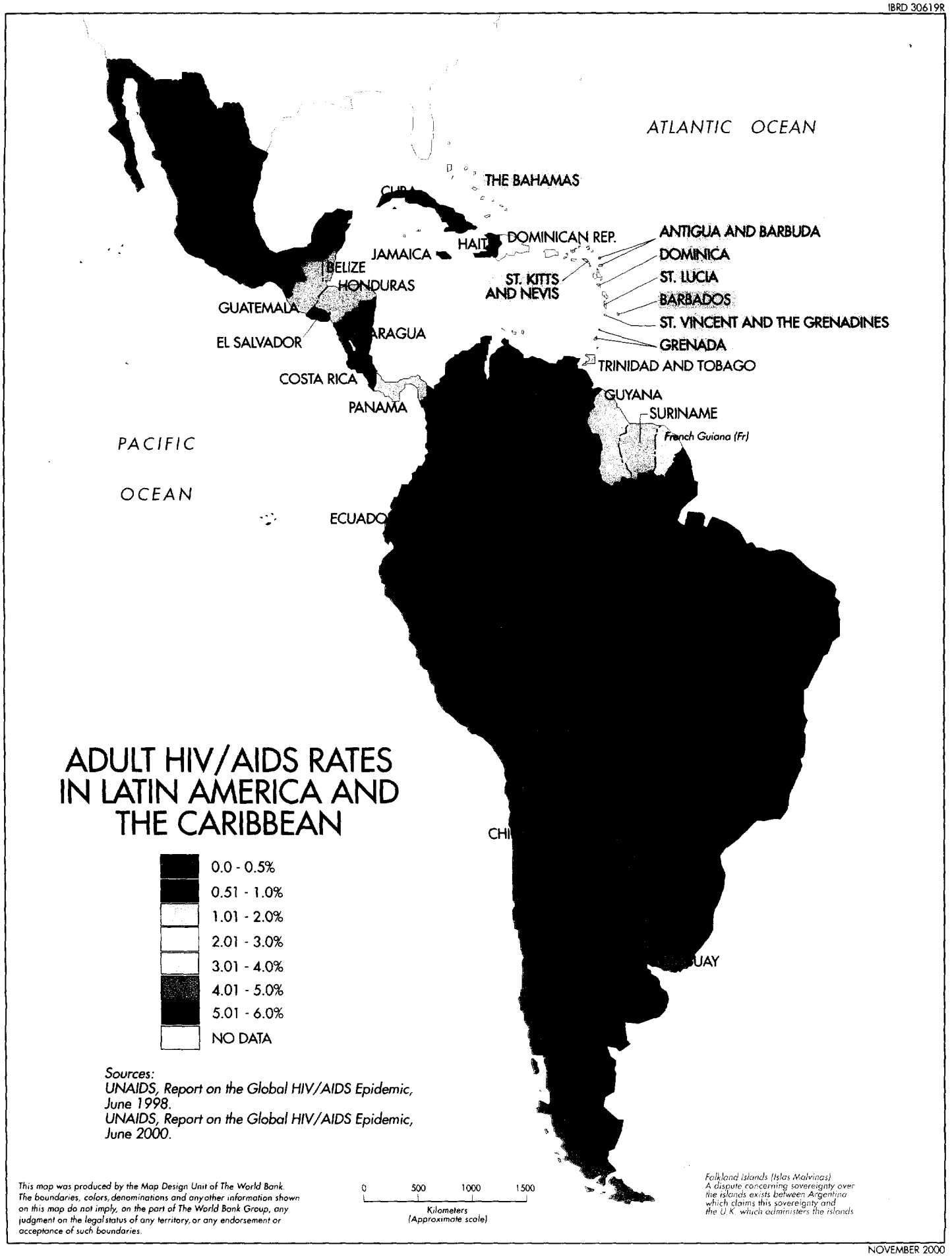


EXTERNAL DEBT and RESOURCE FLOWS

	1979	1989	1998	1999
(US$ millions)				
Total debt outstanding and disbursed	1,606	4,039	4,451	..
IBRD	29	201	204	282
IDA	17	20	15	15
Total debt service	322	322	375	..
IBRD	5	36	38	38
IDA	0	0	1	1
Composition of net resource flows				
Official grants	21	34	61	..
Official creditors	63	116	-25	..
Private creditors	61	-10	6	0
Foreign direct investment	17	110	691	..
Portfolio equity	0	0	74	.
World Bank program				
Commitments	87	30	144	12
Disbursements	6	32	17	92
Principal repayments	2	20	24	21
Net flows	4	12	-7	71
Interest payments	3	16	14	18
Net transfers	1	-4	-21	53



MAP SECTION



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