PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED LOAN
IN THE AMOUNT OF US$15 MILLION
TO
JAMAICA
FOR AN

January 25, 2001
CURRENCY EQUIVALENTS
(Exchange Rate Effective November 11, 2001)

Currency Unit = Jamaica Dollar (JMD)
1 JMD = US$0.0214
US$1 = JMD 46.76

FISCAL YEAR
April 1 -- March 31

ABBREVIATIONS AND ACRONYMS

AGD Auditor General's Department
AIDS Acquired Immune Deficiency Syndrome
ANC Ante-Natal Clinic
ARV Antiretrovirals
BCC Behavior Change Communication
BSS Behavior Surveillance Survey
CAS Country Assistance Strategy
CAREC Caribbean Epidemiology Center
CBO Community-Based Organization
CDC Center for Disease Control and Prevention
CD4 Helper T-lymphocytes
CHARES Center for HIV/AIDS Research, Education and Services
CMO Chief Medical Officer
COHSAD Human Resource Council (Subcommittee of Cabinet)
CQ Consultant Qualifications
CSW Commercial Sex Worker
DALY Disability Adjusted Life Years
DOTS Directly Observed Treatment, Short Course
FAA Financial Administration and Audit Act
FBO Faith-Based Organization
FMR Financial Management Reports
GDP Gross Domestic Product
GOJ Government of Jamaica
GTZ Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH
HAART Highly Active Antiretroviral Therapy
HCL Health Corporation Limited
HIV Human Immune-deficiency Virus
HRC/COHSAD Human Resource Council (Subcommittee of Cabinet)
IBRD International Bank for Reconstruction and Development, The World Bank
ICB International Competitive Bidding
IDB Inter-American Development Bank
IEC Information, Education and Communication
JAS Jamaica AIDS Support
JN+ Jamaica Network of HIV+
KAPB Knowledge, Attitude, Practices and Behavior
LAC Latin American and Caribbean Countries
LIB Limited International Bidding
# JAMAICA

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MAP(S)
## Project Appraisal Document

**Latin America and Caribbean Region**

**LCSHH**

**Date:** January 25, 2002  
**Team Leader:** Girindre K. Beeharry  
**Country Manager/Director:** Orsalia Kalantzopoulos  
**Project ID:** P074641  
**Sector Manager:** Charles C. Griffin  
**Sector(s):** HA - HIV/AIDS  
**Theme(s):** Health/Nutrition/Population  
**Poverty Targeted Intervention:** N

### Program Financing Data

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[X] Loan  [ ] Credit  [ ] Grant  [ ] Guarantee  [ ] Other:

**For Loans/Credits/Others:**  
Amount (US$m): $15.00

**Proposed Terms (IBRD):** Fixed-Spread Loan (FSL)

Front end fee on Bank loan: 1.00%

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**Borrower:** JAMAICA  
**Responsible agency:** MINISTRY OF HEALTH  
**Address:** 2-4, King Street, Oceana Building, Ministry of Health, Kingston, Jamaica, West Indies

**Contact Person:** Deanna Ashley, Principal Medical Officer  
**Tel:** (876) 967-1100  
**Fax:** (876) 967-1280  
**Email:** dashley@epi.org.jm

**Estimated disbursements (Bank FY/US$m):**

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**Project implementation period:** 5 years, spanning 6 Bank fiscal years  
**Expected effectiveness date:** 03/15/2002  
**Expected closing date:** 12/15/2006
A. Program Purpose and Project Development Objective

1. Program purpose and program phasing:

This project is part of the Multi-Country HIV/AIDS Prevention and Control Adaptable Program Lending (APL) for the Caribbean Region, which provides loans and/or credits to governments in the Region to finance their HIV/AIDS Programs. Jamaica has met the eligibility criteria of this four-phase horizontal APL (see Section 2) and thus could be included as the second phase of the program.

2. Project development objective: (see Annex 1)

This project is part of the Second Phase Multi-Country HIV/AIDS Prevention and Control Adaptable Program Lending (APL) for the Caribbean Region which provides loans and/or credits to governments in the Region to finance their HIV/AIDS Programs. Jamaica has met the five eligibility criteria for country participation (see Section D.4) and is ready to be included in the second phase of the APL.

The project aims to support selected activities of Jamaica’s National HIV/AIDS Strategic Plan (NSP). Using a multisectoral approach, it would assist the Government of Jamaica (GOJ) in curbing the spread of the HIV epidemic through (a) the expansion of preventive programs targeted to high-risk groups as well as the general population; (b) the strengthening of treatment, care and support for persons living with HIV/AIDS (PLWHA); and (c) the strengthening of Jamaica’s multisectoral capacity to respond to the epidemic.

3. Key performance indicators: (see Annex 1)

Key impact/outcome indicators for monitoring progress include: (a) the prevalence of HIV/AIDS and STD as well as indicators of behavior change (including non-regular partners, condom use with non-regular partners and median age of first sex) in the Jamaican population, particularly in the following sub-groups: ante-natal clinic attendees, the population in the age group 15-24, Sexually Transmitted Infections (STI) clinic attendees, and high-risk groups; and (b) the coverage of programs for voluntary counseling and testing, condom promotion, STI management, and treatment of opportunistic infections. Institutional development indicators will also be monitored during implementation: these will focus on ensuring that the project involves strategic partners to ensure maximum impact and sustainability. The project contributes to the objectives of the National Strategic Plan. As such, the project and the NSP share the same impact and outcome indicators. Support by other donors (see Annex 15) to HIV/AIDS prevention and treatment in Jamaica is similarly framed by the National Strategic Plan. For the purpose of project evaluation, emphasis will be placed on outcome indicators because improvements in the impact indicators are bound to be marginal within the 5-year time frame of the project.

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)

   Document number: R2000-200  Date of latest CAS discussion: November 30, 2000

The World Bank’s Country Assistance Strategy for Jamaica places special emphasis on poverty reduction and supports cost-effective, equitable social sector programs. The CAS identifies the reproductive health of adolescents and youth, and the prevention of AIDS and other sexually transmitted infections as some of the development priorities in Jamaica. The project is consistent with the CAS and its health goals by improving the availability of HIV/AIDS prevention and treatment for the population, especially for marginalized groups at high risk. The project is expected to mitigate the negative impact of HIV/AIDS on
2. Main sector issues and Government strategy:

Main Sector Issues


Jamaica's health indicators are generally more favorable than those of other countries in Latin America and the Caribbean at similar income levels. Fresh evidence of Jamaica's relative success in providing "good health for money" is presented in the August 2001 issue of the British Medical Journal [Evans D.B., et al, "Comparative efficiency of national health systems: cross national econometric analysis," BMJ:323, 2001]: Jamaica ranks 8th [90% confidence interval: 3rd to 12th] out of 191 countries in terms of health system efficiency (defined as the current population health level compared to the maximum possible for observed levels of health expenditure and education in a country).

The rapid epidemiological transition, however, poses unprecedented and difficult challenges to the health system. The public sector is adapting to the new context where non-communicable diseases requiring expensive treatment account for sixty percent of the total disease burden. By attempting to finance and provide the full range of health care services, the public health system has been stretched thin and has not had the means to support the effective functioning of the large system of public infrastructure. The Government may need to review the range of services it can provide. The above-mentioned reports thus recommend that the Government consider: (a) formulating a basic national package of the most cost-effective preventive and clinical interventions that would have the greatest impact in reducing Jamaica's current disease burden; (b) guaranteeing financial access to that basic package for all Jamaicans; (c) reducing the share of public financing for tertiary (and possibly specialty) care institutions; (d) introducing measures to improve incentives to make the health system -- both public and private -- more efficient and to contain costs; and (e) redefining and reorienting the role of the central Ministry of Health towards one that is more regulatory and less managerial and controlling. In response to some of the above concerns, the Government has established a National Health Fund financed from a levy on tobacco consumption and through the national insurance scheme. This Fund will help finance the purchase of selected drugs for fifteen chronic diseases, health promotion activities, and provide support to health services.

HIV/AIDS: Prevalence, Incidence and Mortality Rate. With an HIV prevalence rate of 2%, the Caribbean is the region hardest hit by the epidemic outside Sub-Saharan Africa. Jamaica is one of the Caribbean countries where the epidemic has spread from high-risk groups to the general population. The others are Bahamas, Barbados, the Dominican Republic, Guyana, Trinidad and Tobago, and Haiti. It is estimated that around 1.5-2% of the adult population (or from 24,000 to 32,000 people) are living with HIV/AIDS in Jamaica. This represents the third largest population of people living with HIV/AIDS (PLWHA) in the Caribbean after Haiti and the Dominican Republic. Since Jamaica's first AIDS case in 1982, a total of 5,099 AIDS cases have been reported, of which 50% were recorded in the last four years.

Little is known about the direction of the epidemic since HIV incidence data is all but unavailable; new AIDS cases only give a retrospective indication of the direction of the epidemic. It is, however, known that
HIV incidence is high among young people and women. Reported new infections in adolescents have doubled between 1995 and 1999. This has resulted in higher prevalence among the young: 2.5% and 2.0% in the 15-19 and 25-29 age groups of ANC attendees respectively in 1999.

Lack of access to antiretrovirals compounded by inadequate nutrition and unsystematic access to treatment for opportunistic infections amount to a high annual mortality rate. In 1999, 549 AIDS deaths were reported, representing an annual mortality rate of 60%. Given that eighty-five percent of HIV/AIDS cases occur among individuals who are in their productive years (ages 20 to 59), there is almost a direct correlation between infection and economic duress at household level.

**HIV Transmission Patterns.** Heterosexual contacts seem to be the most important mode of HIV transmission in Jamaica, accounting for 61% of cumulative reported AIDS cases. Mother-to-child transmission (MTCT) accounts for 8% of cases, which is higher than the Caribbean’s average (5%). Although men who have sex with men (MSM) reportedly correspond to 6% of AIDS cases, this group is likely to account for a higher proportion than is reported, given the strong stigma attached to homosexuality. Around 25% of the AIDS cases, the majority of which (80%) are male, are reported as “unknown transmission.” Intravenous drug use is reported as an insignificant mode of HIV transmission in Jamaica.

![AIDS cases by modes of transmission](image)

The high heterosexual transmission rate has narrowed the gender difference in HIV/AIDS over the years, with the male-to-female AIDS case ratio dropping from 6:1 in the 1980s to 1.6:1 at present. In the 10-14 and 15-19 age groups, HIV infections among females are respectively 2 and 3 times higher than males. Women have represented around 40% of all AIDS cases since the start of the epidemic. However, male-to-male transmission appears to remain high. All age groups are affected by the HIV epidemic, especially the population of working age.

Reported AIDS prevalence is high in areas such as St. Ann and St. James, where prevalence rates among antenatal clinic (ANC) attendees are 2.6% and 3.0% respectively. Kingston, the capital city, also has high prevalence (2.5%).

**HIV Risk factors.** There exist numerous risk factors for a more generalized epidemic in Jamaica:

**Epidemiological:** Despite the significant decline in the syphilis rate, the prevalence of sexually transmitted infections (STIs) remains high with 27% of women attending family planning clinics reported to have at least one STI. STIs have a strong association to HIV infection in Jamaica: 39% of PLWHA have a previous history of STI.
Behavioral: Early initiation into risky sexual activities among young people is prevalent. In 1996, 41% of male adolescents in the 12-14 age group reported sexual activity. Other behavioral risk factors include multiplicity of sexual partners, the machismo culture which tolerates male promiscuity, and forces homosexuals and bisexuals into hiding.

Social: Stigma and discrimination against HIV/AIDS patients are prevalent. Only one in three Jamaicans reports having an accepting attitude toward PLWHA. Stigma and discrimination against the disease undermine prevention and care efforts. Other contributing social risk factors include gender inequality, unstable family structures and commercial sex work which exists in both sexes. Poverty, known to increase people’s vulnerability to HIV/AIDS, is widespread in Jamaica, where 18.7% of the population lives below the poverty line.

Institutional: Social risk factors are heightened by an insufficiently supportive legal framework to protect against discrimination of PLWHA, their families, and vulnerable groups.

Health and socioeconomic impacts of HIV/AIDS. The generalized HIV/AIDS epidemic poses a severe health threat to Jamaica. HIV/AIDS and STI are already the second leading cause of death for both men and women in the age group of 30-34 years in Jamaica and the number of AIDS orphans is on the rise. Studies on the impact of HIV/AIDS on growth in Africa tend to conclude to a modest though not negligible macroeconomic impact. M. Haacker (2001), "The Economic Consequences of HIV/AIDS in Southern Africa," IMF (draft), suggests that the expected impact on the rate of growth of per capita GDP in countries with a prevalence rate around 2% would be of the order of -0.2% per annum. Even if the net macroeconomic consequence of HIV/AIDS in Jamaica is small, the impact on individual poor households affected by HIV/AIDS could nevertheless be devastating. Treatment is very expensive, far exceeding the ability to pay of most Jamaicans, and can drive affected families into poverty.

Government Strategy

The Government of Jamaica (GOJ) responded quickly to the epidemic by setting up a comprehensive HIV/STI control program (the National HIV/AIDS/STI Program or NAP) in the late 1980s. A National AIDS Committee (NAC) was also established in 1988 to advise the MOH on policy issues and mobilize different sectors of the society in the fight against HIV/AIDS. Under the NAC umbrella, Parish AIDS Committees (PAC) have been formed in all 14 parishes to spearhead the community response. The NAP has so far designed and implemented four short/medium-term plans (1988, 1989-1991, 1992-1996, and 1997-2001). An HIV/AIDS National Strategic Plan for 2002-2006 has been developed and approved by Cabinet (see Annex 16). The UN and Partners Theme Group on HIV/AIDS in Jamaica has also been actively supporting the national response through policy and technical advice. The past four short/medium-term plans have emphasized: (a) Information, Education and Communication (IEC) at the community levels for the prevention of HIV and STIs; (b) condom social marketing and distribution; (c) ensuring a safe blood supply; (d) making STI, HIV infection and AIDS notifiable conditions, with partner notification and contact tracing; and (e) strengthening the technical and administrative capacity of the NAP at the central and regional levels.

These strategies have yielded quite remarkable results, among which: (a) a high level of HIV/AIDS awareness in the general public (95.6% of the adult population know at least two methods of HIV prevention); (b) an increase in condom use with non-regular partners, especially for women (from 37% in 1992 to 67% in 2000); (c) a decrease in the proportion of people reporting non-regular partners (between 1996-2000, in the 20-29 age group, multiple partners decreased from 36.9% to 31.8% for males, and from 7.0% to 5.2% for females); (d) a slight rise in the median age of sexual initiation (between 1996-2000, the median age of sexual debut rose from 13 to 14 for males, but it remained 14 for females); (e) a marked
decline in syphilis annual case reports (from 90 per 100,000 reported cases in 1987 to 10 per 100,000 in 2000); and (f) a relatively safe blood supply (only 8 reported cases of AIDS transmitted through blood transfusion from 1982 to 2000); all donated blood is screened for HIV and other blood-borne pathogens.

These successes have contributed to containing the epidemic: Jamaica has not seen the exponential progression of the epidemic that was feared in the late 1980s. However, the epidemic is yet far from having stabilized or reverted. As the figure below indicates, the number of AIDS cases and deaths has increased steadily since the start of the epidemic.

A situation analysis was conducted for the National Strategic Plan for 2002-2006. Past strategies were found to contain certain shortcomings, which have prevented an even greater impact on the epidemic than what has been obtained. A first set of issues revolves around the inadequate mobilization of a truly multisectoral response: other sectors, NGOs and the private sector were sorely under-utilized in the planning and implementation of HIV/AIDS activities, and there was insufficient capacity building outside the Ministry of Health. The Ministry of Health cannot mount an effective expanded response to the HIV/AIDS epidemic without the active participation of actors who are able to generate behavior changes in the population. A second set of issues relates to the need for wider involvement at highest levels of government and civil society. Stigma and discrimination have prevailed partly because of this lack of policy attention. Among the consequences of discrimination has been the insufficient focus on prevention interventions targeted at marginalized high-risk groups (who are the main recipients and transmitters of the virus). Past responses also failed to develop and implement a comprehensive policy and program for treatment, care and support of PLWHA (including legal protection), thereby further contributing to the climate of discrimination and stigma. Finally, it was felt that insufficient attention had been paid to strengthening the surveillance system to allow better and more timely understanding of the behaviors driving the epidemic.

The National Strategic Plan for 2002-2006, deriving from the situation analysis summarized above, purports to create the conditions for a more open, tolerant and supportive society regarding HIV and PLWHA and to strengthen the national response through multisectoral and coordinated partnerships for planning and implementation. The NSP also calls for an increase in access to quality care, treatment and support for people living with HIV/AIDS. Effecting behavior change among high-risk and vulnerable groups constitutes the core of the NSP's prevention strategy. Another priority axis of the NSP is to understand the trends of HIV/AIDS over time and the behavior driving the epidemic so as to better plan prevention and care efforts to reduce the impact.
There is a discrepancy between the prevalence rate given by the NAP (1.5%) and UNAIDS (0.77%). Consultations are under way to harmonize the prevalence data among different sources.

According to a CAREC-UWI study [K. Theodore (2000), "HIV/AIDS in the Caribbean: Economic Issues -- Impact and Investment Response", paper submitted to the WHO Working Group of the Commission on Macroeconomics and Health], by 2005 the epidemic would cost Jamaica as much as 6.4% of its GDP (equivalent to JS70 billion in 1997 terms).


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

The proposed project provides key support to each of the five objectives identified in the National Strategic Plan:

The project proposes to contribute to the first objective of creating the conditions for a more open, tolerant and supportive society regarding HIV and PLWHA by addressing the stigma issue. The project would aim to increase acceptance for PLWHA through IEC campaigns involving PLWHA. The project would also assist policy formulation and reinforce laws and regulations to protect the rights of PLWHA and other vulnerable groups. Such social policies would help "normalize" HIV/AIDS, combat discrimination and stigma, and enable effective targeted interventions. The project recognizes that investing in reducing stigma and discrimination may not pay off in the short run -- beliefs may simply not change significantly during the project lifetime and changes in legislation are subject to processes beyond project control -- but posits it is a risk worth taking.

The project actively seeks to support the second objective of strengthening the national response through multisectoral and coordinated partnerships for planning and implementation in three distinct ways: (a) by involving key ministries (especially Labor, Education, and Tourism) outside the health sector in the country's response; (b) by involving the private and voluntary sectors in project design and implementation; and (c) by working with the decentralized entities of the Ministry of Health (RHAs). HIV/AIDS is still perceived as a health problem and as being the responsibility of the MOH, rather than a complex societal issue which requires the active participation of relevant sectors to ensure maximum impact and sustainability. There are clear areas of potentially fruitful collaboration, such as the use of NGOs to reach some of the marginalized/criminalized groups, and the use of teachers to provide guidance and counseling to youth.

The project assists the third NSP objective of reducing HIV infections by focusing on behavior change in those groups that are more likely to be infected and to transmit the infection. The project thus puts emphasis on information provision strategies that are more likely to yield behavior change (for example, peer education) rather than on general information campaigns. The project puts a premium on prevention interventions targeted at high-prevalence groups such as commercial sex workers (CSW), men who have sex with men (MSM), persons with a history of STIs, and prisoners. The prevalence rate among CSW is 20% in Montego Bay and 10% in Kingston; prevalence is estimated at 25% among MSM, 12% among prisoners, and 6% among STI clinic attendees, all orders of magnitude above the national average of 1.5%. Effecting behavior changes among these populations has the highest potential impact on the epidemic. The project also targets the young: 41% of boys and 10% of girls between 12 and 14 report sexual activity and, among those, only 29% of boys and 35% of girls report last-time condom use with a non-regular partner. The project supports the expansion of the testing (especially the use of rapid tests) and counseling capacity to accommodate the policy objective of universal voluntary testing at ante-natal clinics. MTCT prevention has proven to be cost-effective in other contexts (see Annex 4) and represents Jamaica's first step in the direction of improving access to antiretrovirals.
In agreement with the NSP’s fourth objective, the proposed project scales up access to quality care, treatment and support for people living with HIV/AIDS. PLWHA are not receiving the basic care and support they need. Many health workers do not have adequate knowledge and skills in HIV/AIDS management. The necessary infrastructure with basic standards of care, treatment and support for HIV/AIDS has yet to be established. The project will support the delivery of appropriate palliative care, prophylaxis and treatment for opportunistic infections (OI) and referral for HIV patients. The project also seeks to support households and communities to take care of infected patients through the development of care guidelines, training, the provision of homecare kits (drugs, first-aid), support to NGOs providing hospice care, etc. While the project does not expect to finance the procurement of antiretrovirals (ARV), except for PEP drugs -- please refer to Annex 13 for a discussion -- it does, however, support training (VCT, including long-term supportive counseling, use of modified DOTs, clinical management with ARV, etc.), and the expansion of the testing and counseling infrastructure in view of proximate wider access to ARVs (predicated upon a sufficient decline in the price of ARV).

Finally, the project actively supports the fifth and last objective of the NSP of better understanding the trends of HIV/AIDS over time and the behaviors driving the epidemic so as to better plan prevention and care efforts to reduce the impact. Specifically, the project would strengthen M&E by: (a) establishing a formal M&E unit with annual workplans; (b) supporting BSS studies in high-risk groups such as CSW and MSM; (c) increasing the sample size of HIV/AIDS sentinel surveillance; (d) computerizing the information system; and (g) introducing treatment and care indicators into the M&E framework. Technical assistance to meet capacity building needs will be provided to ensure the sustainability of M&E activities after the project ends.

C. Program and Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

Interventions financed by the project are grouped into three components.

Component 1: Preventive programs targeted at high-risk groups and the general population — US$7.82 million (47% of Project cost).

This component firmly focuses on the prevention in those population groups that are most at risk of being infected or of transmitting the infection. In Jamaica these include commercial sex workers (10%-20% prevalence), men who have sex with other men (25% prevalence), prison inmates (12% prevalence) and persons with past exposure to sexually transmissible infections (6% prevalence). A variety of partners (NGOs, other Ministries, PLWHA, etc) would be involved in reaching these populations. Such partnerships have been shown to be effective in reaching out to marginalized high-risk groups in many countries. The project would support activities such as identifying and working with informal networks among these high-risk groups, developing strategies to increase their demand for HIV/AIDS services, outreach programs, training of peer educators, strengthening drop-in centers with Voluntary Counselling and Testing (VCT) and STI services for high-risk groups, and strengthening STI syndromic management at primary care level.
This component seeks to target young people, especially girls, whose rate of infection is higher than the national average. This would be done in a variety of ways (peer education, training of teachers and counselors) and in partnership with strategic partners (youth organizations, schools). This component also supports the expansion of prevention of mother-to-child HIV transmission (MTCT) which accounts for 8% of new infections in Jamaica. The project would support the dissemination and implementation of the MTCT protocol, the training of health workers in the application of this protocol, universal (voluntary) screening for HIV at ante-natal clinics, and providing pregnant HIV-positive women with MTCT interventions. The government would procure the anti-retroviral for MTCT from counterpart funding according to the guidelines described in section D1. Although the blood transfusion system in Jamaica is reasonably safe (only 8 cases of HIV infection have been attributed to blood transfusions since the start of the epidemic), it places excessive reliance on replacement rather than voluntary donors. Since replacement donors are typically riskier than voluntary donors, risks of infection through blood transfusion during the window period (i.e., time between infection and sero-conversion) potentially still exist. The project would thus support a review and amendment of the national blood transfusion policy, disseminate the revised national blood transfusion policy, and strengthen the recruitment of voluntary blood donors.

The project will contribute to maintaining a high level of awareness and behavior change in the general community and in those communities that display high prevalence rates. The project will thus finance activities such as: mass media awareness campaigns, behavior change communication, peer education, condom promotion and increased condom availability in traditional and nontraditional outlets; targeted community campaigns in high prevalence areas (Kingston/St. Andrew, Hanover, St. Catherine, St. Ann, St. James, Westmoreland), expanding VCT services at ANC clinics and supporting the implementation of work place intervention programs.

This component also seeks to support interventions aimed at reducing stigma and discrimination against PLWHA as well as high-risk groups such as MSM. Stigma and discrimination are prevalent in Jamaica and make people unwilling to seek testing and encourage the concealing of their HIV status, thus contributing to driving the epidemic underground. Among other things, the project seeks to identify strategic partners (the media, sports and pop culture celebrities, religious, business and community leaders), mobilizing their support for the cause and offering them training through HIV/AIDS sensitization workshops. It will coordinate these partners in BCC campaigns with a message against stigma and discrimination, and assist the government to reinforce the framework for the protection of human rights of PLWHA, their families and other vulnerable groups (for PLWHA, this concerns confidentiality, employment, housing, access to quality and compassionate care, mandatory testing for employment insurance and immigration). PLWHA will be involved (especially through JN+) in mass media and community campaigns to put a human face to the disease and sensitize the general population. In an effort to reduce discrimination by health workers, post-exposure prophylaxis will be made available to them through the Project.

Finally, this component will support innovative demand-driven subprojects. NGOs, CBOs, and other eligible implementing agencies would prepare subprojects (with appropriate technical assistance) and submit them for funding. The selection criteria and processes will be detailed in the Project Operation Manual. Subprojects in areas where NGOs, CBOs, etc., have a comparative advantage (e.g., reaching marginalized groups) would be of special interest to the project.

Component 2: Basic health care, treatment, and support for PLWHA—US$ 3.71 million (23% of Project cost).

Under this component, the project would aim to increase the capacity to provide basic treatment, care and
support for PLWHA in Jamaica. The project would, once again, seek partnerships outside the public health system to ensure effective delivery of care and support. A first set of activities includes developing and disseminating technical guidelines and operational procedures for HIV/AIDS care and treatment (including the management of common OIs, STIs and TB), training health workers in HIV/AIDS care and treatment, disseminating best-practice guidelines, defining a package of basic drugs for OI management, increasing the availability of and access to such basic OI drugs at hospitals and STI clinics; and establishing an HIV/AIDS/STI specialty center in each region with the capacity to provide comprehensive ambulatory care for PLWHA.

A second set of activities centers on care and support outside the health system; this includes the development of home care guidelines; training community health workers in care and support for PLWHA, providing home care and support through visits (by community health workers, NGOs, CBOs, churches) to PLWHA and their families, establishing a network of social support for PLWHA, which is integrated in the existing social safety net, strengthening and expanding the hospice network, and establishing half-way care facilities. NGOs and CBOs would be key in providing home and community care and support for PLWHA in Jamaica. The project would enable NGOs and CBOs to deliver HIV/AIDS care and support through technical and financial assistance as well as capacity-building (the subproject mechanism would also apply for these types of activities).

A third set of activities centers on the diagnostic infrastructure that underlies treatment and care. Improving the capacity, efficiency and quality of the laboratory system thus involves providing selected diagnostic equipment (hardware and software) and test kits for HIV/AIDS and STIs, ensuring adequate staffs and skills, developing operational guidelines for laboratory logistics, linking the laboratory system through an integrated computer network; and improving safe handling of medical material and waste through the provision of incinerators, autoclaves, waste disposal supplies as well as training of health workers.

Component 3: Strengthening of national capacity for an intensified response to the epidemic— US$ 4.82 million (29% of Project cost).

This component would aim to improve the technical, managerial and implementation capacity of the key players within and outside the health sector, in the Government as well as in civil society who are involved in the fight against HIV/AIDS. Activities would include enhancing the planning, management and implementation capacity of the National STI/HIV/AIDS Program at the regional and parish levels, strengthening the role of the NAC, and the role of other line ministries, of private and voluntary sectors, and of civil society. Specific activities would include supporting the development of the HIV/AIDS work programs of the regional health authorities, elevating the status of the NAC to a Working Group for the National Planning Council on HIV/AIDS, strengthening the NAC and PACs' capacity to coordinate, mobilize and support implementing agencies in the fight against HIV/AIDS, coordinating and providing technical assistance for the formulation of HIV/AIDS work plans in relevant line ministries, and capacity building for NGOs and CBOs through training and workshops.

Part of an adequate response involves improving the information base for better decision-making. To that effect, the project will support the strengthening of the HIV/AIDS/STI surveillance system by developing a surveillance plan, designing and implementing second-generation surveillance (i.e., with an emphasis on behavioral surveillance) for HIV/AIDS, especially among high-risk groups, setting up an integrated data management system for National Public Health Laboratories, hospital laboratories, STI and ANC clinics, sentinel surveillance sites, and hospital pharmacies, and by increasing Jamaica's capacity for operational research and dissemination of best practices in priority areas of the National Strategic Plan for HIV/AIDS.
The implementation of the surveillance system with an emphasis on behavioral surveillance would be a key feature of the project. It would provide information on where risky behaviors persist, so that the project's prevention activities can be adjusted in a timely fashion to the epidemic's new directions, rather than reactively to where the epidemic has been. The findings from the surveillance system will be regularly drawn upon by the PCU to guide the implementation of project prevention activities.

A well-designed and functioning M&E system would be critical for the implementation of the project to provide coordinated feedback to the developers, implementation agencies, and decision makers at different levels of the system. The PCU would be the coordinator of project monitoring and evaluation, with support from the HIV/AIDS unit of the MOH, any HIV/AIDS units established in other line ministries, UNAIDS/PAHO/WHO, as part of their country assistance programs. Early in the project, an M&E sub-unit would be established within the PCU. The M&E sub-unit would use the core indicators in Annex 1 as its framework for M&E and develop a data collecting system with formal links to other partners who have the expertise for generation of information and analysis. An analysis of the adequacy of the current system to generate the data required is summarized in Annex 17. Every six months, the M&E sub-unit would compile and consolidate data related to input/output indicators (i.e. expenditures and disbursement data) into an implementation report (see Annex 17 for dissemination strategy). It can also contract universities, NGOs, independent firms or international agencies to conduct specific surveys for the purpose of baseline and impact evaluation. The Annual Implementation Review would involve the PCU, NAP, NAC, representatives of NGOs, IBRD as well as key external partners such as USAID, CAREC and PAHO. Mid-term and end-of-project evaluations will be conducted by an external agency. Periodic external evaluations of selected pilot interventions as well as of the project as a whole are to be carried out as they will provide invaluable lessons in project design and implementation.

This component also includes project management costs, including payment for PCU staff, operating costs, office set up, technical assistance, and training.

<table>
<thead>
<tr>
<th>Component</th>
<th>Sector</th>
<th>Indicative Costs (US$M)</th>
<th>% of Total</th>
<th>Bank-financing (US$M)</th>
<th>% of Bank-financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component #1: Preventive Programs Targeted at High-risk Groups and the General Population</td>
<td>HIV/AIDS</td>
<td>7.82</td>
<td>47.4</td>
<td>6.69</td>
<td>44.6</td>
</tr>
<tr>
<td>Component #2: Basic Health Care, Treatment and Support for PLWHA</td>
<td>HIV/AIDS</td>
<td>3.71</td>
<td>22.5</td>
<td>3.55</td>
<td>23.7</td>
</tr>
<tr>
<td>Component #3: Strengthening of National Capacity for an Intensified Response to the Epidemic</td>
<td>HIV/AIDS</td>
<td>4.82</td>
<td>29.2</td>
<td>4.61</td>
<td>30.7</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td></td>
<td><strong>16.35</strong></td>
<td><strong>99.1</strong></td>
<td><strong>14.85</strong></td>
<td><strong>99.0</strong></td>
</tr>
<tr>
<td><strong>Front-end fee</strong></td>
<td></td>
<td><strong>0.15</strong></td>
<td><strong>0.9</strong></td>
<td><strong>0.15</strong></td>
<td><strong>1.0</strong></td>
</tr>
<tr>
<td><strong>Total Financing Required</strong></td>
<td></td>
<td><strong>16.50</strong></td>
<td><strong>100.0</strong></td>
<td><strong>15.00</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The World Bank:GOJ 90%-10% (net of taxes) cost-sharing arrangement proposed for this Project is consistent with the 3-year rolling-average of 60%-40% at the present level of the Bank's Jamaican portfolio, in accordance with Operational Policy (OP) 6:30 and Bank Procedure (BP) 6:30.
2. Key policy and institutional reforms supported by the project:

The Project would support five key policy and institutional reforms. First, it supports the implementation of a National Strategic Plan for HIV/AIDS elaborated in consultation with civil society and different development partners in Jamaica. Second, it shifts the focus from raising HIV/AIDS awareness (which is already high in Jamaica) to changing behavior among high-risk groups as well as in the general population. Third, it would strive to reduce the strong stigma surrounding HIV/AIDS -- a major risk factor that impedes efforts to control the epidemic. Fourth, it supports the decentralization of HIV/AIDS-related service delivery to the regional and parish levels. Fifth, it encourages a multi-sectoral approach in HIV/AIDS prevention and care, with the active involvement of relevant line ministries, NGOs, civil society, as well as the private sector (see section C4 below).

3. Benefits and target population:

The project would directly benefit: (a) high-risk groups; (b) persons living with HIV/AIDS; (c) the entire population of Jamaica. High-risk groups in Jamaica include: population with signs and symptoms of STIs, commercial sex workers and their clients, men who have sex with men, prisoners, and adolescents in and out of school; including street children.

Although the exact size of high-risk groups is unknown, it is likely to be significant. For example, twenty-eight percent of women attending family planning clinics have at least one STI. High-risk groups in Jamaica will benefit from reduced HIV infection and STIs thanks to targeted interventions. The estimated 24,000-32,000 PLWHA in Jamaica will benefit from better access to treatment, care, support and mitigation interventions supported by the project. Finally, the entire population of Jamaica will benefit from (a) interventions aimed at the general community such as mass media/community campaigns, condom promotion, VCT, safer blood supply; and (b) reduced HIV transmission from the high-risk groups into the lower-risk population.

4. Institutional and implementation arrangements:

Implementation period: 5 years

Institutional Arrangements

The project will be supported by institutional arrangements that will ensure leadership, visibility and a multisectoral approach. These arrangements will include the following:

(a) Cabinet Ministers will be required to ensure that an HIV/AIDS strategy and work plan is developed and implemented in each Ministry (the first five will be key ministries of labor, education, health, tourism, security and justice). Each key ministry will establish a Focal Point on HIV/AIDS who will be the sector representative on the National AIDS Committee and be responsible for coordination, sharing information and ensuring integration with the National AIDS Program. To develop strategies and work plans, the Project will finance strategic planning workshops to be held before project effectiveness with key Ministries. Ministries can submit work programs to the PCU for financing and must show a willingness to match contributions.

The Ministry of Health, as the executing agency, will have a particularly important role in the program. It houses the PCU and is responsible for technical implementation of identified program areas in prevention, care and treatment. The Ministry of Health would also be directly responsible for supporting the development and financing of the HIV/AIDS work plans submitted by the Regional Health Authorities.
(b) The National Planning Council (NPC) will be responsible for raising the profile of the HIV/AIDS Program in the general public as well as proposing policy recommendations to Cabinet. The NPC is a multisectoral body consisting of representatives from key ministries, private sector, unions and professional groups, that advises Cabinet on social and economic development in Jamaica. The NPC, whose secretariat is the PIOJ, is chaired by the Minister of Finance and Planning. The Ministry of Health is a member of the NPC and the National AIDS Committee will be elevated in profile and resources in order to act as the NPC’s Working Group on HIV/AIDS.

(c) The National AIDS Committee (NAC) will be elevated in profile (to report to the NPC) and strengthened in resources to ensure its role as the organization responsible for stimulating the multisectoral response to HIV/AIDS in Jamaica. Established in 1988, it has reported to the Minister of Health and has not had the financial resources or leverage to ensure consistent high level coordination and advocacy. In the last few years, USAID has financed its core staff and basic program costs. The NAC will be significantly strengthened through the IBRD-funded project providing additional funding to that of USAID, which will continue to support the NAC and improve its ability to provide capacity building and coordination support to Parish AIDS Committees. The NAC will have a new Chairman approved by the Prime Minister, a revised executive structure (including a Director) and additional staff to ensure implementing capacity (see Annex 11 for details).

The NAC will: (i) act as Working Group of the NPC on all matters relating to HIV/AIDS; (ii) coordinate and facilitate the multisectoral consultations on the national HIV/AIDS response; (iii) formulate policy proposals and national response priorities based on multisectoral consultation for discussion by the NPC and decision-making by Cabinet; (iv) coordinate and assist Parish AIDS Committees (PACs) in their outreach to communities by providing support to PACs for the development of work programs, providing them with training and advisory services and other forms of support to build medium-term sustainability; (v) provide monitoring and evaluation of the strategic plans of Ministries and other implementing agencies (NGOs, CBOs, FBOs); and (vi) ensure knowledge-sharing and coordination among ministries, implementing agencies and international organizations in respect of research, activities and best practice to combat HIV/AIDS.

(d) The Parish AIDS Committees will be strengthened to ensure a parish level coordination, facilitation and advisory facility, in addition to monitoring and evaluation of community-based activities. Many PACS were established by health workers or other interested individuals and operate only on a limited basis, while others are actively engaged in awareness activities and raise funds accordingly. The PACs have only recently been actively involved in the national coordination exercise through the NAC. In future the role of the PACs will be to (i) work in communities to generate awareness of the HIV/AIDS epidemic and create ownership of the national response at a parish level (ii) strengthen the parish capacity to respond to the epidemic in prevention and care by building community partnerships and coordinating the activities of implementing agencies in the parish; (iii) support parish-based implementing agencies in the preparation, financing (through applications for subprojects) and implementation of their activities (iv) monitor and evaluate the activities of these implementing agencies (v) work with communities and PLWHA to address stigma and discrimination against PLWHA and affected families; and (vi) ensure membership or linkages with all key development partners in the Parish, including Parish Health Departments and Parish Development Committees (PDCs). The PACs will continue to draw mainly on volunteer services and will receive training through the NAC. However, PACS will need to register as legal entities and will need support for some additional capacity for administration and coordination. The Chairs of four PACS (representing regions) will be members of the Executive Committee of the NAC and participate in quarterly meetings. They will report to the NAC but are expected to be accountable to local communities and stakeholders.
(e) The Project Coordination Unit (PCU) will be responsible for implementing the IBRD-funded Project and will be based within the Ministry of Health in order to ensure its integration and sustainability within the National AIDS Program. The PCU will report to the Minister through the National AIDS Program which is the Unit responsible for all donor projects and for the National AIDS Program. The location of the PCU in the Unit ensures coordination with other donor-funded HIV/AIDS projects, integration into the NAP and sustainability required to ensure institutional capacity and memory are retained from the project. It is, however, recognized that the implementation of a multi-sectoral approach might not be facilitated by a PCU which is located within the MOH. Measures will be taken to minimize such a risk (see section F.2). The PCU will be responsible for day-to-day management of the project, including procurement, contracting of implementation agencies, provision of budgetary support to ministries, technical support and quality control, project financial management, monitoring and evaluation. The PCU will also establish a selection committee to approve applications for demand-driven sub-projects. As a priority, the PCU will work with other structures to ensure the smooth operation of the project in support of the NAP. The PCU will coordinate closely with NAC through regular program reports and review meetings. The PCU will have the following key staff: (a) executive director; (b) component directors; (c) M&E specialist; (d) financial management specialist; and (e) procurement specialist. Once the project has closed, it is expected that some technical staff such as component directors of the project will be absorbed into the National AIDS Program unit of the Ministry of Health.

**Implementation Arrangements**

The roles of Cabinet and the NPC are critical to ensuring the political and programmatic support for HIV/AIDS activities across all sectors of Jamaican society. The NAC and PACs are responsible for generating awareness and action on the ground and for coordinating activities across implementing agencies. The implementing agencies themselves will range from line Ministry operational staff to NGOs, CBOs, private enterprises and FBOs at the community level. Given the difference in roles, scope and capacity, the different implementing agencies will need different implementation mechanisms to be put in place. It is envisaged that 3 kinds of implementation mechanisms will be established: (i) direct support to Ministries from the Project based on annual sector workplans submitted; (ii) subcontracts established with national civil society organizations or private organizations to carry out particular activities; and (iii) support for smaller innovative subprojects at Parish level by civil society organizations, private enterprises, NGOs, etc., on a demand-driven basis.

### Implementing Agencies and Mechanisms

<table>
<thead>
<tr>
<th>Implementing Agency</th>
<th>Workplan-based Budget Support</th>
<th>Subcontractors</th>
<th>Subprojects – demand-driven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Ministries</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>RHAs</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>NAC</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>PAC</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>National NGOs</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Small NGOs, CBOs, FBOs</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Private Sector</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Y/Yes-----N/No

(a) **Budget support to Line Ministries and RHAs.** In order to implement sector plans, the project will need
to provide some financial support to Line Ministries and RHAs. This will be provided by the PCU based on an approved annual work plan between the Ministry/RHA and the PCU. According to Jamaican law, the PCU can disburse to other Ministries on the basis of a Memorandum of Understanding between the said Ministry and the Ministry of Health (for other implementing agencies, normal contracting and procurement procedures will apply). Ministries will be expected to provide quarterly financial and program reports and funds will be released according to specified indicators and outputs.

(b) Subcontracting Arrangements. During Project preparation, a number of specific roles have been identified which NGOs and private health (or other) companies could undertake as subcontractors to the PCU. These may be solicited by the PCU but unsolicited proposals will also be considered where the amount exceeds that determined for applications for demand-driven sub-projects. These contracts will be allocated by the PCU according to World Bank Procurement rules and will be monitored and evaluated by the PCU.

(c) Demand-driven Subprojects. A share of project funds (10%) will be set aside within the budget to provide small grants to implementing agencies on a demand-driven basis. Individual subprojects would be between $1,500 and $20,000. This support will encourage community based activities, particularly innovative initiatives – to be known as demand-driven “subprojects”. Eligibility for sub-project support will be set out in the Operations Manual but will include elements such as relevance of the activity under the NSP, experience of the implementing agency in HIV/social development, bookkeeping and reporting capacity, community participation, etc. A Selection Committee will be convened by the PCU, comprising NAP, NAC, PCU civil society representatives. It will meet on a regular basis to approve subproject applications and PACs and other local authorities will be called upon to verify applicant's bona fides and capabilities. A number of mechanisms are contemplated to ensure that interested agencies and community groups possess the capacity to formulate proposals and to implement subprojects. For example, experienced NGOs and the PACs can be contracted to build capacity among a pool of applicants. Another option is to contract a lead national NGO with proven financial management, monitoring and community mobilization skills to promote community based initiatives and provide training and assist with subproject preparation. Alternatively, applicants can include a 'capacity-building' component in their funding request applications to the PCU so they can acquire the particular capabilities that they lack, e.g., training, human resource and financial management, monitoring and tracking systems. NGO networking will be promoted to enhance capacity of small and new NGOs/CBOs.

Operations Manual
An Operations Manual is being prepared by the PCU together with a consultant and will be sent to the World Bank for review. A condition of effectiveness of the project is that the PCU shall have drawn up and the Government have adopted an Operations Manual (OM) satisfactory to the World Bank. The OM would include the conditions for project implementation, such as guidelines for preparing and implementing project activities, as well as technical norms (e.g. medical waste management) and administrative, budgetary, disbursements, contracting and procurement procedures to be followed during project implementation. For project implementation, CBOs, private sector and NGOs could be contracted following the criteria and procedures established in the Operations Manual. The PCU would assist, facilitate and supervise implementation of these activities.
Accounting, reporting, and auditing arrangements
The financial management of the project (including accounting, reporting audits and disbursements) will be
coordinated by the PCU, which is currently in the process of finalizing the overall financial management
system. To facilitate disbursements, a Special Account will be established and managed according to Bank
guidelines as prescribed in the Disbursement Handbook. The project will be audited annually by an
independent auditor acceptable to the Bank, and special purpose audits will be carried out on a half-yearly
basis to audit the demand-driven component of the project. Details of all financial management
arrangements may be found in Annex 6.

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

This project is a Sector Investment Loan under the Second Phase Multi-Country HIV/AIDS Prevention and
Control Adaptable Program Lending (APL) for the Caribbean Region. Sector investment loan for
individual countries and programmatic lending with disbursements links to outputs were two alternatives
considered and rejected (see PAD of Caribbean Countries Multi-Country HIV/AIDS Prevention and
Control Program for details).

As to the technical design of this specific project, the following project alternatives were considered and
rejected:

An exhaustive gamut of interventions. The project rejected this approach in favor of giving priority to the
most cost-effective HIV/AIDS interventions (see Annex 4) to avoid stretching thin the limited resources.
Scaling up the most cost-effective interventions will help to maximize the impact of the investment on the
epidemic.

Highly active antiretroviral therapy (HAART). Although the pharmaceutical industry has substantially
reduced the price of HAART for low and middle-income countries, the cost and sustainability of HAART
in Jamaica remains an issue (see Annex 13). While the procurement of antiretrovirals is not included in the
proposed loan, it is contemplated in the National Strategic Plan for such time as they become affordable.
Furthermore, Jamaica still lacks an adequate infrastructure to implement HAART successfully on a large
scale. This project would help the country formulate an ARV strategy, strengthen the health infrastructure
(including laboratories and pharmacies), and provide training on ARV use to health care providers as the
foundation for HAART implementation in the future. The Project, however, supports the procurement of
PEP drugs through the procurement method provided for in Schedule 4 Part C.4 of the Loan Agreement.
This method will be revised on the basis of the ongoing negotiations and agreements within the framework
of the World Trade Organization, taking into account intellectual property rights and the right to protect
public health in the country. In addition, the Government will procure antiretrovirals for MTCT with
counterpart funds, also taking into account intellectual property rights and the right to protect public health
within the framework of the ongoing World Trade Organization negotiations and agreements. The
Government of Jamaica is signatory to the Declaration on the Trade-Related Aspects of Intellectual
Property Rights Agreement and Public Health adopted by the World Trade Organization Ministerial
Conference in Doha on November 14, 2001.

A purely health sector approach. Various legal, socioeconomic, gender and cultural factors exert
influences over individuals’ behavior, which in turn have an impact on the epidemic. These factors cannot
be influenced by the health sector alone; they require the involvement of other sectors. The level of
awareness is, however, already high in Jamaica, but this has not necessarily led to changes in behavior. It is clear that, without the active involvement of strategic partners (community leaders, youth leaders, peers, etc.), behaviors are unlikely to change. The Ministry of Health therefore needs to contract out the behavior change aspect of the project to those entities that have more experience with it.

**Pure public delivery of HIV/AIDS services.** This approach was rejected because NGOs and CBOs are often more effective than public-sector providers in delivering services to high-risk groups such as CSW and MSM. In addition, while the Government can be involved in care and support, it cannot possibly claim to cover needs adequately. The private sector must be involved in the response to the epidemic. Note that this approach is perfectly aligned with the recommendations in section B.2 (Main Sector Issues) regarding the proper role of the public health sector.
2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned). (see Annex 15 for a synopsis of donor involvement in HIV/AIDS). The Ministry of Health has provided effective donor coordination and ensured that the actions of the different agencies supporting the national efforts to combat the epidemic are complementary.

<table>
<thead>
<tr>
<th>Sector Issue</th>
<th>Project</th>
<th>Latest Supervision (PSR) Ratings (Bank-financed projects only)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bank-financed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Sector Efficiency</td>
<td>Public Sector Modernization Project</td>
<td>Implementation Progress (IP)</td>
</tr>
<tr>
<td>Social Protection</td>
<td>Social Safety Net Project</td>
<td>Development Objective (DO)</td>
</tr>
<tr>
<td><strong>Other development agencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID</td>
<td>Support to the Ministry of Health's HIV/AIDS/STI Prevention and Control Program for: surveillance; research; laboratory services; STI control; behavior change communication; condom promotion; training; care and social support</td>
<td></td>
</tr>
<tr>
<td>Japanese Government (PHRD Grants)</td>
<td>TA for gathering baseline information, situation analysis and response analysis.</td>
<td></td>
</tr>
<tr>
<td>UN HIV/AIDS Theme Group</td>
<td>UN Integrated Plan of Action TA (care &amp; support; clinical approach; epidemiology; communications); health education; NGO capacity; blood safety; National Public Health Laboratory.</td>
<td></td>
</tr>
<tr>
<td>PAHO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTZ</td>
<td>Behavioral and operational research; behavior change communication; training of private and public healthcare service providers and volunteers; counselling; laboratory infrastructure.</td>
<td></td>
</tr>
<tr>
<td>IDB</td>
<td>Health Sector Reform Program</td>
<td></td>
</tr>
</tbody>
</table>

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)
3. Lessons learned and reflected in the project design:

The project adopts the design features that underpin the Multi-Country HIV/AIDS Prevention and Control Adaptable Program Lending for the Caribbean Region, and that have proven successful in other countries:

- First, there needs to be a clear demonstration that government, at the highest level, is committed to the issue and ready to provide leadership. In practical terms, this means the government is committed to discussing the epidemic openly, accepting that a problem exists and that the means of transmission are known. The government should also indicate its willingness to strive to reduce the stigma and discrimination associated with HIV infection.

- Second, there has to be a clear recognition that reversing the HIV/AIDS epidemic is ultimately an issue of behavior change and that strategic partners (community leaders, youth leaders, peers, etc.) have to be involved in the planning and implementation process. Government therefore has to indicate its willingness to collaborate with NGOs, CBOs, other line ministries and the private sector in program design and implementation.

- Third, the response to the epidemic must include care and support. There are known and relatively inexpensive means to improve the quality of life and life expectancy of PLWHA. Providing care and support to PLWHA would convey to the public that HIV is a health problem rather than a moral one. Providing care would require that the health system and health workers begin to manage the disease rather than manage the death of reprehensible people. The inclusion of care and support in the response to HIV/AIDS are thus expected to contribute to diminish stigma and discrimination.

- Fourth, prevention must remain at the core of the response: this is most cost-effective way of managing the epidemic. Among possible prevention interventions, behavior change among high-risk groups is key. Even though the epidemic is now generalized in Jamaica, those in high risk groups are still more likely to contract and spread HIV to others. Prevention among those at greater risk prevents many more infections indirectly in the general population.

- Fifth, sufficient emphasis has to be placed on strengthening the HIV/AIDS/STI surveillance system as a tool for effective program monitoring and evaluation. The surveillance system must give policymakers timely information on the direction of the epidemic, as well as knowledge of the behaviors that continue driving the epidemic.

- Finally, strategies for dealing with the epidemic are bound to change as new information becomes available. Implementation procedures must therefore favor flexibility, learning and innovation, and responsiveness to opportunities and demand.

4. Indications of borrower commitment and ownership:

The five criteria for country participation in the Multi-Country HIV/AIDS Prevention and Control Adaptable Program Lending (APL) for the Caribbean Region are laid out in Annex 5 of the APL Project Appraisal Document (Report No. 22184-LAC). The eligibility criteria for entering into negotiations are: (a) an approved National HIV/AIDS Strategy and Program; (b) readiness of national leadership (including a structured project management unit); (c) programming for multisectoral implementation; (d) the use of sustainable business arrangements; and (e) defined institutional arrangements for monitoring and evaluation.
The GOJ has indicated its strong commitment to and ownership of the project by complying with all the five criteria (see Annex 16); (a) Cabinet has approved the National Strategic Plan for HIV/AIDS; (b) GOJ has agreed to use the National Planning Council, chaired by the Minister of Finance, as a high-level forum for discussing/advising on HIV/AIDS. The NPC comprises cabinet members, business leaders and leaders from civil and religious society. The profile of the NAC has been elevated to a Working Group of the NPC on HIV/AIDS; (c) Cabinet has issued a mandate to key line ministries to prepare and implement HIV/AIDS work programs within their sectors and to report regularly to Cabinet on progress; (d) the core PCU staff has been appointed; and (e) a Monitoring and Evaluation plan and unit have been established to monitor progress.

The GOJ has effectively used a grant from the Policy and Human Resources Development Fund (PHRD) (Grant No. TF026633) in project preparation. It has begun using an advance from the Project Preparation Facility (PPF) (PPF No. P-390-0-JM) to ensure PCU readiness to implement the project and to initiate project activities.

5. Value added of Bank support in this project:

The rationale for World Bank’s involvement includes:

- The Bank has vast experience in working across sectors, giving it a comparative advantage in supporting a multisectoral response to HIV/AIDS in Jamaica. The Bank has been instrumental in translating the NSP’s objective of fostering a multisectoral approach into an implementation plan that can be monitored and evaluated. The project creates a number of instruments (contracting, subprojects, workplans) that will allow strategic partners to be involved in project implementation.

- The Bank is well positioned to make regional and international experiences available to the project. It has already financed HIV/AIDS activities in more than 80 countries and has accumulated substantial experience in the design, implementation and evaluation of HIV/AIDS programs. The Bank's experience in Argentina, Brazil, the Caribbean (Barbados, Dominican Republic) and various countries in Africa (Senegal, Madagascar) was brought to bear in at various times and in various ways during project preparation.

- The project would provide new resources to scale up successful cost-effective HIV/AIDS prevention activities, especially those targeted at high-risk marginalized groups. The amount involved is substantial compared to the current budgetary allocations for the HIV/AIDS, providing GOJ needed headroom to address current needs as well as undertake some structural and institutional improvements that would make the national HIV/AIDS program more sustainable in the long run.

- The project will permit the Government to flesh out a coordinated treatment and care response that will include universal access to palliative care and treatment of opportunistic infections. The project also helps build the infrastructure (training, laboratory capacity, testing, etc.) needed for introducing ARV.

- The project will help consolidate the investments made by a number of other donors and cooperation agencies in HIV/AIDS (especially USAID, UNICEF, and PAHO) by mobilizing all partners to work under a GOJ-led developmental framework for HIV/AIDS. Collaboration with USAID has been particularly successful; the proposed project even shares monitoring indicators with the USAID program.
E. Summary Project Analysis (Detailed assessments are in the project file, see Annex 8)

1. Economic (see Annex 4):
   - Cost benefit NPV=US$36.3 million; ERR = 57.6 % (see Annex 4)
   - Cost effectiveness
   - Other (specify)

By contributing to prevent new infections, the project generates substantial benefits in the shape of averted productivity losses and savings on in-patient care and on treatment of opportunistic illnesses. Benefits are taken to materialize several years after an infection has been prevented to mirror the fact that HIV is initially asymptomatic and that HIV-related disability emerges several years after infection. A sensitivity analysis, carried out on all key parameters used in the cost-benefit computation, indicates that the economic rates of return are robust to very significant biases against project feasibility. Note, however, that this analysis mixes public and private costs and benefits, and a positive economic rate of return does therefore not provide sufficient grounds for supporting public financing of HIV/AIDS prevention. The substantial negative externalities, not computed here, associated with HIV/AIDS provide better justification for public financing of HIV/AIDS prevention.

Cost-effectiveness information from literature was used to prioritize among prevention interventions.

A supplementary analysis (see Annex 13) of the costs and benefits of public financing of antiretrovirals was carried out. It indicates that prices would have to go down to about $1,183 per patient per year for private benefits to exceed private costs, and to about $800 per patient per year if (a) the net impact of public provision of ARV on the MOH pharmacy budget is to not exceed 5% and (b) no income quintile is to devote more than 7% of its total per capita spending on ARV drugs and allied costs. If the objective is to achieve budget neutrality for the Ministry of Health (i.e., increase in pharmacy and allied costs due to ARV matched by savings on in-patient care and treatment of opportunistic illnesses), then prices need to go down to as low as $348 per patient per year. This analysis is indicative and does not suggest that the purchase of ARV should be automatically triggered if prices reached the thresholds identified above.

In addition, the analysis does not take into account competing uses for the money, whether from own resources or borrowed resources, and it must be acknowledged that there may be much better uses for the money. In the context of the creation of a new Health Fund, the Ministry of Health conducted a study to determine the cost of expanding access to currently unavailable or heavily rationed care (organ transplants, cardiovascular surgery, bone marrow transplant, renal dialysis, diagnostics (MRI, CT-Scan), treatment of certain cancers and leukemia). The cost of providing these additional services was shown to far exceed the financial capacity of the Health Fund and the MOH undertook to prioritize among the possible uses of the scarce resources based on a series of criteria including cost-effectiveness, burden of disease, and susceptibility to management. The exercise also took into account the availability of generic drugs for these conditions. During this exercise, the treatment of conditions such as hypertension, diabetes, heart diseases (ischemic heart disease, myocardial infarction, rheumatic heart disease), asthma, arthritis, glaucoma, depression, breast cancer, and prostate cancer was shown to be a higher priority.

GOJ’s strategy to (a) negotiate ARV prices down for the private sector; (b) subsidize care for vulnerable sub-populations (children, then mothers); and (c) develop the testing and counseling infrastructure to allow increased access to ARV in view of the anticipated reduction in ARV prices, is eminently sensible. Should circumstances change during project implementation, the issue of ARV procurement will be revisited.
2. Financial (see Annex 4 and Annex 5):
NPV=US$ million; FRR = % (see Annex 4)
N/A

Fiscal Impact:
The net fiscal impact of the project is expected to be small. Incremental recurrent costs due to the project are estimated at roughly $1 million annually (recurrent costs + maintenance of investments and equipment). The project prevents about 300 infections annually, which translate into around $530,000 in terms of averted productivity losses. Supposing an effective taxation rate of 20%, then the project averts $106,000 in potential losses in fiscal revenues. The net fiscal impact is therefore approximately $894,000, i.e., 0.61% of the recurrent budget of the Ministry of Health or 0.04% of recurrent public expenditure.

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 proven cost-effective interventions such as peer education for positive behavioral changes (especially those targeted at high-risk groups), interventions STI management, condom promotion, VCT, prevention of HIV vertical transmission, and supply of safe blood. The project also supports the upgrading of the surveillance system (with technical support from CAREC and CDC), making it more capable of providing relevant and timely information to policymakers. The project also supports the expansion of treatment, care and support as part of the response continuum to the epidemic. While the project does not contemplate the procurement of antiretrovirals, it does provide critical building blocks (screening and diagnostic services, safe handling of waste, health worker training, counseling infrastructure, etc.) for an expanded ARV strategy.

The country has capable and experienced staff that have been working for several years in HIV/AIDS prevention and control programs. The role of NGOs in prevention, care and support, traditionally supported by bilateral agencies, will be expanded through the proposed project.

Best practices in technical standards for the safe handling of medical waste have been adopted to minimize environmental impact.

4. Institutional:

4.1 Executing agencies:

Ministry of Health (MOH)
The Ministry of Health will be the executing agency with overall responsibility for project implementation and administration. The PCU will report to the Minister of Health through the National AIDS Program and will supervise all project activities, including those to be contracted out to non-public implementing agencies such as CBOs, NGOs and the private sector. Project funds will be used directly by the PCU (project management), the MOH and its agencies, contracted agencies, and applicants for financing HIV/AIDS demand-driven subprojects. The NAC and PACs will provide support to the project by ensuring a multi-sectoral consultation process as well as assistance to NGOs, CBOs and other implementation agencies undertaking activities in support of project objectives.

NGOs and CBOs
Because NGOs and CBOs are close to communities they serve, they are well placed to identify and respond appropriately to community needs and implement effective interventions to change social norms and risk behavior. Marginalized high risk groups are also more accessible to NGO/CBO interventions. NGOs have
greater flexibility and capacity to accommodate responses to changing public needs. NGOs can also innovate and implement new initiatives without major hindrances. Experience, however, shows that while NGOs and CBOs have played a critical part in mobilizing and sustaining the community response to HIV/AIDS, many lack the technical and managerial capacity.

PCU and NAC will develop appropriate selection criteria for appropriate NGO and CBOs to receive funding and support for capacity building. Selection criteria would include: committed, knowledgeable and credible leadership; a formal organized structure with articles of association; a clear mission statement with objectives; proven track record in working with specific client groups; willingness to deliver differentiated services; credibility with large or specific constituency; and ability to mobilize additional resources. Capacity building and training will be provided to strengthen NGO/CBO organizational and management systems. Training will be provided in strategic planning, program design, monitoring and evaluation, financial and human resource management, logistics management, proposal development and reporting. Training will also be provided in technical areas so that NGOs and CBOs have a better understanding of strategies for HIV/AIDS prevention and control, priority interventions and develop capabilities to build alliances, develop mechanisms for collaboration and promote information exchanges with other NGOs/CBOs.

Proposals will be selected on a competitive basis on predefined funding cycles. The organizational proposal will be an integral part of the NGO/CBO contract with stipulated deliverables and outcomes. Payments would be made based on submission of satisfactory program and financial reports. Large NGOs will submit annual audit reports. Piloting performance-based reimbursement may be examined.

4.2 Project management:

Project Management: Project Coordination Unit (PCU)

During project preparation it was agreed that the PCU for project implementation would be created by a new resolution of the MOH as a condition of negotiation. The MOH will appoint and maintain during the execution of the project qualified technical personnel in adequate numbers and with functions, responsibilities, qualifications acceptable to the Bank. The PCU would be run by (i) a full time Project Director who will coordinate and supervise project implementation through the RHA and the MOH approved NGOs, and (ii) a multi-skilled project team that will monitor project implementation.

The PCU will:
1. Work with the NAC and PACs to promote the project in Regions and parishes;
2. Ensure coordination between the project, MOH and NAC;
3. Maintain project records and prepare regular implementation reports to the MOH and NAC;
4. Prepare terms of reference for consultants who will assist in implementing the project components and supervise their work;
5. Coordinate the processing (collection, appraisal, approval and supervision) of demand-driven subprojects presented by civil society organizations (NGOs, CBOs, the private sector etc.) to undertake HIV/AIDS activities in communities, ensuring compliance with the Operations Manual;
6. Coordinate the processing (identification, preparation, appraisal, approval, contracting and supervision) of contracts for specific activities to be contracted out to NGOs, the private sector and others as determined by the PCU as necessary for project implementation, ensuring compliance with the Operations Manual;
7. Ensure that executing agencies comply with Bank procurement guidelines;
8. Undertake the financial management of the project;
9. Operate a management information system to track project processing and outputs;
10. Ensure the auditing of project accounts and other audits required by the Bank;
11. Coordinate Bank supervision missions and facilitate the mid-term review of the project;
12. Organize baseline studies and the evaluation of the project's impact using monitoring indicators, analysis and other appropriate methodologies;
13. Select and manage independent consulting firms to carry out ex-post impact evaluation of a sample of subprojects.

The Operations Manual: The PCU will prepare an Operations Manual providing detailed criteria and terms of reference for project implementation arrangements including requirements and procedures for subproject implementation arrangements. Such procedures and requirements may include, as appropriate, health protocols, infrastructure and staffing, training plans, financing of recurrent costs, sustainability, and measures to ensure that the environment will not be negatively affected. The final version of the draft will be submitted to the Bank as a condition for effectiveness.

Monitoring: The PCU will be responsible for project monitoring and evaluation. It will use performance indicators indicated in Annex 1. Progress reports, including monitoring indicators, would be sent by the PCU to the Bank every six months. Baseline, mid-term and end-of-project evaluation will be carried out with the participation of external partners. The MOH, supported by the PCU staff and, when necessary, consultants, will carry out technical supervision of subprojects. Monitoring indicators were agreed upon in the course of negotiations, and a Supplemental Letter detailing them signed.

4.3 Procurement issues:

Procurement: The PCU will be responsible for all procurement with the exception of drugs, which will be procured by the Health Corporation Limited (HCL), a government-owned limited liability company established by the MOH with responsibility for the procurement, warehousing and distribution of medical supplies for the public sector. Anti-retroviral PEP drugs will be procured under Direct Contracting, unless otherwise agreed by the Bank through written notice to Jamaica. Within the PCU, a procurement specialist will implement all procurement activities, including procurement planning, procurement processes, contract award and contract information system. Procurement of goods for subprojects will be carried out by those NGOs or private companies whose submissions will have been approved for funding. The HCL, under a procurement services agreement to be negotiated and signed with the PCU, will: (i) carry out the procurement processes for the purchase of drugs, (ii) receive procured drugs and verify compliance with technical specifications, and (iii) store and distribute procured drugs. An assessment of the PCU's and HCL's capacity to implement project procurement has been carried out by a Bank procurement specialist.

4.4 Financial management issues:

Financial Arrangements: The PCU is adequately staffed and there is an appropriate segregation of duties within the PCU and MOH to ensure the effective and efficient management of all resources. The PCU is responsible to submit financial reports to various departments and divisions in the MOH and Ministry of Finance and Planning (MOFP) on a monthly basis, and will report to the Bank on a bi-monthly basis through the submission of the financial management reports.

To facilitate the disbursement of funds, the GOJ/MOFP will establish a Special Account (SA), to be operated by the MOH (PCU) under terms and conditions satisfactory to the Bank. The project would be audited annually, including a review of procurement by an independent audit firm acceptable to the Bank. Project audit arrangements also include half-yearly special purpose audits to review the community-based component of the project. Details of all financial management arrangements may be found in Annex 6.
5. Environmental: Environmental Category: B (Partial Assessment)

5.1 Summarize the steps undertaken for environmental assessment and EMP preparation (including consultation and disclosure) and the significant issues and their treatment emerging from this analysis.

The Project Environmental Assessment and corresponding Environmental Management Plan to be supported by the Project were conducted by PAHO/WHO which has a long experience of dealing with medical waste management issues in Jamaica.

The assessment reveals that while there have not been any major disease outbreak associated with the handling of medical waste, there is nonetheless need for immediate improvements in the management of the waste stream. Among the major deficiencies in the current approach to infectious waste management are: (a) the indiscriminate disposal of blood and blood products; (b) inadequate incineration facilities (volume, temperature attainment, etc.); (c) inadequate storage at point of generation; (d) the lack of a system for ready identification of infectious wastes; and (e) low level of awareness among hospital staff with respect to the importance and methodology for handling infectious material.

To correct the present shortcomings, legislation has been drafted and submitted to the Parliamentary Council for final review. The specific provisions contained in the regulations cover the various categories of waste, segregation, containerization, storage, and transportation to the incineration treatment site. These provisions along with the infection control manual will be the basis upon which the safe handling of health care wastes will be managed. The regulations are to be adopted into law.

5.2 What are the main features of the EMP and are they adequate?

The project will support the upgrading of waste management in the four facilities that will be involved in providing treatment and care (Kingston Public and Victoria Jubilee Hospitals, Cornwall Regional Hospital, Mandeville Regional Hospital, and St. Ann's Bay Regional Hospital), as well as in the 59 health care facilities that will also operate as testing centers. The project will support: (a) the upgrading or acquisition of new incinerators; (b) the procurement of autoclaves; (c) the procurement of waste disposal supplies (protective equipment, needlizers, etc.); and (d) health worker training in the proper management of infectious wastes.

No withdrawals will be made in respect of payments for expenditures for hospital waste management equipment, unless Jamaica has presented to the Bank the results of a site-specific environmental assessment regarding the installation and use of said equipment, carried out with public consultation in Jamaica, and to the satisfaction of the Bank.

5.3 For Category A and B projects, timeline and status of EA:

Date of receipt of final draft: January 10, 2002

5.4 How have stakeholders been consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed environment management plan? Describe mechanisms of consultation that were used and which groups were consulted?

PAHO held consultations with the main facilities that will be affected by the project.

5.5 What mechanisms have been established to monitor and evaluate the impact of the project on the environment? Do the indicators reflect the objectives and results of the EMP?
Hospital waste management equipment will be installed or upgraded according to the environment safety specifications contained in the project Operations Manual.

6. Social:

6.1 Summarize key social issues relevant to the project objectives, and specify the project's social development outcomes.

Because most of the factors (both direct and indirect) driving the epidemic are social, the project would have to deal with these, especially the stigmatization of PLWHA, and the marginalization of high risk groups (MSM, IDU and CSWs which are all illegal in Jamaica, and prison inmates). In order to achieve the project’s goals of reducing the spread of HIV infection and improving the care and support for infected and affected persons, dealing with these social issues is critical. A situation analysis of the epidemic in Jamaica which also includes a social analysis has been conducted by UN Theme Group on HIV/AIDS.

**Stigma and discrimination.** As discussed earlier, stigma and discrimination against HIV/AIDS are one of the biggest challenges to the fight against the epidemic in Jamaica. They make it hard for prevention work to take place and prevent PLWHA from accessing treatment, care and support. Furthermore, the marginalization of high risk groups (such as MSM, CSW) makes it difficult for them to access services that are available for prevention and care, making them more at risk of contracting and spreading the infection as well as being more vulnerable to its impacts. In this context, the problem is worsened by an insufficiently supportive legal framework to protect against discrimination of PLWHA, their families and other vulnerable groups.

The project would address this issue through a combination of actions:
(i) identify strategic partners (the media, political, cultural, religious, business and community leaders) and offer them training through HIV/AIDS sensitization workshops; (ii) coordinate these partners in IEC/BCC campaigns in the media and the communities; (iii) assist the government in developing a framework for the protection of the human rights of PLWHA, their families and other vulnerable groups of the population (for PLWHA, this concerns confidentiality, employment, housing, mandatory testing for the purposes of insurance, immigration, employment, and access to compassionate health care); (iv) organize workshops for lawyers and legal aide counsellors on such legislation/regulations; (v) implement patient exit polls at facilities offering HIV/AIDS services; (vi) set up complaint bureau and hot-lines where people facing stigma and discrimination can voice their grievances and seek help; and (vii) systematically involve PLWHA (especially through JN+) in prevention/communication activities to render the epidemic visible and "humanize" the disease.

**Gender relations.** In Jamaica, female vulnerability to HIV/AIDS is linked to male sexual priority, economic vulnerability and dependency on males, including physical and sexual violence against women, rape, and the machismo culture which accepts and encourages multiple sexual partnerships, and homophobia. Gender stereotypes allow women to be blamed for spreading HIV/STIs. Communication between parents and children and between partners about relationships, male and female sexual needs and responsibilities is deficient. This is registered in the fact that many new cases are being reported in women, and in the fact that HIV infection in young girls is three times that in boys of the same age. Changing gender relations in a machismo culture is a long-term and difficult process. Toward this goal, the project would aim to:

(i) include messages in HIV/AIDS campaigns empowering women, especially in sexual decision-making; (ii) provide gender-sensitive peer education, equal access to information, education and prevention intervention, sensitizing men; (iii) promote appropriate interventions; female controlled methods, such as
female condoms, improve condom negotiations skills; (iv) create supportive environment; (v) combat 
discrimination and stigma; and (vi) develop gender-sensitive care and support for women living with 
HIV/AIDS.

**MSM and HIV/AIDS.** MSM account for around 6% of AIDS cases in Jamaica. However, given the illegal 
status of and the strong stigma around homosexuality in Jamaica, some policy makers believe this is likely 
to be an underestimate. At the same time, a high percentage (25%) of AIDS cases are reported as "unknown of transmission", of which 80% are male. It is suspected that MSM mode may be responsible for a significant proportion of "unknown transmission" AIDS cases. Currently, prevention targeted to MSM is limited in both coverage and content. The project will address this issue by: (i) striving to reduce the 
marginalization of MSM as part of the campaign against stigma and discrimination as mentioned above; (ii) conducting rapid assessment as baseline (behavior, prevalence, needs, etc.) to guide actions; and (iii) targeting MSM with peer education, VCT and STI management.

6.2 Participatory Approach: How are key stakeholders participating in the project?

HIV/AIDS being a major developmental and societal issue, makes it imperative that the project take a 
participatory approach in all aspects of the project involving key ministries, the private sector, 
nongovernmental sector and key stakeholders in civil society, including faith-based organizations, PLWHA 
and other donor organizations in Jamaica.

Already part of the national response to the epidemic is the decentralization of the prevention activities with 
the formation of Parish AIDS Committees (PACs) who have the mission to mobilize a broad cross-section 
of community members and raise resources. The private sector (both medical and non-medical) which had initially not been centrally involved in the national response are being targeted now through periodic 
training and updates. A few NGOs and the international community have been prominent in the country’s response to the epidemic.

With the involvement of the different stakeholders and the multisectoral approach to the epidemic, 
coordination of all inputs to the HIV/AIDS programming will be an important issue in the project 
management.

6.3 How does the project involve consultations or collaboration with NGOs or other civil society 
organizations?

The Project will involve consultation with NGOs and Civil Society through two processes. Firstly, in the 
preparation of the National Strategic Plan, a series of consultations is underway with civil society to 
discuss the draft plan. In addition, the high-level National Planning Council is a body including high level 
representatives from Civil Society, and convenes regularly to discuss national development priorities. HIV/AIDS will be on the agenda a number of times per year to ensure discussion and coordination of activities across all sectors of Jamaican society. Furthermore, the National AIDS Committee will be 
strengthened to ensure it acts as an effective consultative and advisory body for civil society participation 
in the NAP, and an implementation sub-committee of the National Planning Council in the matter of 
HIV/AIDS. Finally, the Project itself clearly requires that project implementation be done in collaboration 
with NGOs and Civil Society, in order to achieve maximum impact. Components I and II will provide 
support to nongovernmental implementing agencies for prevention, diagnosis and care services and towards 
this end, Component III will provide capacity building, training and technical assistance to these agencies.

6.4 What institutional arrangements have been provided to ensure the project achieves its social 
development outcomes?

Apart from the institutional arrangements set out above that ensure consultation with a range of
stakeholders in the Jamaican society, specific project components will enable the project to meet its social development outcomes. Different NGOs, private sector and civil society organizations (for example, faith-based organizations, PLWHA, employers organizations etc.) will be engaged in the design, implementation, and M&E of the project. Facilitation of this involvement will be done in a coordinated, ongoing basis through the NAC and PAC, which are to be strengthened through the project. In terms of implementation, the PCU will contract out specific activities to be undertaken by implementing agencies in civil society, along with technical assistance to build capacity. NGOs may have a comparative advantage in outreach to certain groups relative to the government, including neutrality, trust and confidentiality (for PLWHA, MSM, CSW) and proximity to communities who take greater ownership of NGOs. In order to ensure flexibility and efficiency, and to support social initiatives that may not be apparent during project preparation, a demand-driven HIV/AIDS Facility will provide funds to applicants who meet an agreed set of eligibility criteria.

6.5 How will the project monitor performance in terms of social development outcomes?

The project will monitor institutional development indicators, particularly the participation of non-traditional actors and agencies. Satisfaction with project outcomes for key beneficiaries (especially high-risk groups) will be measured through health facility exit polls and by monitoring people's attitude towards them.

7. Safeguard Policies:

7.1 Do any of the following safeguard policies apply to the project?

<table>
<thead>
<tr>
<th>Policy</th>
<th>Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Natural Habitats (OP 4.04, BP 4.04, GP 4.04)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Forestry (OP 4.36, GP 4.36)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Pest Management (OP 4.09)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Cultural Property (OPN 11.03)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Indigenous Peoples (OD 4.20)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Involuntary Resettlement (OP/BP 4.12)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Safety of Dams (OP 4.37, BP 4.37)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)</td>
<td>○ Yes ○ No</td>
</tr>
<tr>
<td>Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*</td>
<td>○ Yes ○ No</td>
</tr>
</tbody>
</table>

7.2 Describe provisions made by the project to ensure compliance with applicable safeguard policies.

A special issue has been raised by the LCR Quality Assurance Team (QAT) with respect to OD 4.20. The QAT suggested that the Maroons may claim to qualify under the Bank's definition of indigenous people as a group whose special needs should be recognized by this project. Maroons are descendents of run-away slaves who started communities of their own, prior to the abolition of slavery in Jamaica. In many ways, they are not distinguishable from other Jamaicans of African descent, but do have a treaty with the government that gives their communities some degree of local autonomy. In any case, the Ministry of Health has responded that it will provide the necessary culturally sensitive, appropriate prevention messages and intervention to all the citizens including the Maroon communities. This commitment will be included in the Operations Manual in the following manner:

During the preparation of Annual Action Plans (provided for in Section 3 of the Loan Agreement), project activities would be adapted according to the nature and characteristics of the groups affected by the project (e.g., different communication strategies on HIV/AIDS transmission or safe sex practices). This provision will be incorporated as part of the project's Operations Manual to be approved by the World Bank as a loan
effectiveness condition and adopted by the Government for managing project implementation.

F. Sustainability and Risks

I. Sustainability:

Critical to the sustainability of the project are the following factors.

(a) an enabling environment. This refers to the legal and policy framework as well as social norms that help reduce risk-taking behavior, stigma and discrimination and facilitate HIV/AIDS interventions in the long run, especially for marginalized high-risk groups and PLWHA. The project would seek to create this environment by promoting ownership of this program, organizing workshops to sensitize opinion leaders, and train the media, lawyers and legal aids in HIV/AIDS issues. It will assist the development of a regulatory framework as well as instruments (complaints bureau/hotline) to address critical issues related to stigma.

(b) implementation sustainability. This would be sought through (i) ensuring the PCU is located within the NAP institutional structure in a manner that will ensure sustainability of project capacity and experience after Project completion; (ii) focusing on low cost, effective-preventive interventions which will reduce the future burden of HIV/AIDS on the health system; (iii) capacity building and training for NAP, NAC and PACs at the national, regional and parish levels; and (iv) involving key Ministries, NGOs and private sector in HIV/AIDS activities and strengthening their implementation capacity as needed.

(c) financial sustainability. As shown in the financial analysis, the project would have reasonable financial sustainability, given the minimal recurrent cost as well as the potential fiscal benefit from the reduced burden of HIV/AIDS.

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

<table>
<thead>
<tr>
<th>Risk From Outputs to Objective</th>
<th>Risk Rating</th>
<th>Risk Mitigation Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decline in leadership's commitment to HIV/AIDS control</td>
<td>M</td>
<td>Encourage leadership outside Government: involve of NGOs, civil society, PLWHA in planning and delivery of project services; work with Ministry of Finance and PIOJ to find alternative mechanisms to maintain leadership; strengthen capacity of NAC to operate as Working Group of NPC.</td>
</tr>
<tr>
<td>Declining commitment to multisectoral approach and to involvement of NGOs and CBOs, etc. in the context of a PCU located within the MOH</td>
<td>M</td>
<td>Assist line ministries to develop work plans for HIV/AIDS prevention; build capacity among NGOs, CBO, etc; monitor involvement of NGOs, CBOs, private sector and feed lessons learned back into project.</td>
</tr>
<tr>
<td>Pressure to shift focus in strategy, resulting in imbalance between prevention and treatment/care/support</td>
<td>H</td>
<td>Balance of interventions to keep being guided by the following considerations: (a) public finance principles; (b) cost-effectiveness; (c) recurrent cost implications; and (d) equity implications.</td>
</tr>
</tbody>
</table>
Stigma and discrimination against HIV/AIDS and high-risk groups cannot be overcome

Reinforce existing legal and regulatory framework to protect human rights for PLWHA, high-risk groups. Involve representatives of PLWHA, high-risk in policy making and project implementation; education campaign to sensitize opinion leaders; monitor beneficiary satisfaction.

From Components to Outputs

Inadequate institutional and managerial capacity at all levels.

Project emphasis on capacity building at local level and among potential implementation agencies; periodic performance review and troubleshooting; involve NAC in identifying needs and satisfying them.

PCU capacity/ slow disbursements

Close supervision of PCU business processes; training.

Overall Risk Rating

S

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

3. Possible Controversial Aspects:

Given the strong stigma against HIV/AIDS and homosexuality in Jamaica, one possible controversial aspect of the project is the targeting of interventions to MSM as one of the high-risk groups. The project would address this issue by striving to reduce stigma though campaigns to sensitize opinion leaders as well as communities. The fact that the project does not choose to finance ARV can potentially be another controversial topic. In its communication strategies, the project is going to make clear that it would help the government develop a strategy for ARV, train health care providers in ARV use, and strengthen the health infrastructure (including laboratories and pharmacies) required for successful and sustainable implementation of ARV in the future.

G. Main Loan Conditions

1. Effectiveness Condition

- Adoption of an Operations Manual satisfactory to the WB (including a financial management section, and an environmental section).
- The Participation Agreements and/or Participation Arrangements required for the implementation of the Annual Action Plan for the year 2002 have been entered into by the parties thereto.
- Appointment of auditors satisfactory to the WB.

2. Other [classify according to covenant types used in the Legal Agreements.]

- 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.

☐ 2. The procurement documents for the first year's activities are complete and ready for the start of project implementation.
☐ 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

☒ 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.

[Signatures]

Girindre K. Beeharry
Team Leader

Charles C. Griffin
Sector Manager

Orsalia Kalantzopoulos
Country Manager/Director
## Annex 1: Project Design Summary


<table>
<thead>
<tr>
<th>Hierarchy of Objectives</th>
<th>Key Performance Indicators</th>
<th>Data Collection Strategy</th>
<th>Critical Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Purpose:</td>
<td>End-of-Program Indicators:</td>
<td>Program reports:</td>
<td>(from Purpose to Goal)</td>
</tr>
</tbody>
</table>

- 32 -
<table>
<thead>
<tr>
<th>Hierarchy of Objectives</th>
<th>Key Performance Indicators</th>
<th>Data Collection Strategy</th>
<th>Critical Assumptions</th>
</tr>
</thead>
</table>
| Project Development Objective: Mitigate the socio-economic impact of HIV/AIDS by (a) reducing HIV transmission, especially by targeting high-risk groups and reducing stigma (b) improving treatment, care and support for PLWHA (c) strengthening the national capacity to respond to the epidemic. | **Outcome / Impact Indicators:**  
- **Impact Indicators**  
  By end of project:  
  - HIV prevalence rate among (a) ANC attendees aged 15-24 stays below 2%;  
  - (b) young army recruits stays below 1%;  
  - (c) CSWs drops from 20% to 10% in Montego Bay and from 10% to 7% in Kingston  
- Syphilis sero-prevalence rate among ANC attendees aged 15-24 reduced by 25%  
- **Outcome Indicators**  
  - Delay median age at first sex by at least 0.5 years (baseline: 13 years for boys and 14 years for girls);  
  - 25% reduction in the proportion of men/women aged 15-49 who report having sex with a non-regular sexual partner in the last 12 months  
  - The proportion of men/women aged 15-49 who report using a condom in their last sexual intercourse with their non-regular partner increases from 76% to 85% for men and 66% to 75% for women;  
  - The proportion of CSWs who report condom use with last client increases from 75% to 85%;  
  - Proportion of ANC attendees receiving MTCT interventions increases from 15% to 80%;  
  - 90% coverage of primary - **Project reports:**  
  - (a) and (b) through routine HIV/AIDS surveillance reports of the epidemiological unit of MOH;  
  - (c) through surveys conducted at mid-term and project completion (M&E Unit)  
- Routine STI sentinel surveillance reports  
- KAPB at mid-term and project completion  
- Idem  
- Idem  
- BSS at mid-term and project completion  
- MOH/M&E Unit report  
- HIV/AIDS Specialty | - The drivers of the epidemic continue to be those identified and addressed by the project  
- There is effective uptake of the new services provided and actual behavioral changes towards safer sex practices. |
prophylaxis of Pneumocystis carinii pneumonia (PCP) for AIDS patients in HIV/AIDS specialty centers - 70% of formal sector employers targeted with HIV/AIDS workplace interventions implemented, project completion and policies of Labor (or trade union) - Joint MOH/Ministry of Labor (or trade union) HIV/AIDS workplace survey conducted at baseline, project midterm and completion
<table>
<thead>
<tr>
<th>Hierarchy of Objectives</th>
<th>Key Performance Indicators</th>
<th>Data Collection Strategy</th>
<th>Critical Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output from each Component:</td>
<td>Output Indicators:</td>
<td>Project reports:</td>
<td>(from Outputs to Objective)</td>
</tr>
<tr>
<td>Component 1</td>
<td>- At least one outreach program with adequate peer educators for each high-risk group (CSW, MSM, out-of-school youths, prisoners, etc.) in every high-transmission area; - Number of peer educators trained for each high-risk group; with improvement in their pre and post-test HIV/AIDS knowledge - 100% ANC clinics offer VCT and MTCT interventions.</td>
<td>- M&amp;ē Unit report</td>
<td>- Government's commitment and leadership to HIV/AIDS control maintained.</td>
</tr>
<tr>
<td>- Improved knowledge about HIV/AIDS and access to preventive measures leading to behavioral change. Component 2</td>
<td></td>
<td>- Idem</td>
<td>- Stigma and discrimination against PLWHA and high-risk groups can be overcome</td>
</tr>
<tr>
<td>- National guidelines for OI management developed - 70% of health care facilities at different levels of the public sector deliver appropriate palliative care and OI management according to national guidelines; - Turnaround time for HIV test reduced to no more than 7 working days if negative and 14 working days if positive. - Improved availability of hospice and halfway care services based on regional case rates, with at least one hospice &amp; and one half-way care facility for PLWHA per region - 100% of health districts have at least one trained counselor providing specialized HIV/AIDS counseling</td>
<td>- MOH/M&amp;ē Unit report</td>
<td>- Balance between prevention and treatment/care/support maintained</td>
<td>- Continued commitment to the multisectoral approach and NGOs’ involvement.</td>
</tr>
<tr>
<td>Component 3</td>
<td></td>
<td>- Facility assessment survey</td>
<td></td>
</tr>
<tr>
<td>- Strengthened national surveillance for HIV/AIDS</td>
<td></td>
<td>- NPHL report</td>
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<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>- M&amp;ē Unit report</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- M&amp;ē Unit report</td>
<td></td>
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<td></td>
<td></td>
<td>- M&amp;ē Unit report</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Epidemiological Unit report</td>
<td></td>
</tr>
<tr>
<td>capacity to respond to the HIV/AIDS epidemic</td>
<td>in place by mid-project;</td>
<td></td>
<td></td>
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<tr>
<td>---------------------------------------------</td>
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<td></td>
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</tr>
<tr>
<td>- Completion of computerization and networking for (a) NPHL (b) National Blood Transfusion Services (c) Surveillance system, (d) drug inventory for HCL and four regional treatment center pharmacies by the end of project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- National AIDS Committee and each line Ministry report twice a year to (a) the National Planning Council and (b) Human Resource Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Over the life of the project, increases in annual project funding disbursed for activities executed by the RHA and parishes;</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- 10% of project funding disbursed for activities executed by NGOs, CBOs, and FBOs.</td>
<td></td>
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</tbody>
</table>

<p>| - MIS report |
| - NAC report |
| - M&amp;E Unit report |
| - Idem |</p>
<table>
<thead>
<tr>
<th>Hierarchy of Objectives</th>
<th>Key Performance Indicators</th>
<th>Data Collection Strategy</th>
<th>Critical Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Components / Sub-components: Component 1 Preventive programs targeted to high-risk groups and the general population</td>
<td>Inputs: (budget for each component)&lt;br&gt;Program targeting high-risk groups (mapping high-risk groups, peer education, outreach programs, drop-in centers, VCT, STI management, condoms, training): US$ 441,784&lt;br&gt;Broad-based program for young people as well as the general community (mass media and community campaigns, peer education, training, condoms, IEC, workplace interventions, VCT, STI management, MTCC): US$ 5,256,530&lt;br&gt;Stigma reduction (sensitizing opinion leaders, promotion events, regulatory framework development): US$ 146,741&lt;br&gt;Blood Safety (training, IEC, equipment): US$ 107,305&lt;br&gt;Demand-driven Sub-projects: US$ 1,912,000&lt;br&gt;Subtotal: US$ 7,864,360 or 48% of the loan</td>
<td>Project reports: - Project Disbursement Reports</td>
<td>(from Components to Outputs)&lt;br&gt;Institutional and managerial capacity adequate at all levels</td>
</tr>
<tr>
<td>Component 2 Basic health care, treatment, and support</td>
<td>Basic treatment and care (drugs to treat OIs, civil works, AIDS management, development of care and treatment guidelines, training): US$ 1,545,938&lt;br&gt;Home-based and community care (development of support</td>
<td>- Project Disbursements Reports</td>
<td>PCU capacity/Slow disbursements</td>
</tr>
<tr>
<td>Component 3</td>
<td>Strengthening of national capacity to respond to the epidemic</td>
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<td>-------------------------------------------------------------</td>
<td></td>
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<tr>
<td></td>
<td>Network, hospices and halfway care services, training: US$ 101,530</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Improved diagnostic capacity of service delivery</em> (Laboratory equipment, information system, rapid tests, training, civil works): US$ 2,116,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal:</strong> US$ 3,763,468 or 23% of the loan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Information for better decision-making:</em> (strengthening surveillance and M&amp;E, operational research, evaluation studies): US$ 1,491,846</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Enhancing planning, management and implementation capacity of NAP, NAC, PACs</em> (training, workshops, funding NAC): US$ 646,050</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Project Management</em> (offices, equipment, salaries): US$ 2,734,964</td>
<td></td>
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<tr>
<td></td>
<td><strong>Subtotal:</strong> US$ 4,872,860 or 30% of the loan</td>
<td></td>
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<tr>
<td></td>
<td><strong>TOTAL:</strong> 16,500,600</td>
<td></td>
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</tr>
</tbody>
</table>

- Project Disbursement Reports
Annex 2: Detailed Project Description


Interventions financed by the project are grouped into three components. The expected outputs and outcomes from each component are detailed in the Project Logframe (Annex 1).

By Component:

Project Component 1 - US$7.82 million

Preventive programs targeted at high-risk groups and the general population (47% of loan amount). This is the most important component, as it will, to a large extent, determine the impact of the project on the progress of the epidemic. Under this component, the project would support the scaling up of six areas of intervention:

- Behavior Change Communication (BCC);
- Voluntary Counseling and Testing (VCT);
- Condom social marketing programs;
- Syndromic management of STI;
- Prevention of mother-to-child transmission of HIV; and
- Strengthening the capacity of the blood bank to provide safe blood.

These interventions would be prioritized to target high-risk groups (CSW and their clients, MSM, STI clinic attendees, prisoners), young people as well as communities in high-transmission areas through a decentralized, multisectoral approach. PLWHA, who are in a unique position to help reduce the spread of the epidemic, have also been identified as a priority group. The project will also support a broad-based prevention program for the general population.

1.1. Program targeting high-risk groups (CSWs, MSM, STI clinic attendees, prison inmates, street children). This sub-component would involve two type of activities:

1. Identifying high-risk groups: a rapid baseline mapping exercise would be conducted in order to (i) identify high-risk groups (especially CSW, MSM, street children), their estimated number, their geographical distribution and meeting places, as well as the existence of informal networks among them; (ii) determine the needs for HIV/AIDS interventions among high-risk groups; and (iii) develop strategies to increase their demand for HIV/AIDS services as well as to effectively deliver such services to them.

2. Providing BCC, VCT, condoms, and STI management to high-risk groups: These interventions would be provided through outreach programs targeting leisure locations, meeting areas of CSWs, gay bars, shelter homes for street children, etc. Members of high-risk groups would be recruited and trained to become peer educators to provide tailored BCC messages for each group (e.g., condom negotiation skills with clients for CSWs) as well as condoms. Incentives would be developed and provided to peer educators to encourage their efforts and increase the coverage of peer education and condom distribution. Drop-in centers with VCT and STI services for CSWs would be strengthened and expanded. Given the strong stigma against homosexuality in Jamaica, media such as internet chat rooms and hotlines could be used for peer education for MSM. Outreach programs would also support the formation of informal support networks among high-risk groups such as CSWs and MSM. Interventions for prison inmates, a risk group especially difficult to reach in Jamaica, would include the development and implementation of an HIV/AIDS component in the Comprehensive Prison Health Policy. In collaboration with the Department of Correctional Services and NGOs, the project would provide inmates with peer education, VCT, and STI
management.

Targeted intervention programs would be carried out in close partnership with NGOs, CBOs and representatives of high-risk groups. Such a partnership has been shown to be effective in reaching out to marginalized high-risk groups in many countries.

1.2. **Broad-based program for young people as well as the general community.** This would involve (i) mass media awareness campaigns; (ii) training of peer educators to provide peer education with gender-sensitive messages; (iii) training of teachers and counselors; (iv) condom promotion and increased condom availability in traditional and nontraditional outlets; (v) targeted community campaigns in high prevalence areas (KSA, Hanover, St. Catherine, St. Ann, St. James, Westmoreland); (vi) establishing one VCT site per district; (vii) strengthening STI syndromic management at the primary care levels in STI syndromic management, through the production and dissemination of guidelines, training of health care workers, improved diagnostic capacity and provision of STI drugs; (viii) expanding VCT services at ANC clinics with the goal of screening up to 80% of ANC attendees for HIV; (ix) providing HIV-positive pregnant women with MTCT interventions, and (x) implementing workplace intervention programs in key employers in the formal sector.

1.3. **Addressing stigma.** This component also supports interventions aimed at reducing stigma and discrimination against PLWHA as well as high-risk groups such as MSM. Such interventions include: (i) identifying strategic partners (the media, sports and pop culture celebrities, religious, business and community leaders), mobilizing their support for the cause and offering them training through HIV/AIDS sensitization workshops; (ii) coordinating such partners in BCC campaigns with a message against stigma and discrimination; (iii) assisting the government to develop a framework for the protection of human rights of PLWHA, their families and other vulnerable groups (for PLWHA, this concerns confidentiality, employment, housing, access to quality and compassionate care, mandatory testing for employment insurance and immigration); (iv) organizing workshops on such legislation/regulations for lawyers and legal aid counselors; (v) creating/strengthening appropriate instruments (such as setting up complaint hotlines/bureaus) to allow people facing stigma and discrimination to voice their grievances and seek help; (vi) ensuring access to post-exposure prophylaxis drugs for health workers; and (vii) implementing patient satisfaction polls upon exit at HIV/AIDS/STI clinics. PLWHA will be systematically involved (especially through JN+) in mass media and community campaigns to put a human face to the disease and sensitize the general population.

1.4. **Strengthening the capacity of the blood transfusion services to provide safe blood.** This sub-component would involve: (i) reviewing and amending the national blood transfusion policy; (ii) disseminating the revised national blood transfusion policy; (iii) strengthening voluntary blood donors recruitment program; and (iv) computerizing the blood bank’s data management system.

1.5 **Demand-driven subprojects.** This sub-component is critical in addressing one of the key issues raised by the NSP: the lack of capacity outside the Ministry of Health and the failure of previous plans to utilize the expertise of NGOs and other agencies in the design and implementation of HIV/AIDS interventions. Under the project, NGOs and other eligible implementing agencies will be able to formulate subprojects (both prevention and care/support) and submit them for funding. Implementing agencies would benefit from the technical assistance they might require to formulate these subprojects. The eligibility criteria for funding are discussed in Annex 11 and are detailed in the Project Operations Manual. The fiduciary infrastructure (reporting, auditing) to ensure accountability is discussed in the project Financial Management Capacity Assessment.
Project Component 2 - US$3.71 million

Basic health care, treatment, and support for PLWHA (23% of loan amount). Under this component, the project would aim to increase the capacity to provide basic treatment, care and support for PLWHA in Jamaica.

2.1. Providing non-stigmatizing, basic care and treatment (including the management of common OIs and TB) for PLWHA. This includes (i) developing and disseminating technical guidelines and operational procedures for HIV/AIDS care and treatment (including the management of common OIs and TB); (ii) training health workers in HIV/AIDS care and treatment, disseminating best-practice guidelines (iii) defining a package of basic drugs for OI management; (iv) increasing the availability of and access to such basic OI drugs at hospitals and STI clinics; and (viii) establishing a HIV/AIDS/STI specialty center in each region with the capacity to provide comprehensive ambulatory care for PLWHA.

2.2. Supporting home and community care for PLWHA. This includes (i) developing home care guidelines; (ii) training community health workers in care and support for PLWHA; (ii) providing home care and support through visits (by community health workers, NGOs, CBOs, churches) to PLWHA and their families; (iii) establishing a network of social support for PLWHA, which is integrated in the existing social safety net; (iv) strengthening and expanding the hospice network; and (v) establishing half-way care facilities.

NGOs and CBOs would be key in providing home and community care and support for PLWHA in Jamaica. The project would enable NGOs and CBOs to deliver HIV/AIDS care and support through technical and financial assistance as well as capacity-building.

2.3. Improving the diagnostic capacity, efficiency and quality of service delivery sites and staff. This would involve: (i) providing selected diagnostic equipment (hardware and software) and test kits for HIV/AIDS and STIs; (ii) ensuring adequate staffs and skills in HIV/AIDS diagnosis; (iii) developing operational guidelines for laboratory logistics; (iv) improving safe handling of medical material and waste through the provision of incinerators, autoclaves, waste disposal supplies as well as training of health workers in proper management of medical waste; and (v) upgrading the national training center, and training of providers for HIV/STI management.

Project Component 3 - US$ 4.82 million

Strengthening of national capacity for an intensified response to the epidemic (29% of loan amount).

This component would aim to improve the technical, managerial and implementation capacity of the key players within and outside the health sector, in the government as well as in civil society who are involved in the fight against HIV/AIDS. Activities would include:

3.1. Enhancing the planning, management and implementation capacity of agencies involved in response.

1. Enhancing the capacity at the regional and parish levels. Specific activities would include (i) supporting the development of the HIV/AIDS work programs of the regional health authorities; (ii) developing efficient mechanisms to channel funding for HIV/AIDS prevention and care to the regions and parishes; and (iii) ensuring adequate staff and skills.

2. Strengthening the role of the NAC. The capacity, role and visibility of the NAC would be enhanced by:
(i) raising its profile through the appointment of a new Chairman (approved by the Prime Minister); (ii) elevating its status to Working Group for the National Planning Council on HIV/AIDS; and (iii) improving its staffing including the appointment of a director.

3. **Fostering a multisectoral response to HIV/AIDS.** This component aims to foster collaborations among the MOH, other line ministries, private and voluntary sectors as well as the civil society in the fight against HIV/AIDS. This would involve (i) coordinating and providing technical assistance for the formulation of HIV/AIDS work plans in relevant line ministries; (ii) developing funding mechanisms for greater involvement of NGOs/CBOs/line ministries; (iii) capacity building for NGOs and CBOs through training and workshops (iv) strengthening the NAC and PACs' capacity to coordinate, mobilize and support implementing agencies in the fight against HIV/AIDS.

3.2. **Improving the information base for better decision-making.** The project will pursue a four-fold strategy:

1. **Expanding and improving the nationwide HIV/AIDS/STI surveillance system.** Activities would include (i) developing an HIV/AIDS/STI surveillance plan; (ii) increasing the number of sentinel sites and the sample size; (iii) designing and implementing second-generation surveillance for HIV/AIDS; especially among high-risk groups; and (iv) designing and implementing STI surveillance.

2. **Setting up an integrated data management system for National Public Health Laboratories, hospital laboratories, STI and ANC clinics, sentinel surveillance sites, and hospital pharmacies.** This would involve (i) providing hardware and software for integration of data management system; (ii) training of staff; and (iii) providing program support and system maintenance.

3. **Increasing Jamaica’s capacity for operational research and dissemination of best practices in priority areas of the National Strategic Plan for HIV/AIDS.** This would involve (i) supporting local research; (ii) strengthening the linkages between Jamaican researchers and multilateral and international institutions; (iii) establishing a user-friendly and accessible information warehouse in HIV/AIDS.

4. **Building capacity for monitoring and evaluation of program activities.** Activities would include (i) creating an M&E unit with clearly-defined terms of reference and work plan (ii) providing training in M&E for relevant staff; (iii) establishing a reporting and tracking system; (iv) conducting baseline, mid-term and project completion M&E activities. Periodic external evaluation of selected interventions (for example, cost-effectiveness studies) and of the project as a whole will be carried out to provide lessons in project design and implementation. Annex 17 is a preliminary evaluation of the adequacy of the current data collection system to the M&E needs of the NAP and of the proposed project. The Annual Action Plan for the first year of the project (a condition for project effectiveness) will include the activities required to ensure that baseline information is available or generated for the project indicators.

3.3 **Project Management.** This subcomponent covers all costs related to project management, including staff, PCU set-up costs, technical assistance and training.
## Annex 3: Estimated Project Costs


<table>
<thead>
<tr>
<th>Project Cost By Component</th>
<th>Local US $million</th>
<th>Foreign US $million</th>
<th>Total US $million</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preventive programs targeted at high-risk groups and general population</td>
<td>2.70</td>
<td>4.85</td>
<td>7.55</td>
</tr>
<tr>
<td>2. Basic care, treatment and support</td>
<td>2.50</td>
<td>1.03</td>
<td>3.53</td>
</tr>
<tr>
<td>3. Strengthening of national capacity to respond to the epidemic</td>
<td>3.63</td>
<td>1.02</td>
<td>4.65</td>
</tr>
<tr>
<td><strong>Total Baseline Cost</strong></td>
<td><strong>8.83</strong></td>
<td><strong>6.90</strong></td>
<td><strong>15.73</strong></td>
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<tr>
<td>Physical Contingencies</td>
<td>0.09</td>
<td>0.06</td>
<td>0.15</td>
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<tr>
<td>Price Contingencies</td>
<td>0.28</td>
<td>0.19</td>
<td>0.47</td>
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<tr>
<td><strong>Total Project Costs</strong></td>
<td><strong>9.20</strong></td>
<td><strong>7.15</strong></td>
<td><strong>16.35</strong></td>
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<tr>
<td>Front-end fee</td>
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<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Total Financing Required</strong></td>
<td><strong>9.20</strong></td>
<td><strong>7.30</strong></td>
<td><strong>16.50</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Project Cost By Category</th>
<th>Local US $million</th>
<th>Foreign US $million</th>
<th>Total US $million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods and Equipment</td>
<td>0.45</td>
<td>6.67</td>
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<tr>
<td>Civil Works</td>
<td>0.61</td>
<td>0.00</td>
<td>0.61</td>
</tr>
<tr>
<td>Services; Technical Assistance</td>
<td>4.79</td>
<td>0.42</td>
<td>5.21</td>
</tr>
<tr>
<td>Services; Training</td>
<td>1.13</td>
<td>0.06</td>
<td>1.19</td>
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<tr>
<td>Project Management and Operating Cost</td>
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<td>0.00</td>
<td>0.40</td>
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<tr>
<td>Subproject</td>
<td>1.82</td>
<td>0.00</td>
<td>1.82</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td><strong>9.20</strong></td>
<td><strong>7.15</strong></td>
<td><strong>16.35</strong></td>
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<tr>
<td>Front-end fee</td>
<td></td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Total Financing Required</strong></td>
<td><strong>9.20</strong></td>
<td><strong>7.30</strong></td>
<td><strong>16.50</strong></td>
</tr>
</tbody>
</table>

The World Bank:GOJ 90%-10% (net of taxes) cost-sharing arrangement proposed for this Project is consistent with the 3-year rolling-average of 60%-40% at the present level of the Bank's Jamaican portfolio, in accordance with Operational Policy (OP) 6:30 and Bank Procedure (BP) 6:30.

Identifiable taxes and duties are 0 (US$m) and the total project cost, net of taxes, is 16.5 (US$m). Therefore, the project cost sharing ratio is 90.91% of total project cost net of taxes.
Annex 4: Cost Benefit Analysis Summary


Summary of Benefits and Costs:

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs</th>
<th>Benefits</th>
<th>Net Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1,500,000</td>
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</tr>
<tr>
<td>2003</td>
<td>2,500,000</td>
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<tr>
<td>2004</td>
<td>3,000,000</td>
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<tr>
<td>2005</td>
<td>2,500,000</td>
<td>(2,500,000)</td>
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<tr>
<td>2006</td>
<td>1,500,000</td>
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<tr>
<td>2007</td>
<td>1,000,000</td>
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<tr>
<td>2008</td>
<td>1,000,000</td>
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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
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<td>17,697,220</td>
</tr>
<tr>
<td>2011</td>
<td>1,000,000</td>
<td>9,442,096</td>
<td>8,442,096</td>
</tr>
</tbody>
</table>

IRR = 57.6%

Main Assumptions:

- The prevalence rate at the beginning of the period is 1.5% of adult population or about 25,000;
- Population is expected to grow at 1% per annum during the project period and is unaffected by the AIDS epidemic;
- AIDS deaths are modeled as the linear extrapolation of the trend established the previous nine years;
- Incidence stays at 50 per 100,000 in the no-project scenario;
- In the with-project scenario incidence is expected to decrease sufficiently to maintain prevalence at the initial 1.5% of adult population;
- On average, averting HIV infection ‘buys’ an individual thirty-three more years of productive life (calculated as pension age (60) minus average age at onset of AIDS(27));
- Average annual productivity is valued at per capita spending in 2000 (US$1,766);
- A patient who gets infected will live for 10 years after infection with adequate care;
- The average annual cost of care per patient is US$1,059 (calculated as 14 hospital days at $61 per day + $200 in palliative care and prevention/treatment of OIs);
- The consumption benefits of a lower HIV prevalence are not factored in;
- Benefits are supposed to accrue five years after the infection has been averted to reflect the fact that it takes time for an HIV infection to translate into hospital costs and productivity losses;
- The analysis is conducted from the point of view of ‘society’ and mixes public and private costs and benefits.
Sensitivity analysis / Switching values of critical items:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Base case</th>
<th>Limit value of parameter that yields an IRR above 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence rate</td>
<td>Reduction sufficient to ensure that adult prevalence stays at 1.50% over project lifetime</td>
<td>A 5% reduction in incidence (versus without-project scenario), corresponding to an increase in prevalence to an end-of-project prevalence of 1.56%</td>
</tr>
<tr>
<td>Annual cost of care for patient</td>
<td>$1,059</td>
<td>$0 (i.e., the productivity losses averted are sufficient justification on their own)</td>
</tr>
<tr>
<td>Average number of years patient needs care</td>
<td>10 years</td>
<td>0 years (idem)</td>
</tr>
<tr>
<td>Average number of years lived if infection is avoided</td>
<td>33 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Productivity valuation</td>
<td>$1,766</td>
<td>$155</td>
</tr>
</tbody>
</table>

In addition, if the stream of costs stays the same but the stream of benefits is delayed by one year (i.e., benefits start accruing only in 2008), then the rate of return drops to 44.9%, and if the stream of benefits is delayed by four years (i.e., benefits start accruing in year 2011) the IRR drops to 26.6%. The returns to society are therefore robust to very significant negative biases.

Note that this analysis is largely tangential to public financing decisions. It shows that society as a whole benefits from the investment but does not demonstrate that public financing is warranted. The significant negative externalities associated with HIV/AIDS, not computed here, constitute a more appropriate justification for public financing of HIV/AIDS prevention.
### Annex 5: Financial Summary


**Years Ending June 30**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Financing Required</th>
<th>Project Costs</th>
<th>Total Project Costs</th>
<th>Front-end fee</th>
<th>Total Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>0.4</td>
<td>4.9</td>
<td>4.7</td>
<td>3.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Year 2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Year 3</td>
<td>0.6</td>
<td>5.0</td>
<td>4.8</td>
<td>3.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Year 4</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Year 5</td>
<td>0.6</td>
<td>5.0</td>
<td>4.8</td>
<td>3.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Year 6</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Year 7</td>
<td>0.6</td>
<td>5.0</td>
<td>4.8</td>
<td>3.7</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**Financing**

<table>
<thead>
<tr>
<th>Source</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBRD/IDA</td>
<td>0.8</td>
<td>4.7</td>
<td>4.5</td>
<td>3.1</td>
<td>1.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Government</td>
<td>0.0</td>
<td>0.3</td>
<td>0.3</td>
<td>0.6</td>
<td>0.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Central</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Provincial</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Co-financiers</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>User Fees/Beneficiaries</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Others</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Project Financing</td>
<td>0.8</td>
<td>5.0</td>
<td>4.8</td>
<td>3.7</td>
<td>2.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Main assumptions:**
Annex 6: Procurement and Disbursement Arrangements


Procurement

A. Procurement Guidelines


2. Jamaica’s own tendering laws will be used for procurement of activities under Government budgetary funds. They establish four general processes, related to the expected size of the contract as follows:

   a) Contracts under JMS$ 250,000 (US$ 6,000): purchase made on the basis of price quotations from a minimum of three local suppliers registered with the National Contract Commission (NCC). Contract award approved by the Ministry Permanent Secretary;

   b) Contracts of between JMS$ 250,000-JMS$ 1,000,000 (US$6,000-US$25,000): price quotations from a minimum of five local suppliers invited. Contract award approved by the Ministry Permanent Secretary;

   c) Contracts between JMS$ 1,000,000-JMS$ 4,000,000 (US$25,000-US$100,000): tendering open to all suppliers that are register with the NCC. Invitations to tender posted nationally. Contract award approved by the Ministry Permanent Secretary;

   d) Contracts between JMS$ 4,000,000-JMS$ 15,000,000 (US$100,000-US$350,000): tendering open to all suppliers that are registered with the NCC, following a process similar to the World Bank concept of “National Competitive Bidding”. Contract award approved by the Ministry Permanent Secretary following NCC recommendation.

B. Procurement Responsibility

The PCU will be responsible for all procurement with the exception of drugs, which will be procured by the Health Corporation Limited (HCL), a government owned limited liability company established by MOH with responsibility for the procurement, warehousing and distribution of medical supplies for the public sector. Within the PCU, a Procurement Officer will implement all procurement activities, including procurement planning, procurement processes, contract award and contract information system.

The HCL, under a procurement services agreement to be negotiated and signed with the PCU, will: i) carry out the procurement processes, ii) receive procured drugs and verify compliance with technical specifications, and iii) storage and distribute procured drugs. Established in 1995, the HCL has in place adequate practice procedures supported by appropriate information systems. The drug purchasing process is designed to ensure the availability of drugs for a yearly contracted period (April-March). Bids are invited during the months of September to October each year. The bidding process provides a competitive
mechanism to purchase the required quality specifications and acceptable past performance at the lower bidders. The system allows HCL to purchase pharmaceuticals not only from well-established brand-name companies, but also from proven and reliable generic companies around the world. On tender for 2000-2001 period, 59 bid proposals for pharmaceuticals were received and contracts were awarded to 27 suppliers. The HCL’s computerized supply system provides for the purchasing, inventory control and distribution records.

C. Procurement methods

Procurement Planning. A procurement plan including procurement packaging for the entire four-year project implementation period and a timetable of procurement actions for the first year has been prepared. The procurement plan for each year will be submitted by the PCU to the WB for approval, not later than December of the prior year (Jamaica 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. Anti-retroviral PEP drugs which are covered by patent rights up to an aggregate amount not to exceed $0.06 million equivalent would be procured under direct contract method.

The methods to be used for the procurement described below, and the estimated amounts for each method, are summarized in Tables A and A1. The threshold contract values for the use of each method are fixed in Table B.

Procurement of Works. Works procured under this Project will include the building and/or refurbishing of STI centers, 13 small clinics and a training center in Kingston. The project would also finance works associated with the upgrading of incinerator facilities and waste management. Total cost is expected to reach US$0.61 million and various lots would be procured under NCB.

Procurement of Goods. Goods procured under this Project will include general medicines, condoms, testing kits, laboratory equipment, educational and campaign publications, hardware and communication equipment, and office furniture and equipment for an aggregate amount of US$7.12 million. Out of this amount, US$1.1 million corresponds to drugs which will be procured by HCL, and US$6.03 million to goods and equipment to be procured by the PCU. To the extent possible, contracts for goods will be grouped into bidding packages of more than $150,000 equivalent and procured following International Competitive Bidding (ICB) procedures, using Bank-issued Standard Bidding Documents (SBDs). Contracts with estimated values less than US$150,000 per contract may be procured using National Competitive Bidding (NCB) procedures up to an aggregate amount of US$0.18 million, 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$25,000 per contract may be procured using shopping (National /International) procedures, up to an aggregate amount of US$1.33 million 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. Contracts for goods up to an aggregate amount of US$1.11 million, which can only be purchased from a limited number of suppliers, regardless of the cost thereof, would be procured under contracts awarded following Limited International Bidding (LIB) procedures. Anti-retroviral PEP drugs will be procured under Direct Contracting, unless otherwise agreed by the Bank through written notice to Jamaica.
Selection of Consultants. Consulting services will be contracted under this Program in the following areas of expertise: HIV/AIDS Education and Prevention Campaigns, Studies, Technical Assistance and Training, Monitoring and Impact Evaluation, Development and maintenance of information and statistical Databases, and participation in National and International Congresses and Workshops. These services are estimated to cost **US$5.21 million** equivalent and would be procured following Bank’s Guidelines for the Selection of Consultants.

**Firms.** Firms would be selected using Bank Standard Request for Proposals for QCBS. Small and simple contracts estimated to cost of less than US$100,000 for an aggregate amount of **US$1.00 million** equivalent would be selected using Consultants Qualifications (CQ). Firms for audit services would be selected using Least-Cost Selection (audit: see below under Operating Costs).

**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$2.61 million**.

**Training.** Services for training other than consultant’s services will include transportation costs and per-diem of trainees and rental of training facilities and equipment up to an aggregate amount of **US$1.19 million**.

**HIV/AIDS Subprojects.** Subprojects up to an aggregate amount of **US$1.82 million** would consist of demand driven programs proposed and implemented by NGOs or community organizations. Criteria for the selection of subprojects are included in the Operational Manual to be approved by the Bank. Selection criteria include the technical elements discussed in Annex 11 of the PAD, as well as the management and financial capability of the proponent NGO.

**Operating Costs.** Operating costs estimated at **US$0.40 million** include auditing services, office rent and utilities, and office supplies. Firms to provide auditing services will be selected using Least Cost Selection procedure.

**D. Review of Procurement Actions**

**Review of Procurement Plans.** A procurement plan, satisfactory to the Bank, for the first year of project implementation will be prepared as a condition for issuing invitations to bid. Annual procurement plans satisfactory to the Bank for completing the project will be prepared by the end of each calendar year for implementation the following year. This plan will include: a 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 Coordination Unit and are summarized in Table B.

E. Project Coordination Unit Procurement Capacity Assessment

A procurement capacity assessment of the PCU was carried out and approved by the RPA on 12/11/2001. The procurement risk is assessed as average. The major risks identified and actions recommended to address them are:

a) **Project Coordination Unit (PCU):** The PCU is a new unit that will be responsible for coordination of the Project and the implementation of procurement actions. The lack of procurement experience in this unit and the need for strong coordination with several Ministry's units. To address this issue, a procurement officer with some procurement experience has been recently appointed and a procurement seminar of one whole week is recommended to all staff working in procurement in the project (PCU and HCL)

b) **Health Corporation Limited:** This agency will carry out the procurement of drugs for the whole program. It has satisfactory experience in procurement of drugs; however, it does not have much exposure to Bank procurement. To address this, HCL would participate in the one-week training recommended in (a) above.

c) **Filing:** The PCU 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. Initial Bank 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.

d) **Bidding Documents.** The MOH lacks standard bidding documents for the procurement of works, goods, and consultant services. The PCU will use the following standard bidding documents: (i) Bank-issued Standard Documents for the Procurement of Health Sector Goods for the procurement of condoms under ICB, including a pre-qualification process; (ii) Bank-issued Standard Documents (SBD) for the procurement of drugs under LIB; (iii) Bank's SBD for the procurement of works and goods under NCB; and (iv) Bank's Standard Documents for the Selection of Consultants.

F. 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. 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 ten contracts signed.

In addition, the PCU will contract independent procurement reviews (IPRs) by consultants under terms of reference satisfactory to the Bank.

**Procurement methods (Table A)**
Table A: Project Costs by Procurement Arrangements

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>0.61 (0.51)</th>
<th>0.61 (0.51)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Works</td>
<td>0.61 (0.51)</td>
<td>0.61 (0.51)</td>
</tr>
<tr>
<td>2. Goods and Equipment</td>
<td>4.50 (3.92)</td>
<td>1.11 (1.11)</td>
</tr>
<tr>
<td>3. Technical Assistance</td>
<td>5.05 (5.05)</td>
<td>0.16 (0.00)</td>
</tr>
<tr>
<td>4. Training</td>
<td>1.19 (1.19)</td>
<td>0.00 (0.00)</td>
</tr>
<tr>
<td>5. Project Management - Operating Costs, including audit</td>
<td>0.40 (0.20)</td>
<td>0.00 (0.00)</td>
</tr>
<tr>
<td>6. HIV/AIDS Subprojects</td>
<td>1.82 (1.55)</td>
<td>1.82 (1.55)</td>
</tr>
<tr>
<td>7. Front-End Fee</td>
<td>0.15 (0.15)</td>
<td>0.15 (0.15)</td>
</tr>
<tr>
<td>Total</td>
<td>4.50 (3.92)</td>
<td>1.11 (1.11)</td>
</tr>
</tbody>
</table>

Footnotes to Table A:

1. Figures in parentheses are amounts to be financed by the Bank loan. All costs include contingencies.
2. Other includes: $1.33 million for goods to be procured through shopping and $60,000 for anti-retroviral PEP drugs to be procured through direct contracting; $5.21 million for consulting services to be procured per methods in Table A-1; $1.19 million for training services to finance transportation costs and per-diem of trainees and rental of training facilities and equipment; $0.40 million to finance operating costs, including auditing services, and office utilities, rental and supplies; $1.82 million for procurement under sub-projects according to methods defined in the Operational Manual; and $0.15 million to cover Front-End Fee.
3. Not Bank Financed (procurement to be financed by Government exclusively)
Table A1: Consultant Selection Arrangements

(US$ million equivalent)

<table>
<thead>
<tr>
<th>Consultant Selection Method</th>
<th>QCBS</th>
<th>QBS</th>
<th>SFB</th>
<th>LCS</th>
<th>CQ</th>
<th>Other</th>
<th>N.B.F.</th>
<th>Total Cost (including contingencies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Firms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.44 (1.44)</td>
</tr>
<tr>
<td></td>
<td>1.44</td>
<td>1.00</td>
<td>0.16</td>
<td>2.60</td>
<td></td>
<td></td>
<td></td>
<td>5.21 (5.05)</td>
</tr>
<tr>
<td>B. Individuals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.61</td>
<td></td>
<td>2.61 (2.61)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.61</td>
<td>2.61 (2.61)</td>
</tr>
<tr>
<td>Total</td>
<td>1.44</td>
<td>1.00</td>
<td></td>
<td></td>
<td>0.16</td>
<td></td>
<td>2.61</td>
<td>5.21 (5.05)</td>
</tr>
</tbody>
</table>

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)
N.B.F. = Not Bank-financed.
Figures in parenthesis are the amounts to be financed by the Bank loan.
Audit Services included under Operating Costs will be procured using Least-Cost Selection method.

Prior review thresholds (Table B)
Table B: Thresholds for Procurement Methods and Prior Review

(US$ 000's)

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Contract Value (Threshold)</th>
<th>Procurement Method</th>
<th>Contracts Subject to Prior Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Works</td>
<td>Any</td>
<td>NCB</td>
<td>All: 610</td>
</tr>
<tr>
<td>2. Goods and Equipment</td>
<td>&gt;150</td>
<td>ICB</td>
<td>All: 4,420</td>
</tr>
<tr>
<td></td>
<td>Regardless of cost</td>
<td>LIB</td>
<td>All: 1,110</td>
</tr>
<tr>
<td></td>
<td>25 to150</td>
<td>NCB</td>
<td>All: 180</td>
</tr>
<tr>
<td></td>
<td>&lt;25</td>
<td>Shopping</td>
<td>First two: 50</td>
</tr>
<tr>
<td>3. Consultant Services and Training</td>
<td>Firms &gt;100</td>
<td>QCBS</td>
<td>&gt;75: 1,340</td>
</tr>
<tr>
<td></td>
<td>&lt;100</td>
<td>CQ, LCS</td>
<td>&gt;75: 340</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>Individual</td>
<td>&gt;25: (TORs, Contract, CV):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consultants</td>
<td>1,500</td>
</tr>
</tbody>
</table>

Total value of contracts subject to prior review: **9,650**

Overall Procurement Risk Assessment:

- High
- Average **x**
- Low

Frequency of procurement supervision missions proposed: One every six months during first year of execution; and one every 12 months subsequently
### Disbursement

**Allocation of loan proceeds (Table C)**

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Amount in US$ million</th>
<th>Financing Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Works</td>
<td>0.49</td>
<td>100% of foreign expenditures and 85% of local expenditures</td>
</tr>
<tr>
<td>(2) Goods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Condoms</td>
<td>2.04</td>
<td>85% until disbursements under this Category have reached an amount of $1.80 million and 50% thereafter</td>
</tr>
<tr>
<td>(b) Drugs (OI, STI, PEP)</td>
<td>0.61</td>
<td>90% until disbursements under this Category have reached an amount of $0.60 million, and 50% thereafter</td>
</tr>
<tr>
<td>(c) Hospital waste management equipment</td>
<td>0.48</td>
<td>100% of foreign expenditures and 85% of local expenditures</td>
</tr>
<tr>
<td>(d) Equipment (except as covered under Categories (2) (c), (4) and (6))</td>
<td>2.93</td>
<td>100% of foreign expenditures and 85% of local expenditures</td>
</tr>
<tr>
<td>(3) Consultants’ services</td>
<td>4.61</td>
<td>100%</td>
</tr>
<tr>
<td>(4) Training</td>
<td>1.14</td>
<td>100%</td>
</tr>
<tr>
<td>(5) Grants for HIV/AIDS Subprojects</td>
<td>1.27</td>
<td>85% of amounts disbursed</td>
</tr>
<tr>
<td>(6) Operating Costs (including audits)</td>
<td>0.20</td>
<td>50%</td>
</tr>
<tr>
<td>(7) Refunding of Project Preparation Advance</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>(8) Fee</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>(9) Unallocated</td>
<td>0.57</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>15.00</td>
<td></td>
</tr>
</tbody>
</table>
Financial Management and Disbursement Arrangements

**Implementing Entities**

The Ministry of Health (MOH) will be the implementing entity and a Project Coordination Unit (PCU) has been established within the Ministry to coordinate all activities under this program. Regarding the financial management arrangements, the PCU has appointed a qualified accountant (who is currently working in the Auditor General’s office, and has substantial private sector experience) to oversee all aspects of financial management for the project. This staff member will also liaise with the MOH’s Finance and Accounts Division for matters of consolidation of budgetary and accounting information, and for monitoring the flow of funds to the project.

**Funds Flow**

Procedures for flow of funds from the loan and the required counterpart contribution will be implemented with due regard to safeguarding project's resources and ensuring timely execution of payments.

Loan funds will be disbursed to one Special Account (US dollar account for Bank funds), and this account will be utilized for the purposes of the implementation arrangements agreed. As is the current practice in Jamaica, the Special Account will be opened by the Ministry of Finance and Planning (MOFP) and maintained in a commercial bank. In accordance with the recommendations made in the 2001 CFAA, and in effort to streamline the national account management, this special account, for accounting purposes only, will appear as a sub-account within the government's general consolidated fund.

The PCU is currently in the process of preparing its budget request for the fiscal year beginning April 1, 2002. The Government of Jamaica will allocate its counterpart funding into a local operational project account, based on appropriation warrants submitted by the MOH. Given the simple level of financing under the project, 30-day’s of estimated expenditures will be transferred from the Special Account to the project account, from which checks or transfers (in local currency) will be issued to the providers of goods and services. The project will reconcile (monthly) both the project account as well as the Special Account, and submit the documentation regarding both accounts, to the Bank under each withdrawal application and Statement of Expenditure (SOE).

Additionally, the PCU will execute all payment orders on behalf of the line-Ministries and Regional Health Authorities (RHAs) which, under the project, will receive financial support for specifically approved activities in their annual work plans. The line-Ministries and RHAs will carryout the procurement for services and/or goods in accordance with Bank procurement guidelines, and payment orders for eligible expenditures will be forwarded to the PCU for financing and execution. This arrangement will not require additional accounts for Bank funds, as all financial transactions will flow directly from the PCU's Special Account. Furthermore, this will allow all expenditures under the project to appear as expenditures for the MOH and in addition will appear in the MOH's financial statements. This arrangement will also fall under the normal scope of work for the annual external audit.

The PCU will also disburse funds to Community Based Organizations (CBOs) and NGOs to implement the demand-driven subcomponent component of the project. Separate bank accounts will be established for each entity that qualifies to receive funding, in order to ensure the transparency of the flow of funds to the
communities. The accounting and reporting for these funds will be in adherence to the MOH's Legal Framework and Policy Framework documents. The PCU will ensure that monthly account reconciliations and financial reports are received and approved before continuing to disburse to the CBOs/NGOs.

**Payments and operation of bank accounts.** Before payments for acquisition of goods and services can be processed, a purchase order or contract must exist. On the basis of these documents, appropriation warrants are issued, provided that there’s available budget. Bank account reconciliations will be prepared on a monthly basis by the Accountant and will be available within 8 days after the end of the month.

**Accounting Policies and Procedures**

Administrative procedures will be in place to ensure that financial transactions are made with consideration to safeguarding project assets and ensuring proper entry in the accounting/monitoring systems. The project already has a working draft of the operations manual, which is in the process of being finalized. The project accounting system will have the capacity to record assets, liabilities and financial transactions of the project, and produce financial statements useful to project management and meeting IBRD’s fiduciary requirements. The accounting system is designed to be able to capture all financial information and allocate among both categories (the Bank’s legal/disbursement categories and GOJ Budget categories) and project activity. Furthermore, the accounting system will be linked to the project management system, which manages all work flows and procurement processes, so that any change in one system will be reflected with revised/updated monthly/quarterly/annual actual funding needs and future budget estimates.

The project will also submit detailed monthly statements of expenditures to the office of Finance and Accounts and to the MOFP’s Economic Management Division in order that the project’s expenditures are recorded on the Ministry’s accounts as well as supervised by the unit responsible for management of external financing.

**Segregation of duties.** The PCU has a clear organizational structure and procedures established according to the norms under the Financial Administration and Audit Act (FAA). Said procedures support an adequate segregation of procurement, budgeting, payment and recording activities, and this was observed within the MOH during the appraisal mission. All payment orders/requests are reviewed and signed by the PCU executive director and by the office of the Director of Finance and Accounts (in the MOH) before being processed by the Accountant General’s office in the MOFP. All detailed procedures are contained in the operational manual for the project.

**Budgeting.** The loan agreement and project cost tables will be the main inputs for the project budgets and counterpart (GOJ) funding estimates under the Capital B Budget. The MOH will follow prescribed governmental budgetary heads, and in adherence to the FAA Act, the PCU/MOH will prepare at least:

- The annual work plan classified by work lines, with goals/objectives, physical and financial programs;
- the budget proposal specifying the sources of funds, the summarized and detailed expenditures by major areas, accounts, and specific objects;
- after approval by Parliament: the budget execution program broken down monthly, and the quarterly document of budgetary commitment authorization;
- the monthly report on budgetary execution to be issued within 5 days after the end of each month; and
- the quarterly report on evaluation of budgetary execution to be issued within 10 days after the end of the quarter.
Bank account reconciliations will be prepared on a monthly basis by the Accountant and will be available within 8 days after the end of the month.

Accounting. Accounting and budgetary records will be maintained in accordance with the GOJ's procedures, under the FAA Act and which are satisfactory to the Bank. However, for Bank monitoring purposes the PCU will report on detailed information at the project level, specifically the deposits to the special account and the expenditures classified by activity/subcomponent and disbursement category.

It was deemed by both the PCU and the Bank, that the MOH’s accounting system would not permit a detailed level of cost allocation and financial recording – particularly for the activities under Component 3. Therefore, the project has implemented a basic system that will be able to account for all financial transactions by source of financing and by either general category or project activity detail. Regarding the reports produced by the accounting system, please refer to the Report and Monitoring section below.

Safeguard over assets. Assets acquired by the project will be in the custody of the respective institutional departments of the MOH. For the proposed project, the PCU will keep detailed subsidiary records of plant and equipment acquired. The amounts in this register will be reconciled monthly against the respective accounting balances. At least one annual physical inspection will be undertaken by MOH staff, preferably with the participation of staff from the external auditors and the Auditor General’s Department.

Internal Audit

The PCU will be subject to review by the MOH’s Internal Audit Department and the country’s Auditor General’s Department (AGD). Although no internal auditor will be assigned specifically to the project, the external auditors will perform visits on a quarterly basis (see next section), and the AGD, under its sampling/material criteria, will audit the project at least once before completion and its required governmental audit.

External Audit

Audit arrangements. Annual project financial statements will be audited in accordance with International Standards on Auditing, by an independent firm and in accordance with terms of reference (TORs) both acceptable to the Bank. In addition to the audit opinions on project financial statements, Special Accounts and Statements of Expenditures (SOEs), special purpose reports will be required to deal specifically with: (i) observance of the procurement and consultants services provisions of the Loan Agreement; and (ii) special purpose audit carried out on a half-yearly basis to review the demand-driven subcomponent and activities carried out at the Parish level by Community-Based Organizations (CBO) and NGOs. The memorandum on internal controls (“management letter”) will be issued after semi-annually (the second report will be included in the annual report of the audited financial statements).

The contracted independent firm will carry out the special purpose audits, mentioned above, and reports will be issued on a half-yearly basis, and the findings will be also incorporated as an annex for the year-end audit. These audits are designed to ensure that the activities carried out at the community level are meeting the desired level of developmental impact. Also, these audits will employ a sampling criteria and will attempt to report findings on a more frequent basis to ensure continuous monitoring and assistance.

The PCU will appoint the auditors (for both the annual and special audits) by loan effectiveness, with an annual contract to be renewed during the first quarter of each subsequent year. For cost benefit purposes, it was agreed that the first audit of the project would cover funds managed up to December 31, 2002.
(including the funds managed under the PPF). The second audit would cover funds managed from January 1, 2003 through March 31, 2004. Subsequent audits would then follow the provisions of Section 4.01 (b) (ii) of the Loan Agreement (April 1st through March 31st of each year).

The PCU will prepare, if needed, an action plan to address any issues and recommendations contained in the audit reports. The action plan and follow-up activities would be communicated to the Bank.

The table below summarizes audit requirements:

<table>
<thead>
<tr>
<th>Audit Report</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project financial statements</td>
<td>4 months after the end of the reporting period (coincides with GOJ requirements)</td>
</tr>
<tr>
<td>SOE</td>
<td>same as above</td>
</tr>
<tr>
<td>Special Accounts</td>
<td>same as above</td>
</tr>
<tr>
<td>Special purpose</td>
<td>1 month after the end of each semi-annual period; annex in final year-end report</td>
</tr>
</tbody>
</table>

**Reporting and Monitoring**

Financial statements and reports will be prepared in formats satisfying the Government and IBRD's monitoring and fiduciary purposes.

On a monthly basis (at least), the PCU will prepare the project’s Statement of Expenditure, a matrix classifying receipts by financing source and expenditures by financing source and disbursement category. The expenditures would be compared to the projected figures per the quarterly budgets prepared as indicated in the Budgeting section above. This report is submitted to the MOH’s Finance and Accounts Division, the MOFP’s Financial Management Division.

In addition to Statement of Expenditure, the monthly financial reports will include the Special Account Reconciliation Statements. Any difference in the amount of expenditures reported under the two financial statements must be clearly explained. The project financial statements, along with the physical progress and procurement sections of the Financial Monitoring Reports (FMRs), will be submitted to the Bank on a quarterly basis, and will be submitted no later than forty-five (45) days after the end of each quarter. The contents of the FMRs have been discussed, and the formats of the reports will be finalized by loan negotiations.

For Bank purposes, the annual financial statements will include, as well, the schedule of Statements of Expenditure (SOEs) presented during the year in support of Withdrawal Applications.
### Annex 7: Project Processing Schedule


<table>
<thead>
<tr>
<th>Project Schedule</th>
<th>Planned</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time taken to prepare the project (months)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>First Bank mission (identification)</td>
<td>02/19/2001</td>
<td>02/19/2001</td>
</tr>
<tr>
<td>Appraisal mission departure</td>
<td>12/03/2001</td>
<td>10/21/2001</td>
</tr>
<tr>
<td>Negotiations</td>
<td>12/17/2001</td>
<td>12/18/2001</td>
</tr>
<tr>
<td>Planned Date of Effectiveness</td>
<td>02/28/2002</td>
<td></td>
</tr>
</tbody>
</table>

**Prepared by:**

The Ministry of Health of Jamaica with the assistance of consultants funded by a Japanese PHRD Grant and Bank Staff

- Peter Figueroa Chief Medical Officer, MOH
- Deanna Ashley Principal Medical Officer, MOH
- Yitades Gebre National AIDS Program Director, MOH
- Elizabeth Ward Epidemiologist, MOH
- Alfred Brathwaite STI Advisor
- Verity Rushton National AIDS Committee Coordinator
- Lovette Byfield BCIC Programme Specialist
- Sandra McKenzie GTZ Programme Manager
- Valerie Marshall National Programme Administrator
- Dunstan Bryan Procurement Officer
- Leila Palmer Director of External Cooperation Management, PIOJ
- Faith Hamer Manager Health Desk, PIOJ
- Pauline Morrison PIOJ
- Nigel Logan Principal Finance Officer
- Lemual Brady Director Environmental Health, MOH
- Stanley Lalta Health Economist, MOH
- Winston Thomas Environmental Health Advisor, PAHO
- Christian Hurtado Consultant (PHRD)
- Kevin Fenton Consultant (PHRD)
- Dorothy Blake Consultant (PHRD)
- Sharon Arscott-Mills Consultant (PHRD)
- Bernard Branson Epidemiologist, CDC
- Peter Carr Management Consultant (PHRD)
Preparation assistance:

PHRD TF026633 and PPF P-390-0-JM

Bank staff who worked on the project included:

<table>
<thead>
<tr>
<th>Name</th>
<th>Speciality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girindre Beeharry</td>
<td>Task Team Leader/Economist</td>
</tr>
<tr>
<td>Kate Kuper</td>
<td>Implementation Specialist</td>
</tr>
<tr>
<td>Son Nam Nguyen</td>
<td>Public Health Specialist</td>
</tr>
<tr>
<td>Elizabeth Lule</td>
<td>Population and Reproductive Health Adviser</td>
</tr>
<tr>
<td>Marcelo Osorio</td>
<td>Procurement Specialist</td>
</tr>
<tr>
<td>Rajeev Swami</td>
<td>Financial Management Officer</td>
</tr>
<tr>
<td>Eduardo Brito</td>
<td>Senior Counsel LEGLA</td>
</tr>
<tr>
<td>Edward Daoud</td>
<td>Sr. Financial Management Specialist</td>
</tr>
<tr>
<td>Sarah Menezes</td>
<td>Operational Support</td>
</tr>
<tr>
<td>Ayodeji Akala</td>
<td>NGO Specialist</td>
</tr>
</tbody>
</table>

Additional support was provided by Paloma Cuchi (UNAIDS/PAHO); Anabela Abreu (World Bank) and Irene Jillson (Policy Research, Inc.) were the project peer reviewers.
Annex 8: Documents in the Project File*


### A. Project Implementation Plan
- Draft Annual Action Plan for first year of project implementation
- Draft Procurement Plan
- Draft Operational Manual

### B. Bank Staff Assessments

### C. Other

### D. Bibliography


*Including electronic files
Annex 9: Statement of Loans and Credits


07-Nov-2001

<table>
<thead>
<tr>
<th>Project ID</th>
<th>FY</th>
<th>Purpose</th>
<th>IBRD</th>
<th>IDA</th>
<th>Cancel</th>
<th>Undisp</th>
<th>Orig</th>
<th>Frm Rev'd</th>
</tr>
</thead>
<tbody>
<tr>
<td>P067774</td>
<td>2002</td>
<td>JM- Social Safety Net Project</td>
<td>40.00</td>
<td>0.00</td>
<td>0.00</td>
<td>40.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>P007490</td>
<td>1997</td>
<td>JM PUB SCTR MODERNIZ</td>
<td>28.40</td>
<td>0.00</td>
<td>0.00</td>
<td>15.96</td>
<td>14.70</td>
<td>11.59</td>
</tr>
<tr>
<td>P038700</td>
<td>1997</td>
<td>JM STUDENT LOAN</td>
<td>28.50</td>
<td>0.00</td>
<td>0.00</td>
<td>0.37</td>
<td>0.37</td>
<td>0.00</td>
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</table>

Total: 96.90 0.00 0.00 56.33 15.07 11.59

JAMAICA
STATEMENT OF IFC's
Held and Disbursed Portfolio
MAY-2001
In Millions US Dollars

<table>
<thead>
<tr>
<th>FY Approval</th>
<th>Company</th>
<th>Loan</th>
<th>Equity</th>
<th>Quasi</th>
<th>Partic</th>
<th>Loan</th>
<th>Equity</th>
<th>Quasi</th>
<th>Partic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Jam Energy Prtnr</td>
<td>15.11</td>
<td>0.00</td>
<td>0.00</td>
<td>33.79</td>
<td>15.11</td>
<td>0.00</td>
<td>0.00</td>
<td>33.79</td>
</tr>
<tr>
<td>2001</td>
<td>Mossel</td>
<td>18.00</td>
<td>0.00</td>
<td>12.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>12.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Total Portfolio: 33.11 0.00 12.00 33.79 15.11 0.00 12.00 33.79

Approvals Pending Commitment

<table>
<thead>
<tr>
<th>FY Approval</th>
<th>Company</th>
<th>Loan</th>
<th>Equity</th>
<th>Quasi</th>
<th>Partic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Pending Commitment: 0.00 0.00 0.00 0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex 10: Country at a Glance


POVERTY and SOCIAL

2000
Population, mid-year (millions) 2.6 2.516 2.046
GNI per capita (Atlas method, US$) 2,630 3,680 1,140
GNI (Atlas method, US$ billions) 6.9 1,895 2,237
Average annual growth, 1994-00
Population (%) 0.8 1.6 1.0
Labor force (%) 1.4 2.3 1.3

Most recent estimate (latest year available, 1994-00)

Poverty (% of population below national poverty line) 56 75 42
Life expectancy at birth (years) 75 70 69
Infant mortality (per 1,000 live births) 20 30 32
Child malnutrition (% of children under 5) 4 9 11
Access to an improved water source (% of population) 71 85 80
Illiteracy (% of population age 15+) 13 12 15
Gross primary enrollment (% of school-age population) 100 113 114
Male 100 116 116
Female 99 114

KEY ECONOMIC RATIOS and LONG-TERM TRENDS

GDP (US$ billions) 2.7 4.2 7.2 7.4
Gross domestic investment/GDP 15.9 27.9 25.6 26.8
Exports of goods and services/GDP 51.1 52.0 42.0 44.1
Gross domestic savings/GDP 15.9 23.8 15.6 15.8
Gross national savings/GDP 10.6 18.2 20.0 20.8
Current account balance/GDP -5.2 -7.7 -3.4 -4.8
Interest payments/GDP 4.6 4.8 4.5 2.5
GDP total debt service/exports 19.6 28.4 20.2 16.5
Present value of debt/GDP -5.2 -7.7 -3.4 -4.8
Present value of debt/exports 4.6 4.8 4.5 2.5
Exports of goods and services 72.1 110.3 54.6 57.8
GDP growth of exports and imports (%)
Agriculture 0.6 1.9 1.3 -11.2
Industry 38.3 43.2 30.8 31.3
Manufacturing 16.6 19.5 13.5 13.4
Services 53.5 50.4 62.2 62.2
Private consumption 63.8 62.2 67.5 67.9
Public government consumption 20.2 14.0 16.9 16.2
Imports of goods and services 51.0 56.1 52.0 55.1
GDP growth of investment and GDP (%)
Agriculture 0.6 1.9 1.3 -11.2
Industry 2.4 -0.5 -0.3 0.2
Manufacturing 2.7 -1.9 -0.9 0.7
Services 1.8 1.1 -0.8 3.0
Private consumption 4.3 -1.1 -2.6 2.7
Public government consumption 6.2 2.7 -2.6 -2.1
GDP growth of investment and GDP (%)
Agriculture -0.1 4.4 0.1 0.4
Exports of goods and services 9.2 1.1 -2.4 4.3

Note: 2000 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.
Jamaica

PRICES and GOVERNMENT FINANCE

Domestic prices

<table>
<thead>
<tr>
<th>Year</th>
<th>1980</th>
<th>1990</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation (%)</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Implicit GDP deflator</td>
<td>7.7</td>
<td>10.6</td>
<td>10.6</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Government finance (% of GDP, includes current grants)

<table>
<thead>
<tr>
<th>Year</th>
<th>1980</th>
<th>1990</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current revenue</td>
<td>27.0</td>
<td>22.0</td>
<td>8.4</td>
<td>6.9</td>
</tr>
<tr>
<td>Current budget balance</td>
<td>5.9</td>
<td>-2.4</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Overall surplus/deficit</td>
<td>-15.5</td>
<td>2.6</td>
<td>-4.3</td>
<td>-1.0</td>
</tr>
</tbody>
</table>

TRADE

(US$ millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>1980</th>
<th>1990</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total exports (fob)</td>
<td>1,157</td>
<td>1,247</td>
<td>1,293</td>
<td>1,247</td>
</tr>
<tr>
<td>Alumina</td>
<td>537</td>
<td>627</td>
<td>744</td>
<td>744</td>
</tr>
<tr>
<td>Bauxite</td>
<td>198</td>
<td>103</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Manufactures</td>
<td>57</td>
<td>42</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>Total imports (cif)</td>
<td>2,960</td>
<td>3,192</td>
<td>3,192</td>
<td>3,192</td>
</tr>
<tr>
<td>Food</td>
<td>126</td>
<td>274</td>
<td>293</td>
<td>293</td>
</tr>
<tr>
<td>Fuel and energy</td>
<td>416</td>
<td>585</td>
<td>585</td>
<td>585</td>
</tr>
<tr>
<td>Capital goods</td>
<td>470</td>
<td>509</td>
<td>509</td>
<td>509</td>
</tr>
<tr>
<td>Export price index (1995=100)</td>
<td>118</td>
<td>118</td>
<td>118</td>
<td>118</td>
</tr>
<tr>
<td>Import price index (1995=100)</td>
<td>117</td>
<td>117</td>
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<tr>
<td>Terms of trade (1995=100)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

BALANCE OF PAYMENTS

(US$ millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>1980</th>
<th>1990</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports of goods and services</td>
<td>2,247</td>
<td>3,367</td>
<td>3,250</td>
<td>3,250</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>3,340</td>
<td>3,928</td>
<td>3,973</td>
<td>3,973</td>
</tr>
<tr>
<td>Resource balance</td>
<td>-103</td>
<td>-627</td>
<td>-723</td>
<td>-723</td>
</tr>
<tr>
<td>Net income</td>
<td>-229</td>
<td>-333</td>
<td>-410</td>
<td>-410</td>
</tr>
<tr>
<td>Net current transfers</td>
<td>91</td>
<td>649</td>
<td>780</td>
<td>780</td>
</tr>
<tr>
<td>Current account balance</td>
<td>-138</td>
<td>-328</td>
<td>-353</td>
<td>-353</td>
</tr>
<tr>
<td>Financing items (net)</td>
<td>58</td>
<td>123</td>
<td>643</td>
<td>643</td>
</tr>
<tr>
<td>Changes in net reserves</td>
<td>79</td>
<td>122</td>
<td>-290</td>
<td>-290</td>
</tr>
</tbody>
</table>

Memo:

Reserves including gold (US$ millions) | 801 | 1,082 |
Conversion rate (DEC, local/US$) | 1.8 | 7.2 |

EXTERNAL DEBT and RESOURCE FLOWS

(US$ millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>1980</th>
<th>1990</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total debt outstanding and disbursed</td>
<td>4,674</td>
<td>3,913</td>
<td>4,279</td>
<td>4,279</td>
</tr>
<tr>
<td>IBRD</td>
<td>176</td>
<td>393</td>
<td>415</td>
<td>415</td>
</tr>
<tr>
<td>IDA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total debt service</td>
<td>662</td>
<td>732</td>
<td>577</td>
<td>577</td>
</tr>
<tr>
<td>IBRD</td>
<td>18</td>
<td>99</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>IDA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Composition of net resource flows</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official grants</td>
<td>20</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Official creditors</td>
<td>-19</td>
<td>-99</td>
<td>442</td>
<td>442</td>
</tr>
<tr>
<td>Private creditors</td>
<td>-28</td>
<td>-524</td>
<td>-524</td>
<td>-524</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Portfolio equity</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>World Bank program</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Commitments</td>
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<td>0</td>
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<td>75</td>
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<td>Disbursements</td>
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<td>64</td>
<td>98</td>
<td>98</td>
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<tr>
<td>Principal repayments</td>
<td>6</td>
<td>51</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>Net flows</td>
<td>50</td>
<td>-11</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Interest payments</td>
<td>13</td>
<td>24</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Net transfers</td>
<td>37</td>
<td>-35</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>
Additional Annex 11: Institutional and Implementation Arrangements


A. Institutional Arrangements

The institutional structures that are involved in the National Response to HIV/AIDS include:

1. Cabinet
2. National Planning Council
3. National AIDS Committee
4. Parish AIDS Committees and AIDS Action Committee
5. Ministry of Health and other line ministries (Education, Tourism, Labor, Security and Justice, Local Government, Youth and Sports, Planning and Finance)
6. PCU

1. Cabinet
   (i) Role
   Line Ministers will ensure that an HIV/AIDS Strategy and Work plan is developed and implemented in each Ministry. This is particularly critical for the five key ministries – labor, education, health, tourism, security and justice.

   (ii) Resource Implications
   Each Ministry will appoint an HIV/AIDS Focal Point for the Ministry and ensure the allocation of resources to implement HIV/AIDS activities. The focal point will be the sector representative on the NAC and will be responsible for coordinating and sharing information on the sector strategy and ensuring integration and synergy with the National AIDS Program.

   (iii) Reporting
   Each Ministry will report to Cabinet through the Human Resource Council and NPC twice a year. Each Focal Point will report to the NAC as well as to its own Ministry on activities in the sector and participate in joint planning and review meetings to foster inter-sectoral coordination.

2. The National Planning Council (NPC)

   (i) Role
   The National Planning Council is a multisectoral body consisting of senior representatives from key ministries, the private sector, labor and trade unions, and professional groups, is responsible for advising the government in policy issues related to social and economic development in Jamaica. The Minister of Finance and Planning chairs its monthly meetings except in the months of July and January. The NPC will be responsible for raising the profile and importance of the Fight Against HIV/AIDS in the eyes of the general public as well as prepare policy recommendations to be sent to cabinet.

   (ii) Resource Implications
   The National AIDS Committee (NAC) will be elevated in profile and resources in order to act as the extraordinary working group/taskforce on HIV/AIDS to the NPC.
3. The National AIDS Committee (NAC)

(i) Role

The National AIDS Committee is the organization tasked with coordinating the multisectoral response to HIV/AIDS in Jamaica. It was established in 1988 as a nonprofit limited liability company and has been housed to date in the Ministry of Health, reporting de facto to the Minister of Health, with three staff financed through USAID. The expected expansion of the National Response to a larger scale with stronger multisectoral and community actions have resulted in recommendations for significantly strengthening the NAC to perform the following role:

- Act as the Working Group/taskforce of the NPC on all matters relating to HIV/AIDS, including convening and preparing for meetings of NPC dealing with HIV/AIDS
- Formulate policy and establish national response priorities for HIV/AIDS (for discussion by the NPC and decision-making by Cabinet)
- To take the lead in the process of consultation regarding HIV/AIDS across all sectors
- Provide advocacy and lobbying with all stakeholders to ensure that the response to HIV/AIDS in Jamaica is congruent with the national strategic plan/policies of Jamaica, (including the reduction of stigma associated with PLWHA).
- Coordinate and assist Parish AIDS Committees in their outreach to communities including the development of work programs, training and advisory services, and support for actions to build medium-term sustainability
- Provide advisory support and monitor the strategic HIV/AIDS plans of Government Ministries and other implementing agencies (including NGOs, CBOs, FBOs).
- To foster linkages among ministries, implementing agencies and international organizations to ensure knowledge sharing and implementation synergy between activities to combat HIV/AIDS.
- Act as a clearinghouse for information, including national and international updates
- To mobilize resources and monitor allocation and utilization

(ii) Resource Implications

The current NAC requires substantial strengthening in terms of its management team and the motivation and commitment of its board members and subcommittees. The strengthened NAC will have a Board of Directors to guide overall policy, an Executive Committee to carry out programs under the NAP, NAC subcommittees and a Management Team to carry out the day to day administration and coordination in support of the NAP’s work plan. In addition, the NAC has a general membership that will be convened at least on an annual basis. The NAC should be moved to an independent venue (e.g., within a private sector organization).

Board of Directors

A Chairman appointed by the Prime Minister heads the NAC. The Chairman of the NAC is well known in Jamaican society and prepared to champion the fight against HIV/AIDS. The Board will include representatives of:

- Government Ministries
- PLWHA
- Faith Based Organizations
- Nongovernmental Organizations
- Private Sector Organizations
- The NAC Director will be a nonvoting member of the Board.

The role of the board is to provide overall policy guidance and support the NAC in advocacy.
Executive Committee
The executive committee, responsible for policy execution, overall program development, technical oversight and monitoring the work of the NAC, is comprised of:

- The Chairman, Director and chairs of the subcommittees:
  - Policy and advocacy
  - Care and support
  - Education
  - Legal and ethical
  - Resource Mobilization

Representation from:
- PACs (4 regional groupings)
- Focal points of PLWHA, PSO, NGO
- UN Theme Group
- The NAP Director

Management Team
The Management Team will be the day to day administration of the NAC and contracting of consultants to carry out identified activities (e.g. capacity enhancement and training of PACs). The Team will consist of:

- NAC Director (position to be upgraded to management role)
- PAC Liaison Officer responsible for coordination and capacity enhancement for PACs
- Information and Subcommittee Officer (responsible for coordinating website development, PR, information materials, coordinating subcommittee activities)
- Assistant/secretary
- Office Manager with Accounting skills

The Director would be responsible for interfacing with the NPC, sector ministries and for management of the NAC (to be employed by one of the line ministries).

General Membership
All agencies involved in implementing HIV/AIDS activities can become members of the NAC in order to access information and participate in NAC activities. The NAC Executive Committee will convene a general meeting of members at least once a year to report on the implementation of the multisectoral NAP.

(iii) Reporting:
The NAC reports to the NPC and will present the NPC with annual workplans and reports. The individual members of the NAC will report to their respective authorities.

4. Parish AIDS Committees (PAC)
(i) Role
Parish AIDS Committees were established in each parish in order to coordinate a response to HIV/AIDS at a decentralized level. Many were established by health workers in the Parish and operate on a limited basis, while others have a number of non-health sector members and are actively raising funds in order to implement HIV/AIDS activities. The PACs have only recently been actively involved in a national coordination exercise through NAC. In the future, the role of the PACs includes:

- Work in the communities to generate awareness of the HIV/AIDS epidemic, the NAP, coordinate the parish multisectoral response, create ownership of the NAP at the parish level and strengthen the parish capacity to respond to the epidemic;
To increase awareness in order to prevent transmission of infection with a focus on young/vulnerable and other high risk groups and to mitigate the health and social impact of AIDS through community care

- Act as a resource and information center on HIV/AIDS;
- Build community partnerships and coordinate implementing agencies in the Parish in the fight against HIV/AIDS (CBOs, small NGOs, FBOs and other groups) and facilitate NGO networks;
- Provide technical assistance to implementing agencies in the Parish to develop proposals for HIV/AIDS activities, raise funds and implement these in the communities of the Parish;
- Monitor and assess the activities of these implementing agencies;
- Ensure linkages between national level and the parish, partly through regular reporting on the activities in the Parish to the NAC;
- Work with communities and PLWHA to address stigma and discrimination against PLWHA and affected families and protect their rights;
- Participate in the work of the subcommittees of the NAC where appropriate;
- Ensure membership of the PAC or linkages with all key partners in development in the Parish, in particular with the Parish Health Departments (PHD) and the Parish Development Committees (PDC).

(ii) Resource Implications
The Parish AIDS Committees will require institutional and training support in order to fulfill their primary role of generating awareness, activating community responses and coordinating with the NAP. The objective of the capacity building of PACs should be to build their skills to assist the implementing agencies in the Parish develop proposals, raise funds, manage project activities and monitor and evaluate these. The PACs will need some additional resources in the short term in order to undertake these activities. The USAID project will support and strengthen PACs through the provision of training.

The PACs will need to be registered as legal entities in order to receive project funding. The members of the PAC will, however, be all organizations in the parish interested in carrying out HIV/AIDS activities. Many PAC members are currently implementing activities themselves. These member organizations (not individuals due to Bank rules and sustainability requirements) will be able to apply for funding for demand-driven sub-projects. Support for PAC coordination activities will come from a separate capacity building budget line. All members of PACs will fulfill their roles as officers of the PAC as volunteers in their individual capacities to ensure sustainability.

(iii) Reporting:

The Chairs of four PACs (representing regions) will be members of the Executive Committee of the NAC and participate in quarterly meetings convened by the NAC. The PACs will report directly to the NAC. However, given their proximity to the target populations and the fact that they are constituted by implementing agencies and interested parties in the communities in the Parish, they are expected to be accountable to local communities and stakeholders.

5. Ministries

(i) Role
As required by Cabinet, each Ministry will incorporate HIV/AIDS in its sector policies, develop an HIV/AIDS strategy and operational work plan for its sector. It will work with partners in the sector to develop, implement and monitor these work plans. Each ministry will appoint a focal point responsible for coordinating, design, implementation and monitoring sector interventions.
As the executing agency, the Ministry of Health has a particularly important role in the program. It is responsible for technical implementation of identified program areas in prevention, care, and treatment. The PCU will also be housed within the Ministry and all project monies will be directed to all relevant structures and implementing agencies through the PCU. The Ministry would be represented on the board of the NAC, and would provide technical guidance to the NAC in the areas of its competence. The Ministry of Health would also be directly responsible for supporting the HIV/AIDS programs of the RHAs. MOH will provide technical support to other line ministries.

(ii) Resource Implications
Each Ministry must provide physical and financial resources to support the HIV/AIDS Focal Point. The Ministries will apply to the Project Coordination Unit for financial support with a matching contribution of 15% in cash or in kind. By the end of the project, Ministries are expected to finance the HIV/AIDS activities in their sector.

To develop the sector plans, the Project will finance strategic planning workshops to be held before project effectiveness. Two two-day workshops are envisaged—one for key ministries who generally have some activities under way and one for ministries that as yet have not considered the impact of HIV/AIDS in their sector. The workshops will use local facilitators (including an experienced international facilitator) and technical experts from the Ministry of Health will participate. Each sector will finalize its workplan during these workshops.

(ii) Reporting
Each Ministry will report progress to Cabinet through NPC and COHSAD twice a year.

6. Project Coordination Unit (PCU)

(i) Role
The PCU as an entity of the Government of Jamaica will be responsible for implementing the World Bank Project and based within the Ministry of Health in order to ensure its integration and sustainability with the NAP. It will be responsible for day to day management of the project, including procurement, contracting of implementation agencies, provision of budgetary support to ministries, technical support and quality control, project financial management, monitoring and evaluation. The PCU will also establish a selection committee to approve NGO/CBOs applications. As a priority, the PCU will work with other structures to ensure the smooth operation of the project in support of the NAP. PCU will coordinate closely with NAC through regular program reports and review meetings. The PCU will have the following key staff: (a) executive director; (b) component directors; (c) M&E specialist; (d) financial management specialist; and (e) procurement specialist.

(ii) Resource Implications
Detailed terms of reference have been prepared for the PCU. Once the project has closed, it is expected that some technical staff such as component directors of the project will be absorbed into the National AIDS Program unit of the Ministry of Health.

The Selection Committee for the demand-driven subprojects will consist of 1 representative of the NAC, 1-2 representatives from the PCU (component directors?) and 1-2 members of civil society (1 PWLHA).

The PCU will have an advisory committee consisting of researchers, academics, international experts on technical and international best practice aspects of HIV/AIDS.
(iii) Reporting:
The PCU will report to the NAP and to the Minister of Health through the CMO on a quarterly basis.

B. Implementation Arrangements

The objective of the project is to support the expansion of the NAP to all sectors and to reach out to the most decentralized level. This is to build awareness and inculcate responsible behavior to prevent HIV/AIDS and the provision of care and treatment for PLWHA at a community level.

The roles of Cabinet and the NPC are critical to ensuring the political and programmatic support for HIV/AIDS activities across all sectors of Jamaican society. The NAC and PACs are responsible for generating awareness and action on the ground and for coordinating activities across implementing agencies.

The implementing agencies themselves will range from line Ministry operational staff to NGOs, CBOs and FBOs at the community level. Given the difference in roles, scope and capacity, the different implementing agencies will need different implementation mechanisms to be put in place. Three kinds of implementation mechanisms will be established: (i) direct support to Ministries from project based on annual sector workplans submitted, (ii) subcontracts established with national civil society organizations or private health organizations to carry out particular activities and (iii) support innovative subprojects at Parish level by smaller civil society organizations on a demand-driven basis.

Table 2: Implementing Agencies and Mechanisms

<table>
<thead>
<tr>
<th>Implementing Agency</th>
<th>Workplan-based Budget Support</th>
<th>Subcontractors</th>
<th>Subprojects – demand-driven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Ministries</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>RHAs</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>NAC</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>PAC</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>National NGOs</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Small NGOs, CBOs, FBOs</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Private Sector</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Y/Yes-----N/No

2. Implementation Mechanisms

(i) Budget support to Line Ministries and RHAs
In order to implement sector plans, the project will need to provide some financial support to Line Ministries and RHAs. This will be provided by the PCU based on an approved annual work plan between the Ministry/RHA and the PCU. Ministries will be expected to provide quarterly financial and program reports and funds will be released according to specified indicators.

(ii) Subcontracting Arrangements
The PCU will identify a number of specific roles which NGOs, private health (or other) companies could undertake as subcontractors to the PCU. These may be solicited by the PCU but unsolicited proposals will
also be considered by the PCU where the amount exceeds that determined for applications demand-driven Sub-projects. These contracts will be allocated by the PCU according to World Bank Procurement rules (i.e. "As consultants") and will be monitored and evaluated by the PCU. Subcontractors will be expected to provide quarterly reports and funds will be released according to specified indicators.

(iii) Demand-driven Subprojects
An amount of project money (10%) will be set aside within the budget to provide small grants to implementing agencies on a demand-driven basis. Individual subprojects would be between $1,500 and $20,000. This support will encourage community based activities, particularly innovative initiatives – to be known as demand-driven “subprojects”. A Selection Committee (see PCU above) will meet on a regular basis to approve subproject applications. A Manual of Procedures to clarify timeframes for submissions, approvals, written responses for refused applications with recommendations for revisions will be developed. A number of mechanisms are contemplated to ensure that interested agencies and community groups possess the capacity to formulate proposals and to implement subprojects. For example, experienced NGOs and the PACs can be contracted to build capacity among a pool of applicants. Another option is to contract a lead national NGO with proven financial management, monitoring and community mobilization skills to promote community based initiatives and provide training and assist with subproject preparation. Alternatively, applicants can include a 'capacity-building' component in their funding request applications to the PCU so they can acquire the particular capabilities (training, human resource and financial management, monitoring and tracking systems) they lack. NGO networking will be promoted.

2. Eligibility
In order to ensure maximum outreach, increase potential for sustainability and support capacity building in civil society, there is a need to identify what constitutes eligible subcontractors and demand-driven subproject implementers. Illustrative thresholds and minimum eligibility criteria for financing under the Project include:

(i) Classification of eligible organizations for subcontracting or subproject funding:

<table>
<thead>
<tr>
<th>Private Sector Enterprises</th>
<th>Enterprises with at least 10 employees and in existence for at least 3 years, managing budget with annual turnover of more than US$ 30,000, with good financial management systems in place.</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Civil Society Organizations</td>
<td>National coverage (more than one parish), preferably with experience in HIV/AIDS or social development program implementation experience (minimum 2 years experience) and with annual budgets at least US$ 5,000, with good financial management systems in place.</td>
</tr>
<tr>
<td>Other civil society organizations</td>
<td>Preferably with demonstrated experience or interest in HIV/AIDS program or community development implementation, have legal status and have identified options to build management capacity.</td>
</tr>
</tbody>
</table>

(ii) Number of Contracts or Subprojects, thresholds and Counterpart Funding required from implementing agencies:

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of requests/contracts per organization during 5 year program</th>
<th>Maximum length of each project (months)</th>
<th>Maximum Amount ($'000)</th>
<th>Counterpart (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A National NGOs</td>
<td>2</td>
<td>36</td>
<td>150</td>
<td>10%</td>
</tr>
<tr>
<td>C CBOs/FBOs</td>
<td>3</td>
<td>24</td>
<td>30</td>
<td>5% (in kind)</td>
</tr>
<tr>
<td>D Private Sector</td>
<td>2</td>
<td>24</td>
<td>50</td>
<td>60%</td>
</tr>
<tr>
<td>E Line Ministries</td>
<td>3</td>
<td>12</td>
<td>N/A</td>
<td>30% increasing to 100% by end of project</td>
</tr>
</tbody>
</table>

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(iii) Eligibility Criteria for subcontractors and subproject implementers

Table 4: Eligibility Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>National</th>
<th>Community</th>
<th>Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program relevance</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Duration of the project</td>
<td>24 months</td>
<td>18 months</td>
<td>12 months</td>
</tr>
<tr>
<td>Bookkeeping/accounting</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Experience : HIV/AIDS or community development</td>
<td>2 + years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have managed a 1/3 of the funds requested</td>
<td></td>
<td>N/A</td>
<td>Have managed 100% of the funds requested</td>
</tr>
<tr>
<td>Not more than 20% spent on administrative costs</td>
<td>+</td>
<td>N/A</td>
<td>+</td>
</tr>
<tr>
<td>Needs identified by the communities the activity will serve</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Proposals must be consistent with the national strategic plan and address the needs of specific target groups identified through community participation. Applicants should have experience with or interest in HIV/AIDS and/or community development programs and ability to scale up interventions using lessons learned. Applicants will be encouraged to provide co-financing or cash or in kind contributions. Consultation and participatory processes must also be demonstrated in all proposals.
Figure B. Management of Funds

Ministry of Finance

Project Coordination Unit (MOH)

- MOH & other Line Ministries
  - Regional Health Authority
    - Other Regional Government Structures
      - Regional Health Authority
        - Other Regional Government Structures

- Subcontractors for Specific Activities including capacity building
  - NGOs, PACs, Private Health Sector

- Demand-driven subprojects
  - NGOs, CBOs, FBOs, Private Enterprises

Other Public Sector Parish Structures
The cost of implementing Jamaica’s National HIV/AIDS Strategy runs at about $25 million, of which $15 million from the proposed loan, over a 5-year period. The overarching objective is to maintain the HIV/AIDS prevalence rate among anti-natal clinic attendees (a proxy for the general population) below its current rate of 1.5% at the end of the project implementation period. Prevalence in year \( t \) is equal to prevalence in year \( t-1 \) + incidence in year \( t \) - AIDS deaths in year \( t \). The primary way in which the project helps meet the objective is by reducing incidence. The project, however, also contributes to increasing prevalence by increasing access to OI treatment. Maintaining the prevalence rate at its current level when the project primarily acts upon one (incidence) of the two parameters that determine prevalence is predicated upon the stability of the other parameter (annual AIDS mortality rate). It can be shown that the achievement of the desired objective is extremely elastic to changes in AIDS mortality: meeting the objective of maintaining a prevalence rate around 1.5% is much harder, at least initially, when there is a parallel improvement in AIDS mortality. For the sake of simplicity, the analysis below postulates no change in the annual AIDS mortality rates.

The analysis was framed to answer the following question: what is the rate of return associated with a reduction in incidence compatible with the program objective of maintaining prevalence below its current rate?

Two hypothetical scenarios of the evolution of HIV/AIDS prevalence and incidence were constructed. The first, without-project, scenario assumes that HIV incidence is stable at 50 per 100,000. This is likely to be an underestimation of the counterfactual trend since incidence is likely to increase rather than stay put without intervention. The second, with-project, scenario supposes a sufficient reduction of the HIV incidence rate to maintain the prevalence rate stable. The difference between these two scenarios then yields the number of HIV infections averted due to the project.

The following assumptions are made: (a) the prevalence rate at the beginning of the period is 1.5% of adult population or about 25,000; (b) population is expected to grow at 1% per annum during the project period and is unaffected by the AIDS epidemic; (c) AIDS deaths is modeled as the linear continuation of the trend established the previous nine years (regression over data for 1992-2000); and (d) incidence stays at 50 per 100,000. The table below summarizes the path of the epidemic given these assumptions.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Incidence</th>
<th>Prevalence</th>
<th>AIDS Deaths</th>
<th>Prevalence Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2,609,000</td>
<td>1,305</td>
<td>24,929</td>
<td>632</td>
<td>1.52%</td>
</tr>
<tr>
<td>2002</td>
<td>2,635,090</td>
<td>1,318</td>
<td>25,487</td>
<td>694</td>
<td>1.55%</td>
</tr>
<tr>
<td>2003</td>
<td>2,661,441</td>
<td>1,331</td>
<td>25,929</td>
<td>756</td>
<td>1.57%</td>
</tr>
<tr>
<td>2004</td>
<td>2,688,055</td>
<td>1,344</td>
<td>26,254</td>
<td>817</td>
<td>1.59%</td>
</tr>
<tr>
<td>2005</td>
<td>2,714,936</td>
<td>1,357</td>
<td>26,461</td>
<td>879</td>
<td>1.61%</td>
</tr>
<tr>
<td>2006</td>
<td>2,742,085</td>
<td>1,371</td>
<td>26,342</td>
<td>941</td>
<td>1.62%</td>
</tr>
</tbody>
</table>

In the with-project scenario incidence is expected to decrease sufficiently to maintain prevalence at the initial 1.5% of adult population. The project is not expected to substantially affect the number of deaths due to AIDS, at least during its lifetime. The with-project scenario is summarized in table 2.

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Table 2: With-Project Scenario

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Incidence</th>
<th>Prevalence</th>
<th>AIDS Deaths</th>
<th>Prevalence rate</th>
</tr>
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<tr>
<td>2001</td>
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<td>2,714,936</td>
<td>1,086</td>
<td>25,863</td>
<td>879</td>
<td>1.50%</td>
</tr>
<tr>
<td>2006</td>
<td>2,742,085</td>
<td>1,234</td>
<td>26,156</td>
<td>941</td>
<td>1.50%</td>
</tr>
</tbody>
</table>

From tables 1 and 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 using the following parameters: (a) on average, averting HIV infection 'buys' an individual thirty-three more years of productive life (calculated as pension age (60) minus average age at infection (27); (b) average annual productivity is valued at per capita spending in 2000 (US$1,766); the valuation of productivity losses obviously is a lower bound on the value of lives lost to the disease; (c) a patient who gets infected will live for 10 years with adequate care; (d) the average annual cost of care per patient is US$1,059; (e) the consumption benefits of a lower HIV prevalence are not factored in; (g) the benefits are supposed to accrue five years after the infection has been averted to reflect the fact that it takes time for an HIV infection to translate into hospital costs and productivity losses.

Table 3: Estimating project benefits

<table>
<thead>
<tr>
<th>Year</th>
<th>Infections averted</th>
<th>Years of life saved</th>
<th>Year</th>
<th>Productivity losses averted ($)</th>
<th>Averted cost of care ($)</th>
<th>Total benefits ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>333</td>
<td>10,978</td>
<td>2008</td>
<td>19,387,932</td>
<td>3,523,082</td>
<td>22,911,014</td>
</tr>
<tr>
<td>2005</td>
<td>271</td>
<td>8,959</td>
<td>2010</td>
<td>15,822,103</td>
<td>2,875,117</td>
<td>18,697,220</td>
</tr>
<tr>
<td>2006</td>
<td>137</td>
<td>4,524</td>
<td>2011</td>
<td>7,990,162</td>
<td>1,451,934</td>
<td>9,442,096</td>
</tr>
<tr>
<td>Total</td>
<td>1,407</td>
<td>46,420</td>
<td>Total</td>
<td>81,977,980</td>
<td>14,896,647</td>
<td>96,874,627</td>
</tr>
</tbody>
</table>

The stream of benefits is supposed to last until project closing. It is assumed that the costs refer to project activities excluding care and treatment. It is also assumed that the Government continues spending US$1 million a year after project closing to maintain the program. The rates of return associated with the project were calculated using the assumptions discussed above.

Table 4: Internal Rates of Return

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs</th>
<th>Benefits</th>
<th>Net Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1,500,000</td>
<td>(1,500,000)</td>
<td>(1,500,000)</td>
</tr>
<tr>
<td>2003</td>
<td>2,500,000</td>
<td>(2,500,000)</td>
<td>(2,500,000)</td>
</tr>
<tr>
<td>2004</td>
<td>3,000,000</td>
<td>(3,000,000)</td>
<td>(3,000,000)</td>
</tr>
<tr>
<td>2005</td>
<td>2,500,000</td>
<td>(2,500,000)</td>
<td>(2,500,000)</td>
</tr>
<tr>
<td>2006</td>
<td>1,500,000</td>
<td>(1,500,000)</td>
<td>(1,500,000)</td>
</tr>
<tr>
<td>2007</td>
<td>1,000,000</td>
<td>22,684,172</td>
<td>21,684,172</td>
</tr>
<tr>
<td>2008</td>
<td>1,000,000</td>
<td>22,911,014</td>
<td>21,911,014</td>
</tr>
<tr>
<td>2009</td>
<td>1,000,000</td>
<td>23,140,124</td>
<td>22,140,124</td>
</tr>
<tr>
<td>2010</td>
<td>1,000,000</td>
<td>18,697,220</td>
<td>17,697,220</td>
</tr>
<tr>
<td>2011</td>
<td>1,000,000</td>
<td>9,442,096</td>
<td>8,442,096</td>
</tr>
</tbody>
</table>

IRR = 57.6%
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 5 below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Base case</th>
<th>Limit value of parameter that yields an IRR above 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence rate</td>
<td>Reduction sufficient to ensure that adult prevalence stays at 1.50% over project lifetime</td>
<td>A 5% reduction in incidence (versus without-project scenario), corresponding to an increase in prevalence to an end-of-project prevalence of 1.56%</td>
</tr>
<tr>
<td>Annual cost of care for patient</td>
<td>$1,059</td>
<td>$0 (i.e., the productivity losses averted are sufficient justification on their own)</td>
</tr>
<tr>
<td>Average number of years patient needs care</td>
<td>10 years</td>
<td>0 years (idem)</td>
</tr>
<tr>
<td>Average number of years lived if infection is avoided</td>
<td>33 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Productivity valuation</td>
<td>$1,766</td>
<td>$155</td>
</tr>
</tbody>
</table>

In addition, if the stream of costs stays the same but the stream of benefits is delayed by one year (i.e., benefits start accruing only in 2008), then the rate of return drops to 44.9%, and if the stream of benefits is delayed by four years (i.e., benefits start accruing in year 2011) the IRR drops to 26.6%. The returns to the project are therefore robust to very significant negative biases against project feasibility.

C. Cost-Effectiveness

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

<table>
<thead>
<tr>
<th>Cost per HIV infection averted</th>
<th>$8-12</th>
<th>$218</th>
<th>$249-346</th>
<th>$276</th>
<th>$1,324</th>
<th>--</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per DALY saved</td>
<td>$0.35-0.52</td>
<td>$9.45</td>
<td>$12.77-17.78</td>
<td>$10.51</td>
<td>$66.2</td>
<td>$720-$2,355</td>
</tr>
</tbody>
</table>

The proposed project gives clear financing priority to those interventions that are most cost-effective
(especially interventions targeted at sex worker (prevalence: 10% in Kingston and 20% in Montego Bay),
men who have sex with men (prevalence: 25%), prisoners (prevalence: 12%), and STI clinic attendees
(prevalence: 6%) - see Annexes 1 and 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)'.

In the section B of this economic analysis, we established that the $11 million spent on prevention would
help prevent a total of 1,407 infections during the course of the project. This corresponds to $7,820 per
infection saved. This amount is several orders of magnitude higher than the amounts indicated in table 6.
The two reasons that contribute to this much higher figure are: (a) we take a very broad view of prevention
and include such items as improved diagnostic capacity and improved surveillance rather than focusing
narrowly on particular types of intervention and taking the other aspects such as surveillance and
diagnostic capacity for given; (b) the ratio is based on capital costs rather than on the rental cost of capital,
making comparability across countries difficult. The project is, nonetheless, very cost-effective: it costs
$7,820 prevent the waste of an average of 33 years of life, each of which yields an average of $1,766 in
labor productivity.

---
1/ Assuming an initial prevalence of 1.5% of adult population, a population growth rate of 1%, a constant incidence rate of 50
per 100,000 population: (a) if 1% of PLWHA in any given year die in the following year, then the prevalence rate after 5 years
is 1.76%; (b) if 2% die, then prevalence is 1.68%; if 3% die, prevalence is 1.61%; and (d) if 4% die, then prevalence after 5
years is 1.54%. AIDS deaths currently represent about 2.5% of prevalence the preceding year, but, towards the end of the
project, are expected to represent 3.2% of prevalence the year before. Using these parameters, prevalence is expected to be
between 1.60% and 1.64% after 5 years if the incidence rate stays at 50 per 100,000 over time. The project objective might
need to be revised as the surveillance system generates more accurate data about AIDS mortality.
2/ AIDS Deaths=61.917t+12.528; R² = 0.9331.
4/ This is calculated as 14 hospital days at $61 per day + $200 in palliative care and prevention/treatment of OIs.
5/ There is an ongoing debate about the use of cost-effectiveness to guide public financing decisions [see especially Musgrove,
decisions should be made on the basis of market failure arguments. Jack [in Jack, W., (2000) "Public spending on health care:
how are different criteria related? a second opinion." Health Policy, 53: 61-67] 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
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.
Background paper of the Commission on Macroeconomics and Health, the World Health Organization.
7/ UNAIDS.
8/ UNAIDS - Brazil Program
9/ 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.
Antiretrovirals (ARV) decrease the viral load in an infected patient, thereby reducing, but not eliminating, chances for HIV transmission during unprotected sex. While ARV does therefore yield some positive externalities, it is doubtful that the external effects generated should provide a sufficient basis for substantial public provision or financing of ARV. HAART has also generated other negative externalities through behavior reversals and generation of viral resistance through poor compliance. Breaking viral transmission can arguably be achieved more cost-efficiently, for example, by ensuring consistent condom use for HIV+ persons. For these reasons, the provision of ARV must be considered within the framework of a country’s curative care policy rather than within the framework of its public health policy. This is an important distinction: it establishes ARV as private good (with some public good characteristics) and makes public financing of ARV contingent to its equity effect and to its affordability.

A special consideration in the Jamaican case is the role ARV might play in reducing stigma against HIV patients and the impact it would have on managing HIV rather like a chronic disease in the sense of extending and improving the quality of life. Ready access to ARV (on a sliding scale) could convey to the public that AIDS is a health and a development problem rather than a moral issue. Second, it could help health workers to manage the disease more readily. This could create a training and care opportunity for the public sector that could help reduce stigma among care givers, which would create an example for many others in society. Finally, ARV could contribute to the completeness of HIV/AIDS surveillance and decrease transmission by bringing PLWHA and their contacts into the health system earlier. These external benefits, not included in the analysis below, could help the public sector better manage this communicable disease.

By switching the discussion from a public health to a curative care issue, the government’s role becomes one of ensuring that access to ARV is based on need and not on ability to pay. The public sector needs to determine (a) whom it should subsidize, and (b) whether it can afford these subsidies. In other words, the government’s primary role is to seek to protect the poor rather than to finance universal access to ARV. Expecting publicly-funded universal access to ARV unnecessarily constrains policy options and unambiguously postpones access to ARV for Jamaicans. Instead of focusing on public financing of ARV, we first look at the question of introduction of ARV from a societal cost-benefit perspective, and only later draw the additional constraint of public financing into the picture.

The Societal Perspective

We formulate the question as follows: at what price do the benefits that accrue to society exceed the incremental pharmacy and allied costs associated with ARV? In the analysis below, the costs are: (a) drug costs, and (b) other variable costs associated with the implementation of ARV (such as tests). The benefits are taken to be (a) hospital days averted; (b) averted spending on opportunistic illnesses; and (c) averted productivity losses.

This type of analysis is prone to criticism because it purports to value human life and, worse still, does so by using a labor productivity measure, or the opportunity cost of losing a person. In fact, all it does is place a lower bound on the benefits by valuing the productive value. It does not deny that there are "consumption" benefits of life – the additional value of having a person around because of his or her qualities as a person, relative, or a friend. If ARV can be justified on the productive benefits alone, all the
better. If ARV does not make it on those grounds, at least it creates a metric for the lower bound case. In that situation it does not solve the problem that additional qualitative judgment about the “consumption” benefits will have to be made.

Additional base case assumptions are:

- ARV is initiated only for those patients that exhibiting the following characteristics\(^1\): (a) symptomatic; (b) CD4 cell count < 350; (c) plasma HIV-RNA levels > 30,000. This corresponds to 4,000 patients or 16% of PLWHA in 2001. For the following years, the same proportion of 16% is applied to the expected prevalence.
- The provision of ARV comes bundled with the provision of the following additional tests: (a) two complete blood counts yearly (US$12); (b) one RPR/VDRL yearly (US$5); (c) two CD4 counts yearly (US$200); (d) two serum chemistries yearly (US$20); (e) one hepatitis serology yearly (US$10); and (e) one PAP smear for female patients yearly (US$8). These tests total US$255 per year. If we assume two additional physician visits per year at US$20 each, the total additional non-drug costs associated with implementing ARV amounts to close to US$300 per patient per year.
- The current market cost of ARV is US$17,400 per patient per year\(^1\).
- ARV is expected to reduce the need for drugs for opportunistic infections and palliative care for a total amount of US$200\(^4\) per patient per year. In a typical year, 50% of PLWHA would have needed OI drugs in the absence of ARV\(^7\).
- ARV is additionally expected to reduce the need for inpatient care from 14 hospital days to 4 hospital days. One hospital day is estimated to cost US$61\(^6\).
- It is expected that all patients who receive ARV in any given year live through that year and are able to work at normal productivity.
- The average averted productivity loss is taken to be equal to the mean per capita total household spending, i.e., J$75,922 in 2000\(^9\) or roughly US$1,766.
- 85% percent of patients are expected to be in the productive age group 20-60\(^8\).
- Expected prevalence in year \(t\) is modeled linearly as the sum of prevalence in year \(t-1\) and new infections in year \(t\) minus AIDS deaths in year \(t\). New infections are taken to be in fixed proportion of population at 50 per 100,000. AIDS deaths are modeled as the extrapolation of the linear regression of the trend over the previous nine years\(^9\).
- Population grows at a natural rate of 1% and is unaffected by AIDS deaths.

Given these assumptions, the epidemic is supposed to take the following path over the next 5 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Prevalence</th>
<th>Incidence</th>
<th>AIDS Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2,609,000</td>
<td>24,929</td>
<td>1,305</td>
<td>632</td>
</tr>
<tr>
<td>2002</td>
<td>2,635,090</td>
<td>25,487</td>
<td>1,318</td>
<td>694</td>
</tr>
<tr>
<td>2003</td>
<td>2,661,441</td>
<td>25,929</td>
<td>1,331</td>
<td>756</td>
</tr>
<tr>
<td>2004</td>
<td>2,688,055</td>
<td>26,254</td>
<td>1,344</td>
<td>817</td>
</tr>
<tr>
<td>2005</td>
<td>2,714,936</td>
<td>26,461</td>
<td>1,357</td>
<td>879</td>
</tr>
<tr>
<td>2006</td>
<td>2,742,085</td>
<td>26,342</td>
<td>1,371</td>
<td>941</td>
</tr>
</tbody>
</table>

The derived costs and benefits associated with the introduction of ARV are summarized in the following table:
The above table clearly indicates that, at current price levels, the costs associated with implementing ARV, according to national protocols in Jamaica, largely exceed the economic benefits associated with it. We next seek to determine at what ARV price do the benefits surpass the costs. The following graph shows how net economic and net financial (equal to economic benefits minus averted productivity losses) benefits vary with ARV prices in 2002.

**Table 2**

<table>
<thead>
<tr>
<th>Year</th>
<th>Patients treated</th>
<th>Patients treated in productive age group</th>
<th>ARV &amp; associated costs (US$)</th>
<th>Averted productivity losses (US$)</th>
<th>Averted hospital costs (US$)</th>
<th>Averted OI treatment (US$)</th>
<th>Net Benef (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>4,000</td>
<td>3,385</td>
<td>70,780,000</td>
<td>5,976,611</td>
<td>2,440,000</td>
<td>2,532,000</td>
<td>-59,831,38</td>
</tr>
<tr>
<td>2003</td>
<td>4,028</td>
<td>3,409</td>
<td>71,277,990</td>
<td>10,032,079</td>
<td>2,457,167</td>
<td>2,549,815</td>
<td>-56,238,93</td>
</tr>
<tr>
<td>2005</td>
<td>4,087</td>
<td>3,458</td>
<td>72,316,953</td>
<td>10,942,633</td>
<td>2,492,983</td>
<td>2,586,981</td>
<td>-56,294,35</td>
</tr>
<tr>
<td>2006</td>
<td>4,117</td>
<td>3,484</td>
<td>72,857,381</td>
<td>11,536,603</td>
<td>2,511,614</td>
<td>2,606,314</td>
<td>-56,202,85</td>
</tr>
</tbody>
</table>

The break-even point for economic benefits to exceed costs is a ARV price about US$2,436 per patient per year or a 86% reduction in the base market price. At this price, society as a whole should be able to pursue the implementation of ARV in a self-sustaining manner. The corresponding break-even point for financial benefits to exceed costs is a ARV price around US$348 per patient per year or a 98% reduction in the base market price. The financial break-even point is of interest to the public sector: it indicates the price at which introducing ARV is budget-neutral, i.e., the additional pharmacy and allied costs are compensated for by savings on hospital care, palliative care, and treatment of opportunistic illnesses.
A sensitivity analysis was conducted to determine whether the above results were robust to changes in key parameters. Probability distributions were assigned to each parameter and the ensuing effect on the main endogenous variables was derived by making use of Monte-Carlo simulations. The table below summarizes the probability distributions assigned to each parameter.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Probability distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients treated for ARV</td>
<td>Uniform distribution bounded at [-10%;+10%] of base case</td>
</tr>
<tr>
<td>Additional variable costs associated with implementing ARV</td>
<td>Triangular distribution bounded by [$200;$500]; base value likeliest</td>
</tr>
<tr>
<td>Additional savings due to reduced need for OI treatment and palliative care</td>
<td>Triangular distribution bounded by [$100;$300]; base value likeliest</td>
</tr>
<tr>
<td>Percentage of PLWHA who need OI and palliative treatment</td>
<td>Triangular distribution bounded at [30%; 80%]; base value likeliest</td>
</tr>
<tr>
<td>Per capita total household spending</td>
<td>Triangular distribution bounded by [-10%; +10%] of base case; base value likeliest</td>
</tr>
<tr>
<td>Cost of hospital-day</td>
<td>Triangular distribution bounded by [$50; $150]; base value likeliest</td>
</tr>
<tr>
<td>Reduction in hospital days needed for patients on ARV</td>
<td>Triangular distribution bounded by [2 days; 14 days]; base value likeliest</td>
</tr>
</tbody>
</table>

The Monte-Carlo simulations are summarized in the graph below. They indicate quite clearly that there is a substantial probability (33%) that the break-even ARV price of US$2,436 yields negative net economic benefits given the parameter distributions suggested in the table above.

Figure 2

Net Economic Benefits at ARV=$2,436 per patient per year

The exercise was repeated until a break-even point was found that yielded a probability of less than 5% of generating negative net economic benefits given the parameter distributions defined above. This is obtained for ARV prices below US$2,050, corresponding to a reduction of 88.2% of the base price.

The Private Sector Perspective

From the above analysis, the price at which antiretrovirals became an attractive option for society as a
whole was derived. This price, however, inadequately represents the private willingness to pay for ARV. Indeed, it is unlikely that private agents will factor savings on hospital days and on treatment of opportunistic illnesses—inasmuch as these are free at point of service—into their own cost-benefit analysis. The analysis above was therefore repeated with only averted productivity losses on the benefits side. The break-even point turns out to be $1,183 per patient per year or a 93.2% reduction of the base price.

The Public Sector Perspective

Since the presumption from a number of policymakers (especially those who frame ARV as a public health issue) is that the cost of ARV introduction would be borne by the Jamaican Government, it is important to examine the capacity of the public sector to shoulder the bill. The following additional assumptions are made:

- GDP grows at an average of 1.0% yearly in the subsequent 5 years.
- Public spending is modeled as fixed percentage of GDP, 30.3% in the base scenario.
- Recurrent spending in the MOH is taken to be a fixed percentage of total public spending, 6.5% in the base scenario.
- The MOH's pharmaceutical budget is taken to be a fixed percentage of recurrent MOH spending, 13% in the base scenario.
- Introducing ARV also involves some fiscal benefits, here the latter are calculated as 20% (assumed effective average income tax rate) of averted productivity losses.

The table below summarizes the impact on the MOH recurrent and pharmacy budget of public provision of ARV when ARV prices are at US$1,183 per annum (i.e., the break-even point for private agents).

<table>
<thead>
<tr>
<th>Year</th>
<th>Incremental recurrent costs due to ARV (supposing there are no savings on hospital costs or on treatment of OI)</th>
<th>Incremental recurrent costs due to ARV as a % of MOH recurrent budget</th>
<th>Incremental recurrent costs due to ARV as a % of MOH pharmacy budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>5,912,800</td>
<td>4.1%</td>
<td>31.3%</td>
</tr>
<tr>
<td>2003</td>
<td>5,954,401</td>
<td>4.1%</td>
<td>31.2%</td>
</tr>
<tr>
<td>2004</td>
<td>5,997,207</td>
<td>4.0%</td>
<td>31.1%</td>
</tr>
<tr>
<td>2005</td>
<td>6,041,194</td>
<td>4.0%</td>
<td>31.0%</td>
</tr>
<tr>
<td>2006</td>
<td>6,086,340</td>
<td>4.0%</td>
<td>30.9%</td>
</tr>
</tbody>
</table>

The incremental costs (i.e., ARV pharmacy and test costs assuming no savings in inpatient care and treatment of opportunistic infections) associated with the introduction of ARV for all needful patients according to national care and treatment protocols would impose a heavy burden on the recurrent budget of the Ministry of Health, and an unsustainable one on the MOH’s pharmacy budget.

Note, however, that the incremental costs in the above table do not factor in the potential savings on inpatient care and on the treatment of opportunistic infections. If indeed, those savings (summarized in table 2) materialize, then the financial picture, shown in table 4b below, is quite different.
Table 4b

<table>
<thead>
<tr>
<th>Year</th>
<th>Incremental recurrent costs due to ARV (=cost of ARV – savings on hospital costs – savings due to reduction in OI)</th>
<th>Incremental recurrent costs due to ARV as a % of MOH recurrent budget</th>
<th>Incremental recurrent costs due to ARV as a % of MOH pharmacy budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>940,800</td>
<td>0.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2003</td>
<td>947,419</td>
<td>0.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2004</td>
<td>954,230</td>
<td>0.6%</td>
<td>4.9%</td>
</tr>
<tr>
<td>2005</td>
<td>961,229</td>
<td>0.6%</td>
<td>4.9%</td>
</tr>
<tr>
<td>2006</td>
<td>968,412</td>
<td>0.6%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

This time, the budgetary impact of ARV introduction at $1,183 is more modest. The key parameters relate to the size of potential savings on hospital care and opportunistic infections relative to the cost of providing ARV. Given the importance of this parameter, an analysis of the sensitivity of the results in tables 4a and 4b to changes in the parameters relating to the costs and savings associated with ARV are carried out. In a separate exercise, not reported here, it is shown that the results above are very robust to changes in the other underlying parameters (GDP per capita growth rate, public spending as a percentage of GDP, MOH recurrent budget as percentage of public spending, MOH pharmacy budget as percentage of MOH recurrent spending, effective taxation rate).

Table 5

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Probability distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional variable costs associated with implementing ARV</td>
<td>Triangular distribution bounded by [$200; $500]; base value likeliest</td>
</tr>
<tr>
<td>Additional savings due to reduced need for OI treatment and palliative care</td>
<td>Triangular distribution bounded by [$100; $300]; base value likeliest</td>
</tr>
<tr>
<td>Percentage of PLWHA who need OI and palliative treatment</td>
<td>Triangular distribution bounded at [30%; 80%]; base value likeliest</td>
</tr>
<tr>
<td>Cost of hospital-day</td>
<td>Triangular distribution bounded by [$50; $150]; base value likeliest</td>
</tr>
<tr>
<td>Reduction in hospital days needed for patients on ARV</td>
<td>Triangular distribution bounded by [2 days; 14 days]; base value likeliest</td>
</tr>
</tbody>
</table>

The Monte-Carlo simulations indicate possibly wide variations around the point estimates in Table 4b. For the year 2002, for instance, the following are the base values and the 90% confidence intervals of interest are:

Table 6

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Base estimate in 2002</th>
<th>90% confidence interval in 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental recurrent costs due to ARV as a % of MOH recurrent budget (net of savings)</td>
<td>0.6%</td>
<td>[-2.2%; 1.5%]</td>
</tr>
<tr>
<td>Incremental recurrent costs due to ARV as a % of MOH pharmacy budget (net of savings)</td>
<td>5.0%</td>
<td>[-15.6%; 11.7%]</td>
</tr>
</tbody>
</table>

The feasibility of public financing of ARV is therefore critically linked to potential savings in OIs and
hospital care about which very little is known in the Jamaican context.

**Implications for Jamaica's National HIV/AIDS Strategic Plan**

The analysis above suggests the following four-pronged strategy to increase access to ARV in Jamaica:

- **Negotiate prices down for the public sector and the private sector.** A fair share of HIV/AIDS patients will then be able to access the drugs privately.

- **A large number of HIV/AIDS patients will not be able to pay for these drugs even at those prices.** The Government's role would consist of subsidizing access for the very poor inasmuch as it can afford to do so and in a way that is compatible with the country's curative care policy. Non-income subsidization criteria are also perfectly legitimate: the Government may, for example, decide that it will subsidize ARV for children and mothers, irrespective of income levels, and cover other groups as the budget constraint relaxes (either because grant funding becomes available and/or because prices drop further).

- **Test the sensitivity of savings on hospital care, palliative care and OI treatment from the introduction of ARV so the Government can generate a better sense of the real budget implications of ARV introduction.**

- **There is a strong likelihood that the downward price pressure on the cost of ARV (either because of price reductions or newly available grant resources) will continue.** It makes sense to start investing now in a viable system of testing, delivery, and counseling, in anticipation of substantial future reductions in the cost.

While such a strategy is more affordable for the public sector, it can be shown that at the $1,183 "threshold", the Government cannot do much to ensure equitable access to ARV for the poor. Say that the government wants to subsidize patients such that no patient pays more than 5% of costs out-of-pocket. Then, it must subsidize all patients substantially if it is to ensure that patients have access to ARV in an equitable and affordable way.

### Table 7

<table>
<thead>
<tr>
<th>Population quintiles</th>
<th>Total per capita household spending</th>
<th>Quintile distribution of patients</th>
<th>Number of patients treated in 2002</th>
<th>% Public sector subsidization of ARV and associated costs</th>
<th>Net outlays by public sector (ARV - savings in hospital days &amp; OI treatment)</th>
<th>Out-of-pocket payment per patient per year (as a % of total per capita spending)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorest</td>
<td>530</td>
<td>27.3%</td>
<td>1,092</td>
<td>97.6%</td>
<td>800,134</td>
<td>28.4 (5%)</td>
</tr>
<tr>
<td>2</td>
<td>862</td>
<td>22.3%</td>
<td>892</td>
<td>96.0%</td>
<td>632,492</td>
<td>47.3 (5%)</td>
</tr>
<tr>
<td>3</td>
<td>1,215</td>
<td>20.3%</td>
<td>812</td>
<td>95.0%</td>
<td>563,763</td>
<td>59.2 (5%)</td>
</tr>
<tr>
<td>4</td>
<td>1,783</td>
<td>19.1%</td>
<td>764</td>
<td>93.0%</td>
<td>507,851</td>
<td>82.8 (5%)</td>
</tr>
<tr>
<td>Richest</td>
<td>3,956</td>
<td>11.0%</td>
<td>440</td>
<td>82.0%</td>
<td>220,935</td>
<td>213.0 (5%)</td>
</tr>
<tr>
<td>Total</td>
<td>1,766</td>
<td>100.0%</td>
<td>4,000</td>
<td>94.0%</td>
<td>2,725,175</td>
<td></td>
</tr>
</tbody>
</table>

While this strategy is more affordable for the public sector, it is still an expensive one. An alternative is to
start with what the MOH considers to be a sustainable increase in their budget and work backwards to
derive the targeting system and/or drug price that is compatible with the sustainable budget impact.
Suppose, for example, that the MOH considers that a 10% increase in their pharmacy budget is the
maximum they can justify given competing uses for the funds. Then at an ARV price of $1,183, one way
to stay within the budget constraint is to subsidize 100% of the cost of antiretrovirals and associated tests
for the lowest three income quintiles, fifty percent for the second richest quintile, and not to provide any
subsidies for the richest quintile. Alternatively, the government may decide that its strategy is to negotiate
prices further so that it can achieve the following two goals simultaneously: (a) the net impact of providing
ARV on its pharmacy budget is not more than 5%; and (b) no quintile pays more than 7% of its total per
capita spending on ARV drugs and allied costs. If those are the objectives, then the prices must be
negotiated down to US$800 per patient per year (assuming the savings on OI and hospital care materialize
fully). Note that the Government has to date been able to negotiate ARV prices down to roughly US$3,270
per patient per year: this is more than three times what ensuring affordable and equitable access to ARV
dictates.

This combination constitutes an ad hoc solution to a general health financing problem, but it does
contribute to ensure faster access to ARV for all patients who need it, irrespective of their ability to pay.
Note that, even under this scenario of targeted public financing, the annual cost (before savings) of
providing ARV is around US$3.9 million. Financing ARV could potentially crowd out much more
cost-effective interventions for HIV/AIDS and care for other conditions that may currently be insufficiently
subsidized by the public sector, therefore exerting great financial strain on the poorest.

These estimates suggest that there is a price at which it would make sense to finance ARV publicly,
although recognizing the private benefits and the limited availability of public funds, there should be an
effort to do so on a sliding scale in which those able to pay, do pay something. It does not take into
account competing uses for the money, whether from own resources or borrowed resources, and we must
accept that there may be much better uses for the money. The challenge, however, is to identify these better
uses.

The Government of Jamaica has taken on this challenge in the context of the creation of a new Health
Fund. The Fund is expected to be the first step towards the creation of a National Health Insurance
system. The Fund will be financed through a levy on tobacco consumption and the national insurance
scheme, and is expected to generate an additional J$2.0bn or US$42.7 million a year. This Fund is
expected to finance health promotion activities, support to the health services, and drugs for selected
chronic diseases. The Ministry of Health conducted a study to determine the cost of expanding access to
currently unavailable or heavily rationed care (organ transplants, cardiovascular surgery, bone marrow
transplant, renal dialysis, diagnostics (MRI, CT-Scan), treatment of certain cancers and leukemia). The
cost of providing these additional services was shown to far exceed the financial capacity of the Health
Fund and the MOH undertook to prioritize among the possible uses of the scarce resources based on a
series of criteria including cost-effectiveness, burden of disease and susceptibility to management. The
exercise also took into account the availability of generic drugs for these conditions. During this exercise,
the treatment of conditions such as hypertension, diabetes, heart diseases (ischemic heart disease,
myocardial infarction, rheumatic heart disease), asthma, arthritis, glaucoma, depression, breast cancer, and
prostate cancer was shown to be a higher priority.
GOJ's strategy to (a) negotiate ARV prices down for the private sector; (b) subsidize care for vulnerable sub-populations (children, then mothers); and (c) develop the testing and counseling infrastructure to allow increased access to ARV in view of the anticipated reduction in ARV prices, is eminently sensible. Should circumstances change during the course of project implementation, the issue of ARV procurement will be revisited.

1/ Blower, S., 'Calculating the consequences: ARV and risky sex,' *AIDS* 2001;15:1309-1310: "The current results of Law et al. and the previous results of Blower et al. have significant public health implications. These results imply that there will be a significant public health benefit (i.e. incidence rates of HIV will fall) as more HIV-positive individuals gain access to treatment, but that this public health benefit will only occur if the levels of risky behavior do not increase. Incidence rates will increase, even with a high usage of ARV, if levels of risky behavior increase. [...] Programs should be developed to simultaneously treat HIV-positive individuals and to counsel these individuals to reduce the number of sex partners that they have, to use condoms and to select sex partners of matching sero-status (i.e., to sero-sort). [...] Recently, it has been suggested that ARV should be used as a public health prevention strategy for reducing incidence rates. However, when making public health decisions regarding ARV it is necessary to consider carefully the beneficial and detrimental effects to the individual patients. It may often be in the best clinical interests of the individual patient to delay treatment rather than to treat early, although doctors should not withhold ARV from certain patients simply because they assume that the patients will not be able to adhere to the complex treatment regimen. Therefore the usage rate of ARV at any time should be determined by the number of individuals in the population who would receive a medical benefit from these therapies. Any public health decision regarding ARV should also consider multiple epidemiological goals, not only the reduction of incidence rates. Although the results from the models show that a high usage of ARV could reduce HIV incidence rates and AIDS death rates, the modelling studies also show that a high usage rate of ARV over time would result in a high prevalence of drug-resistant cases. This build-up of drug-resistant cases could well be detrimental to public health, as well as to the individual patients who develop resistance. The current modelling results predict what would happen given certain usage rates of ARV. These results should not be used as a rationale for increasing population-level treatment rates of ARV, unless such a decision would also result in clinical benefits to the individual patients. However, it is very clear from the current modelling results that every effort should be made to try and stop the levels of risky sex increasing.

2/ MOH guidelines.

3/ Based on the cost in Jamaica of a regime of 2 nucleosides and 2 protease inhibitors: $1,450 per month. Cheaper regimes involving 2 nucleosides and 1 protease inhibitor or 2 nucleosides and 1 NNRTI cost $1,100 and $1,000 per month respectively.

4/ The Panos Institute's 'Beyond Our Means? The cost of treating HIV/AIDS in the developing world,' (2000), referring to World Bank figures, suggests that the average cost for palliative care for AIDS in sub-Saharan Africa as $19 and for treatment other than anti-retrovirals as $33-$233. The equivalent costs in Thailand are $19 and $158-$801 respectively. We conservatively assume that the cost in Jamaica is $200 per patient per year and to vary between $100 and $300 in the sensitivity analysis.

5/ The Panos study suggests that “if antiretrovirals are successful – as confirmed by three monthly testing of viral load and CD4 count – there will be little or no need for prophylaxis [to prevent opportunistic infections], treatment [of opportunistic infections] or painkillers [palliative care].” It further suggests that “overall in the industrialized world, some experts estimate that in the long-term combination therapy may only be effective for 50% to 80% of patients.” Here we assume that antiretrovirals prolong the lives of 100% of patients for the year of the analysis, but that 50% still need some form of complementary therapy.

6/ The Panos study indicates that the cost of hospital care for someone with AIDS are estimated as $218 in Africa and $673 in Thailand and overall costs of treatment without antiretrovirals, $490 a year in Africa and $1,657 in Thailand (in 1996 dollars). Here the overall cost of treatment without antiretrovirals are assumed to be $1,054.


8/ Extrapolated from MOH data on age distribution of AIDS cases.

9/ AIDS Deaths=$6.917t+12.528; R^2 = 0.9331; regression over data for 1992-2000.

10/ It is assumed that HIV/AIDS patients are distributed across quintiles in the same way as all patients Source: Lorraine Blank et al., 'Jamaica : Social Sector Expenditure Review,' March 2000.
Background

Increasingly, there are growing concerns both at the local and global levels, about the potential transmission of diseases from exposure to medical waste.

There is the added concern of the risks associated with the emergence of new diseases with their unique epidemiological patterns, the reemergence of old diseases that are drug resistant, and the corresponding methodologies that are to be determined for safely managing the waste outputs from the treatment of these diseases. Very limited technical information and research on this aspect of hospital/infectious waste management exist to guide practitioners.

Additional developments in the health care delivery services relate to the reduction in hospital stays and the corresponding expansion of home health care services, including the concern that most treatment of AIDS is apparently being done on an outpatient basis. It may indeed be possible that these wastes generated by these latter services may be more susceptible to more direct public exposure.

Against this background it should be noted that the volume of medical waste generated from health care services has virtually doubled over the last twenty years due in part to the increasing use of disposable products. This reality has not only served to increase overall volume but equally, the complexity of the waste stream has changed.

Characterization and Quantification of Hospital Wastes and Appraisal of the Management Systems

In an effort to determine the operational effectiveness and status of the waste management system a number of strategic initiatives, beginning in 1993, were taken to characterize the waste stream and to make an appraisal of the management systems associated with the generation, handling and disposal of medical wastes.

Other interventions addressed the identification of the sources of the wastes, categories or types of waste, and the corresponding generation rates. Inventory of handling practices, including existing regulations, procedures and analysis of risks, training programs, waste segregation techniques and manpower and technological levels were addressed, including infection control and the techniques for final disposal.

Waste characterization analyses were completed in 1993, 1998 and 1999 and international consultants developed a draft National Regulated Medical Waste plan in 1996, as part of the National Solid Waste Programme.

Legal and Regulatory Framework

The outputs from these analyses established the basis, in part, for the development and adoption of a hospital waste management policy. The “Health Facilities Control Policy and Procedures Manual” was the direct result of this Policy and it sought to not only create a managed framework for infection control but it also addressed important issues of waste management, cost effective operations and the reduction of
health risks to health care employees and the community at large.

In terms of the public sector, increasing global reports of needles and blood vials discovered in illegal disposal sites, along with the continuing focus on the increasing number of AIDS patients, stimulated the development of a number of important legal and regulatory instruments. These include a National Solid Waste Policy, Draft Guidelines on Infectious Waste Management, which was a joint effort between the leading national environmental agency, National Environmental and Planning Agency (NRCA/NEPA) and the Ministry of Health and recent revisions to the Public Health Act with particular focus on the safe handling of Medical Infectious Waste.

Correspondingly the National Environmental and Planning Agency has developed Air Pollution Guidelines which will be used to guide the selection and operation of hospital waste management facilities that can be used in the disposal of medical wastes.

**Situation Analysis**

Despite the current financial constraints the Ministry of Health, and the associated health care facilities and agencies, have sought to ensure that the best health services remain in place and the Jamaican population continue to enjoy the highest level of health and well being practicable. In keeping with this achievement, Jamaica enjoys a high standard of health care as can be seen by the recent WHO global ranking for health care delivery to its population.

In the public sector a wide array of hospitals and clinics exist throughout the various parishes and regions (note annex 1). It is made up primarily of 23 hospitals including the UWI Hospital and 366 health care centres. A broad-based private health sector exists including medical centres, seven hospitals and a number of maternity centres.

These health care facilities including the public and private laboratory services generate the bulk of the medical/infectious wastes nationally in Jamaica. The composition of the waste varied among the various health institutions with sharps making between 2% and 27% of the total, glass representing 0% to 11%, plastic representing 0% to 47% and organic material forming 0% to 38% of the infectious waste produced by an institution. The other sources, which are still not quantified, comes from home-based and hospice care. In this context it is now necessary to immediately amend the policy that will address this aspect of the potential waste stream. This constitutes an important consideration in keeping with the overall management of hospital wastes in regards to the infectious nature of the HIV/AIDS virus. A number of waste management measures have already been detailed and specific guidelines have been put in place to ensure proper management of waste, in particular the handling of sharps generated from treatment services.

A national policy and commitment has been in place to secure improvements in the management of medical infectious wastes. In an overall context, although there have not been any major national disease outbreak associated with the handling of medical wastes, there is none the less the need for immediate improvements in the management of this critical waste stream. This conclusion represents an accurate summary of the findings of the earlier analyses of the characterization and management system for medical wastes practiced throughout the health care facilities in Jamaica.

The characterization studies looked at current practices in waste handling for on site and off site disposal and have determined that the medical wastes from a number of treatment facilities are transported off site for disposal in municipal disposal sites, packaged in plastic bags, and treated as general municipal solid
waste. The greater volumes of medical wastes are however incinerated. In terms of the operations of these hospital facilities less care is taken to segregate medical wastes from other wastes, secondary or adequate containers are rarely used, and wastes are often moved about the facilities in open carts.

Storage practices vary throughout the health care sector, including frequency of pick-ups whether off site, on site disposal is practiced and there is a general deficiency in hygienic conditions.

There exists a mixed regime of final disposal practices. Even though it appears that incineration is the option of choice for final disposal, no comprehensive investigation has been completed of the effectiveness of disposal options, whether done on or off site, or whether there was indeed an attempt to address the economies of waste handling through a regional system for incinerating medical wastes. Most of the existing incinerators either are inoperative or operating with reduced efficiencies and do not have any continuous monitoring equipment and no air pollution control systems, effectively meaning that they would not be able to be in compliance with the soon to be promulgated air emission regulations.

There are indeed some very important technical issues to be addressed so that the proposed draft guidelines and revisions to the Public Health regulation can be effectively promulgated. These relate to the written procedures and protocols regarding all steps in the handling and management of the waste stream. This also includes definition of the categories of waste and how they are to be handled, proper documentation and tracking of waste volumes and a framework for regulatory compliance both at the public and private levels of the health care sector.

Adequate monitoring and enforcement are not readily obvious and the whole question of infrastructure for handling wastes throughout the health care service, from the use of proper colour coded plastic bags to the movement of waste in all facilities to final disposal, needs a comprehensive review.

Deficiencies of the Current Approach to Infectious Waste Management

The deficiencies identified in respect of the current infectious waste management regime are listed as under. The list covers an admixture of technical, administrative, educational and infrastructural deficiencies, namely:

1. Absence of an infection control committee, which should be mandated by the infection control policy.
2. Unacceptable pre-treatment storage, handling and disposal of sharps.
3. Indiscriminate disposal of blood and blood products.
4. Inadequate incineration facilities in terms of:
   - temperature attainment for incineration
   - inadequate capacity for volume of wastes
   - existing facilities by and large, in a state of disrepair
   - incinerators do not ensure complete combustion of the waste
   - incineration facilities do not meet NEPA air standards for emissions
5. Inadequate/unacceptable storage at the point of generation (bins with no liners or covers; unsafe containment of sharps).
6. Lack of a system for ready identification of infectious wastes, e.g. colour-coded bags, bio-hazard symbol, etc.

7. There is no separation of infectious from non-infectious wastes, resulting in contamination of a larger quantity of wastes and thereby increasing the overall volume of materials which must be classified as infectious.

8. Since both infectious and non-infectious materials are combined, they are collected together as municipal solid waste and taken to the general disposal facility. This exposes scavengers (and by extension the wider population) to increased risk of contracting communicable diseases.

9. Interim storage areas currently are not designed such as to restrict access to the stored materials by rodents, insects and strays.

10. Generally, there is no pre disposal treatment of the infectious material aimed at reducing risk of contamination and/or infection.

11. There is a low level of awareness among hospital staff in respect of the importance and the methodology for handling infectious material. No specially trained persons are on institution staff.

12. There are generally no particular administrative arrangements for the management and supervision of infectious waste handling and no specially assigned staff for infectious wastes handling. The general housekeeping staff also handles infectious wastes.

13. Problems relating to -- or emanating from -- existing infectious waste handling practices generally go unrecognized and unreported. As such the need for instituting corrective measures goes unnoticed. Thus, problems remain unaddressed and can and do, escalate. The foregoing is due largely to the lack of training and awareness among the staff of the health care facility.

14. There is unsatisfactory final disposal of incompletely incinerated residue, usually by open dumping at the municipal solid waste disposal site, thereby exposing scavengers to the risk of injury and infection.

15. There is no means of accurately determining the quantities of waste generated thereby facilitating the determination of provisions for storage, transportation, treatment and final disposal.

General Recommendations

1. The collection, handling and disposal of infectious wastes should be an area of major policy and procedure decision in every health care facility based on general guidelines prepared by the relevant government health authority.

2. All wastes containing blood and/or feces or other body fluids, or which have been soiled with the same must be rendered innocuous prior to disposal and must be treated as potentially infectious waste.

3. Colour-coded plastic bags (preferably red or yellow) should be used for the collection and storage of infectious or potentially infectious material. Such containers should NOT be used for the storage of other wastes, since this would defeat the purpose of differentiation of the wastes, for which
the use of such bags is intended.

4. A manual containing detailed and/or algorithmic instructions for the handling of health care solid wastes must be prepared and must become the "Bible" for waste management in all facilities which produce any form of infectious waste. Instructions in the manual should be based on the "cradle to grave" approach applied to the management of hazardous wastes.

5. Where the colour-coded bags are unavailable or are not puncture proof they should be placed in cardboard containers and labeled "INFECTIONOUS WASTE" or "BIO-HAZARD".

6. Better handling of infectious waste is needed in all of the institutions surveyed and likely in all Ministry of Health facilities. The Hospital Infection Control Policy should be fully implemented in all hospitals. Every hospital should have an Infection Control Committee that meets regularly and performs inspections of the hospital at least monthly. A scaled down version of the Hospital Infection Control Policy should be applied to the Health Centres. With regards to infectious waste, the Policy calls for the use of yellow or red plastic bags in containers (preferably small step-on bins) provided for the disposal for the disposal of infectious waste. The bags are to be removed and sealed when they are two-thirds full. Sharps are to be disposed of separately in puncture resistant containers. The sharps containers are to be removed when they are two-thirds full.

7. With regard to the disposal of sharps, practices again differ between institutions. The variety of containers used for sharps included: the general waste container, a separate reusable plastic bin lined with a plastic bag, a cardboard box, an empty plastic bleach container and a disposable hard plastic container made specifically for the disposal of sharps. Of these methods, the best option is, of course, the disposable hard plastic container made specifically for sharps. The use of cardboard boxes or plastic bags for the storage or handling of used sharps should be strongly discouraged.

8. The hospital and health centre staff should be trained in the proper handling of infectious waste. It is especially important that the janitorial staff be trained whether they are attached directly to the hospital or to a contractor. This should be the responsibility of the Infection Control Committee. Training should be done for all staff on at least a semi-yearly basis with the Infection Control Committee overseeing practices throughout the ear. Signs should be placed above every waste container identifying the type of waste to be disposed inside.

9. All infectious wastes MUST be properly disposed of. With the exception of one of the incinera tors at Bustamante Hospital for Children, none of the incinerators at the hospitals surveyed was sufficient. The incinera tors are not capable of completely burning waste with sizable proportions of sharps, glass, plastic and organic waste. It is therefore recommended that an assessment of alternatives be undertaken of possible appropriate interventions to ensure proper final disposal of the medical waste in areas affected by this project; the recommended alternative should then be implemented. This analysis should build on this report, and include feasibility, engineering, and site-specific environmental impact assessments for the various options.

10. Terms of reference, acceptable to the Bank, for the site-specific environmental assessment studies that will need to be conducted prior to upgrading or installing new incinerators will be annexed to the Project Operational Manual. Should any incinerators be refitted or procured, they should meet Natural Resources Conservation Authority’s air emissions standards.
Specific Recommendations for Proposed Project

1. Improve final disposal of medical waste at sites affected by Project

Discussions held between the World Bank Team and the PAHO/ Ministry of Health team yielded the following conclusions:

- The need for a Technical Review of existing incinerators in the sites affected by the proposed project.
- The need to review the details and logistics of a training programme regarding the following four institutions which were identified by the National AIDS Program as the primary treatment sites supported by the proposed project:
  - Kingston Public and the Victoria Jubilee Hospitals,
  - Cornwall Regional Hospital
  - Mandeville Regional Hospital, and
  - St Ann’s Bay Regional Hospital

As regards the status and capacity of the infectious waste handling capability of the above institutions, the following aspects of their current situation were identified for assessment and intervention:

- Either the institution currently has facilities with adequate capacity to handle the infectious waste generated in house and also has extra capacity to absorb wastes from satellite sites OR
- A facility exists at the institution but it is inadequate and also needs upgrading to permit.
- Expansion to capture both on site and off site infectious wastes OR
- Installation of a new hospital waste management facility of adequate capacity to accommodate both onsite and off site generation.

(Note: An engineering and technical assessment must first be conducted of each of the existing incinerators to determine their capability to handle existing and projected waste quantities).

The following matrix delineates the cost profile for the foregoing (note that the proposed technical assessments will serve to finalize the costs and the extent of Project support). Note that budget assigned for the incinerators is an estimate, and depends upon the outcome of the engineering, technical and environmental studies that will determine the appropriate intervention(s).
Safe Handling of Medical Material Waste – Cost Profile

<table>
<thead>
<tr>
<th>Items</th>
<th>Cost (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Assessment for new Waste Management Facility for KPH/VJH</td>
<td>$8,000</td>
</tr>
<tr>
<td>Engineering Assessment for Mandeville, St Ann’s Bay and Cornwall Regional Hospitals, Spanish Town Hospital, and NPHL</td>
<td>$8,000</td>
</tr>
<tr>
<td>Development of TORs for items 1&amp;2 above</td>
<td>$2,000</td>
</tr>
<tr>
<td>Development of Operational Manual for Hospitals</td>
<td>$5,000</td>
</tr>
<tr>
<td>Upgrade/Acquire new Waste Management Facility recommended by Engineering Assessment</td>
<td>$449,727</td>
</tr>
<tr>
<td>Procurement of Autoclaves</td>
<td>$95,455</td>
</tr>
<tr>
<td>Waste disposal supplies (personal protective equipment, needlizers, etc) for 59 Health Care facilities</td>
<td>$159,091</td>
</tr>
<tr>
<td>Training in the proper management of infectious wastes (*)</td>
<td>$59,818</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$803,127</td>
</tr>
</tbody>
</table>

* See details in Training Budget below

A service satellite system will be in place, bearing in mind that priority would be given to the four treatment sites. The first line of action will be to conduct an engineering and technical assessment of all existing hospital waste management facilities with a view to determining operational status and their capacity to handle existing as well as projected waste loads and the level of upgrading required. The new hospital waste management facility will be of adequate capacity and in that context, will operate in conformity with the relevant NEPA guidelines.

No withdrawals will be made in respect of payments for expenditures for hospital waste management equipment, unless Jamaica has presented to the Bank the results of a site-specific environmental assessment regarding the installation and use of said equipment, carried out with public consultation in Jamaica, and to the satisfaction of the Bank.

2. Legislation

Legislation has already been drafted and submitted to the Parliamentary Council for final review. The specific provisions contained in the regulations cover the various categories of waste, segregation, containerization, storage, and transportation to the hospital waste treatment site. These provisions along with the infection control manual will be the basis upon which the safe handling of health care wastes will be managed. The regulations will be adopted into law by the end of 2001. The infection control manual will be annexed to the Project Operational Manual.

3. Training

The determinants for the training component are as follows:
1. Numbers of persons to be trained
2. Categories of persons to be trained
3. The nature and cost of the training
5. Based on the available funds, training will be phased as follows
   - Staff at the four treatment sites
   - Relevant staff at other hospitals and health centers
   - Private sector hospitals and other interested care givers

The training intervention would be developed based on the infection control manual and the appropriate legislation, including the relevant NEPA guidelines. It would be targeted at the various categories of hospital / health care personnel, from generators of the wastes through to final handlers, throughout the four regions, including public and private sector health care personnel. Training would commence at the four treatment sites. Teaching methodologies and tools would be chosen for greatest didactic effectiveness, based on the intellectual levels and capabilities of the particular target groups.

The following matrix seeks to delineate some details of the training plan

<table>
<thead>
<tr>
<th>Activities/Outputs</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training manual developed</td>
<td>Manual drafted, reviewed and approved for use</td>
</tr>
<tr>
<td>Hospital/ Health care personnel trained in infectious wastes management</td>
<td>Training programme developed and implemented</td>
</tr>
<tr>
<td>Trained personnel qualify for certification</td>
<td>Certification conferred on trained personnel</td>
</tr>
</tbody>
</table>
## Proposed training Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
<th>Cost (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials/Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen</td>
<td></td>
<td>500.00</td>
</tr>
<tr>
<td>Over head projector</td>
<td></td>
<td>1,500.00</td>
</tr>
<tr>
<td>Lap top computer</td>
<td></td>
<td>2,500.00</td>
</tr>
<tr>
<td>Multi media projector</td>
<td></td>
<td>6,000.00</td>
</tr>
<tr>
<td>Manuals (450)</td>
<td></td>
<td>2,500.00</td>
</tr>
<tr>
<td>Training time (professional cost)</td>
<td>4x2 days workshops</td>
<td>12,636.20</td>
</tr>
<tr>
<td>Training Venue</td>
<td>Treatment site conference facilities</td>
<td>3,000.00</td>
</tr>
<tr>
<td>Refreshments</td>
<td>Coffee breaks and lunch for 8 training days x400 persons @</td>
<td>5,000.00</td>
</tr>
<tr>
<td>Travelling</td>
<td>For Trainers who are not Government Travelling Officers</td>
<td>2,500.00</td>
</tr>
<tr>
<td>Overnight accommodation</td>
<td>For &quot;out of town&quot; trainers and participants</td>
<td>10,000.00</td>
</tr>
<tr>
<td>Professional cost of Manual Preparation</td>
<td>Compilation, editing formatting etc</td>
<td>5,000.00</td>
</tr>
<tr>
<td>Contingency</td>
<td>10%</td>
<td>5681.80</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>56,818.00</td>
</tr>
</tbody>
</table>
Additional Annex 15: Synopsis of Donor Involvement in HIV/AIDS

**MATRIX OF NATIONAL HIV/STI CONTROL PROGRAMME ACTIVITIES**

<table>
<thead>
<tr>
<th>Component/ Activities</th>
<th>Interventions</th>
<th>Target Populations/ Beneficiaries</th>
<th>Implementing Agencies</th>
<th>Sources of Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Planning, Management</td>
<td>Define and promote strategic measures to ensure sustainability and improved efficiency and effectiveness of HIV/STI Control Programme, focusing on increased parish empowerment and leadership and National AIDS Committee sustainability</td>
<td>High risk behaviour groups (migrant farm workers, STI clinic attendees, commercial sex workers, antenatal clinic attendees), other groups not previously tested</td>
<td>HIV/STI Programme Team, National AIDS Committee, all Government ministries, private sector, NGOs, national leaders (Government and private sector), UNAIDS theme group</td>
<td>Government of Jamaica, UN Theme Group on HIV/AIDS</td>
</tr>
<tr>
<td></td>
<td>• To promote and execute measures to ensure sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• To create the appropriate policy framework</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• To reinforce the management structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveillance</td>
<td>Estimate the number and rate of HIV infected persons and to define the epidemiological pattern of HIV/STI infection in Jamaica</td>
<td></td>
<td>National HIV/STI Control Programme, Parish Health Departments, Contact Investigators, selected private practitioners</td>
<td>USAID</td>
</tr>
<tr>
<td></td>
<td>• To strengthen national epidemiological surveillance system for HIV/AIDS/STI at central and parish level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• To monitor temporal trends and to assess incidence among selected groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Maintain a high level of AIDS reporting and improve HIV and STI reporting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Research | Conduct high quality research in the field of HIV/STI and use the results to guide the HIV/STI control programme  
- Conduct behavioural research  
- Conduct operational research  
- Conduct epidemiological/ biomedical research  
- Conduct clinical trials | General public ages 15 - 49 years, PLWHA in Jamaica, STI clinic attendees, ante-natal clinic attendees, high risk groups (eg. Commercial Sex Worker's) and other identified target groups and special populations | National HIV/STI Control Programme, the University of the West Indies, Contract Technical Assistant | USAID, GTZ, Government of Jamaica, Pan American Health Organisation |
| Laboratory Services | Strengthen STI/HIV laboratory infrastructure to assure efficient identification of cases, quality control and rapid laboratory testing  
- Strengthen STI laboratory services at parish and national levels through targeting RPR/TRUST testing for syphilis  
- Fully operationalize computer system for HIV/AIDS Laboratory  
- Improve the efficiency and quality of the HIV laboratory  
- Maintain a safe blood supply and services  
- Provide the necessary personnel, staffing and supplies for National Public Laboratory | STI laboratory staff, public and private laboratories, blood donors, blood recipients, service recipients | National HIV/STI Control Programme, STI clinic laboratories, public and private laboratories, Red Cross, Blood Bank | USAID, GTZ, Government of Jamaica |
<table>
<thead>
<tr>
<th>STD Control</th>
<th>General public, STI clinics, STI clinic attendees, antenatal clinic attendees, Family Planning clinic attendees, laboratory facilities</th>
<th>National HIV/STI Programme, STI sections of Comprehensive Health Centres in Kingston and St. James, medical professionals</th>
<th>Government of Jamaica, USAID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce the incidence of STIs through more effective prevention and treatment of STIs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Strengthen parish infrastructure for the prevention and control of STIs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Improve reporting, syndromic management, and contact investigation of STIs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Achieve more effective case management of persons with STI and their partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Promote appropriate STI health seeking behaviour and an understanding of the link between HIV and STI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Provide the necessary personnel, staffing and supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behaviour Change Communication</td>
<td>Reduce the incidence of HIV and STI by promoting safer sex. Safer sex is defined as including consistent and correct condom use; <strong>partner reduction and mutual monogamy</strong>; delay of first sexual relationship and abstinence; STI health seeking behaviour; heightened sense of individual risk and responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|                                | * Promote consistent and correct condom use*  
* Promote partner reduction and mutual monogamy  
* Promote better understanding of sexuality, delay of first sexual relationship and abstinence  
* Promote health seeking behaviour for STI  
* Heighten understanding of individual risk and sexual responsibility |
|                                | Persons with HIV and their partners, persons with STI and their partners, **commercial sex workers**, men who have sex with men, youth 15 – 24, inner city communities, sexually active adults |
|                                | National HIV/STI Control Programme, Parish Health Departments |
|                                | USAID, GTZ |
| Condom Promotion | Achieve correct, regular and consistent condom use among the sexually active population  
- Raise social demand for condoms  
- Improve access to condoms | Sexually active youth and adult population | National HIV/STI Control Programme, Parish Health Departments, private sector | USAID, Government of Jamaica |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>Ensure satisfactory training of all persons involved in any aspect of HIV/STI prevention and care</td>
<td>Private and public healthcare service providers and volunteers</td>
<td>National HIV/STI Control Programme, private and public institutions offering care, treatment and counselling, including Social Services and training in medical care</td>
</tr>
<tr>
<td><strong>Comprehensive Care and Social Support</strong></td>
<td><strong>Ensure adequate counselling, compassionate and quality care and support for persons living with HIV/AIDS and those affected by the disease</strong></td>
<td><strong>HIV seropositive adults and children and their families in Jamaica</strong></td>
<td><strong>National HIV/STI Control Programme, National AIDS Committee, partner NGOs (Centre for HIV/AIDS Research, Education, and Services, Jamaica AIDS Support, Red Cross), Parish AIDS Committees, CBOs, Parish Health Departments</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>- Decrease impact of HIV/AIDS on the infected individual and those affected by the disease</strong></td>
<td><strong>- Improve social acceptability of AIDS/HIV infected persons</strong></td>
<td><strong>- Improve care for children orphaned by HIV/AIDS</strong></td>
<td><strong>- Expand knowledge, understanding and good management of people affected with HIV/AIDS by health care professionals</strong></td>
</tr>
<tr>
<td><strong>- Promote home, hospice care for HIV/AIDS patients</strong></td>
<td><strong>- Ensure STI clinics and hospitals have proper level of staffing, equipment, supplies and drugs for HIV/AIDS/STI</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Evaluation</strong></th>
<th><strong>Evaluate the HIV/STI Control Programme</strong></th>
<th><strong>National HIV/STI Control Programme, and partner organisations</strong></th>
<th><strong>Government of Jamaica, USAID, UN Theme Group on HIV/AIDS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>- Develop and apply evaluation tools to guide policy, planning and development of the national response to HIV/AIDS/STI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
November 22, 2001

Mr. Girindra Beeharry,
The World Bank,
1830 I Street, NW
Washington DC 20433

Dear Mr. Beeharry,

The decision has been taken to place Dr. Yilada Gebre as the Director of the Project Implementation Unit for the Government of Jamaica/International Bank for Reconstruction and Development (World Bank) HIV/AIDS Project. This project will be a significant component of the National HIV/AIDS & STI Prevention and Control Programme which is under the auspices of the Ministry of Health.

Additional members of the Project Implementation Unit (PIU) are also being hired. These include Dushan Brian – Procurement Specialist and Jeanice Richards – Finance and Administration Officer.

As previously discussed, this completes the core team of the PIU. The component heads for prevention and capacity building have also been identified and are available for early hiring. The supporting reports from the selection of these posts will be submitted shortly by Dr. Deanna Ashley.

The Cabinet submission on HIV/AIDS Control was considered by Cabinet on Monday, November 19, 2001. Cabinet endorsed the National Strategic Plan and the GOJ/World Bank project, including the proposed institutional and reporting arrangements. Jamaica, therefore, has met all the preconditions for negotiation of this important loan. We look forward to early negotiations and completion of the loan agreement.

Thank you for your consistent support and cooperation.

Sincerely,

Dr. J. Peter Figueroa
Chief Medical Officer of Health
Summary of findings from review of Indicators:

General:
The MOH Management Information System policy decision has been taken to select Infomix as the data warehousing vehicle for the MOH. The current databases within the MOH are written in a number of different programming languages. The programming languages which concern HIV and STI databases are MS Access, Fox Pro 2.6, Visual Basic 6.0 (and D-Base). Advice will be needed on the compatibility of each of these databases for back-ending into and data storage in Infomix.

Of vital importance to linking data between databases is the issue of unique identifier (possibly TRN). This is a policy level decision within the MOH that should be fully explored and taken soon.

Impact Indicators:

HIV Prevalence rates:
ANC population:
In order to track HIV prevalence rate among antenatal clinic (ANC) attendees the Monthly Clinic Summary Report (MCSR) will require changes to daily tally sheets, monthly reporting forms, database and reports to reflect capture of these data. To allow for capture of numerator data, a new field for “total HIV positive ANC attendees confirmed by NPBL” and for denominator data, a field for “total ANC first visit clients tested for HIV” will be required for ANC attendees. The rapid field test method is already in place for syphilis screening so data capture for HIV testing should follow data collection routines already in place and familiar in the field. The difference will be that positives must be confirmed by NPBL so that results reported will always lag behind number tested.

Since it is not possible to make the changes to the MCSR forms and database by January 2002 to accommodate these data, the recommendation is that the current sentinel surveillance system (SSS) for HIV continue throughout 2002 while seeking to increase the sample size from the larger pool of tested mothers. Therefore it is important to maintain current selection of parishes and clinics for SSS in 2002 to allow comparability of data.

Thought must be given to the staffing needs in the field, lab and at the MOH to accommodate this parallel system for 2002. After 2002, the total number of tests done by the NPBL should actually drop from current levels of 29,000 tests to approximately 10,000. This figure allows for current HIV positive rate within ANC population and 1/10 negatives to be sent to the NPBL for quality assurance.

In addition, it would be advisable to add a field to the HIV/AIDS Tracking System (HATS) database to track “testing source” (i.e., where patient was first seen/tested) of all HIV+ patients. “Testing source options should include: ANC, STI clinic, PHC, Private Physician, Public Hospital. This would provide aggregate numerator data on each sub-population available from the HATS database. This change will probably not be feasible to incorporate before 2002 as the current “HIV Confidential Reporting Form” and database have recently been updated and new forms printed. The goal should be to have this in place as soon as possible.

STI population:
To allow tracking of HIV screening of STI clinic attendees, another field should be incorporated into the MCSR system (tally sheets, monthly summary reporting form, database and reports) for “Total number of STI clinic attendees tested for HIV this month” and “Total number of STI clinic attendees with confirmed HIV positive results this month.” As for the ANC population, the recommendation is to continue with Sentinel Surveillance of STI population for 2002 to ensure valid data and the proper implementation of data collection changes before a switch-over is made.

Medibase Software:
The MOH plans to purchase customer specific software called Medibase for use at the clinic level for tracking disaggregated patient data on STI/HIV patients. The program has not been fully tested for programming bugs and data edit checks. There are currently some basic conceptual problems with the database in that it was designed as a stand-alone program for a single user. If it is to be used by multiple users on a network, the current method of generating identification numbers will have to be changed. Additionally, if data is to be aggregated at the parish, regional and national level, changes will be required in the record key in order to maintain uniqueness when records are “dumped” from different sources (clinics) into one central data warehouse. Automatic date formats which the program currently uses will need to be altered so that data can be entered on a day other than when the patient was seen and laboratory results entered at a later time. Data entry needs to be changed to allow for rapid HIV test results and confirmatory HIV test results. Basic data edit checks and data entry masks should be implemented to prevent data entry errors and preserve data quality as much as possible. The help feature requires updating and a user manual should be written to accompany the software. The system generates a few basic reports but many more reports will be required from the system and someone will need to be hired to do this.

Initially Medibase will be pilot-tested at the Comprehensive Clinic in Kingston and the plan is to expand island-wide parish by parish. There are cost implications to this plan for hardware purchase for each clinic and parish office, training of staff, and for MIS personnel to maintain and manage increasing numbers of computers and data flow. There may also be further software development costs. The source codes will be provided by the program developer. A software support contract is critical or having an in-house Visual Basic programmer for debugging and creating required reports.

General Population:
The current sentinel surveillance program should continue maintaining the sample pool for general population rates for ages 15-24 to ensure comparability of data. Increase sample size if possible.

KAPB Survey:
The KAPB survey that has been done historically by Hope Enterprises should provide the majority of knowledge, attitudes and behavioral indicators required by the project. There may only be need for a few additional questions particularly in the area of determining attitudes to PLWHA.

Behavioral Surveillance Surveys:
The Behavior Surveillance Surveys provide the indicators required for this project. Thus far no BSS has been done in the MSM population.

Facility Surveys:
A Facility Assessment Survey was done in 2001 but the tool evaluated STI clinics and not hospitals and inpatient or OI care. There is therefore no current baseline data available for inpatient care and treatment of OIs and PLWHA. A facility assessment survey tool will be required for evaluating quality of inpatient care at mid-term and end of project.
## Draft of Monitoring and Evaluation Unit Report and Dissemination Plan Matrix:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Financial</th>
<th>Other</th>
<th>Biological Surveillance</th>
<th>Behavioural Surveillance</th>
<th>Dissemination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-annual</td>
<td>AIDS statistics</td>
<td>- Activities</td>
<td></td>
<td></td>
<td>World Bank, USAID, COHRD, Ministry of Health, Health Regions, Other government ministries, Health workers, NGO’s, media, PAHO</td>
</tr>
<tr>
<td></td>
<td>- Surveillance</td>
<td>Surveillance</td>
<td>To Whom</td>
<td>Method</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surveillance</td>
<td>Surveillance</td>
<td>Email, hard copy, media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annually</td>
<td>MTCT program</td>
<td>- Mass Media</td>
<td>- HIV prevalence rates in a) ANC population, b) 15-24 pop., c) STI clinic pop., d) CSWs</td>
<td>Idem</td>
<td>Idem</td>
</tr>
<tr>
<td></td>
<td>activities</td>
<td>Campaign</td>
<td>Syphilis prevalence rate in ANC attendees and STI prevalence rates</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>institutional capacity building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Home and community based care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Lab capacity, quality and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MIS networking issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VCT &amp; MTCT intervention coverage</td>
<td>- Outreach programs</td>
<td></td>
<td>Email, hard copy, media</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospice care &amp; halfway care sites</td>
<td>- Progress on establishment of national training center</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following section contains excerpts from the Jamaican Country Health Profile produced by PAHO (2001) and from the Clearinghouse on Health Sector Reform in Latin America and the Caribbean (1999). The full profile can be downloaded from http://www.paho.org/English/SHA/prflJAM.htm and http://www.americas.health-sector-reform.org/english/jampren.doc.

<table>
<thead>
<tr>
<th>Mortality Indicators</th>
<th>Last Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant mortality rate, reported</td>
<td>24.5</td>
</tr>
<tr>
<td>Under-5 mortality rate, reported</td>
<td>25.8</td>
</tr>
<tr>
<td>Maternal mortality rate, reported</td>
<td>111.0</td>
</tr>
<tr>
<td>Proportion of under-5 registered deaths due to intestinal infectious diseases</td>
<td>13.0</td>
</tr>
<tr>
<td>Proportion of under-5 registered deaths due to acute respiratory infections</td>
<td>7.0</td>
</tr>
<tr>
<td>Mortality rate from communicable diseases, estimated</td>
<td>33.4</td>
</tr>
<tr>
<td>Mortality rate from diseases of the circulatory system, estimated</td>
<td>215.0</td>
</tr>
<tr>
<td>Mortality rate from neoplasms, all types, estimated</td>
<td>93.6</td>
</tr>
<tr>
<td>Mortality rate from external causes, estimated</td>
<td>6.7</td>
</tr>
</tbody>
</table>
The Ten Leading Causes of Death in Jamaica: 1999

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number of deaths</th>
<th>Deaths per 100,000 population</th>
<th>Ratio of males to females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malignant neoplasms</td>
<td>2,234</td>
<td>86.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Heart disease</td>
<td>2,184</td>
<td>84.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>1,648</td>
<td>63.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>1,545</td>
<td>59.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Assault (homicide)</td>
<td>849</td>
<td>32.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Hypertension</td>
<td>825</td>
<td>32.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Certain conditions originating in the perinatal period</td>
<td>632</td>
<td>24.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Human Immunodeficiency Virus (HIV)</td>
<td>549</td>
<td>21.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Accidents (Unintentional Injuries)</td>
<td>346</td>
<td>13.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>344</td>
<td>13.3</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Indicators of Resources, Access, and Coverage

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Last Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of population with access to drinking water services</td>
<td>80.5</td>
</tr>
<tr>
<td>Proportion of under-1 population vaccinated against poliomyelitis</td>
<td>86</td>
</tr>
<tr>
<td>Proportion of under-1 population vaccinated against measles</td>
<td>88</td>
</tr>
<tr>
<td>Proportion of under-1 population vaccinated against diphtheria, pertussis, and tetanus.</td>
<td>86</td>
</tr>
<tr>
<td>Proportion of under-1 population vaccinated against tuberculosis</td>
<td>94</td>
</tr>
<tr>
<td>Proportion of deliveries attended by trained personnel</td>
<td>95.9</td>
</tr>
<tr>
<td>Physicians per 10,000 inhabitants ratio</td>
<td>2.5</td>
</tr>
<tr>
<td>Annual national health expenditure as a proportion of the GDP</td>
<td>5.4</td>
</tr>
<tr>
<td>Annual public health expenditure as a proportion of the national health expenditure</td>
<td>49.9</td>
</tr>
</tbody>
</table>

System Issues and Health Sector Reform in Jamaica

Traditionally, the public sector has been the focal point of the health system. There are about 33 hospitals in Jamaica, 23 public and 10 private. One public hospital, the University Hospital of the West Indies, is a regional medical and teaching facility and is affiliated with the medical school. The Ministry of Health (MOH) manages 23 hospitals: 2 tertiary hospitals; 6 specialty facilities; 5 secondary care facilities and 10
community hospitals. Most of the rural hospital are old, remnants of the British colonial era. Jamaica has a well-developed and extensive network of about 360 primary care clinics. In 1999 about 1,800 physicians and 1,200 nurses were registered to practice in Jamaica.

Many credit the primary health care system for the country’s relatively good health indices, which resemble that of larger, industrialized countries. Unfortunately, given the changes in health care delivery and financing, the current public health system infrastructure has become burdensome to manage and maintain. The existing public health service system, with its massive infrastructure, is over-extended. Moreover, the changing epidemiological and demographic patterns suggest a need to reconfigure the health system and allocation of resources to better meet the needs of the population.

Prior to this current era of Health Sector Reform, the private sector was not subject to much regulation. As a result, little information is available about the characteristics and performance of the private health sector in Jamaica. This is expected to improve with the development of new laws, regulations and enforcement procedures.

Estimates of total national health expenditure range from about 6 to 9% of the GDP, one of the higher figures in the region. The questionable issue is the financial status and performance of the private sector. The Government (GOJ) spends an average of USS 230 per capita on health. There has been a dramatic growth in the private health care sector over the past 20 years. Around 1980, the MOH was responsible for at least 60 to 70% of health care costs. By 1995, private expenditures for health services represented about 65% of national health expenditures, which are largely dedicated to primary or ambulatory care. GOJ provides 35% of national health expenditures, including 95% of hospital care, which is largely free or highly subsidized. In 1995 about 8 to 10% of the population was estimated to have some form of private health insurance, including public sector workers. Drugs are the third largest component of health costs (about 10% of total national health expenditure). GOJ expenditures on health services represent about 6% of government budget, the second largest domestic item after education. The MOH employs about 10% of the public workforce. Secondary care consumes about 65% of the MOH’s annual health budget. Primary care’s share of the public budget ranges between 17 and 22%. In 1999, personnel costs represented about 75% of the MOH operating budget. The GOJ’s annual health budget has been stable or gradually decreasing during the second half of the decade, as a reflection of trends in the economy.

Health Sector Reform is not new to Jamaica. In the 1970s, the World Bank developed an extensive nationwide network of primary care clinics and the first regional medical facility. The 1980s brought the Health Services Rationalization Project, a partnership between the GOJ and the Inter-American Bank to modernize plant and equipment in a number of hospitals. From 1988 to 1998, the GOJ with support from USAID operated the Health Services Initiative Program. The Health Sector Reform Program, a partnership between the GOJ and the IDB, began in the mid-nineties. This Program includes the restructuring of the MOH head office and the decentralization of management into four Regional Health Authorities. The development of a National Health Insurance program, the integration of primary and secondary services and the establishment of quality assurance standards are examples of other program objectives.

The Health Sector Reform Program was launched at a time when Jamaica faced many other challenges. A number of Government initiatives are being conducted at the same time, for example Public Sector Reform and a new National Industrial Policy. The economy has been slowing since the mid-nineties, which will impact on health care financing. Finally, the Program introduces concepts that are antithetical to traditional ways to organizing, managing, providing and utilizing health services in Jamaica. Considerable education and training will be required to facilitate behavior change in decision-makers, providers and consumers.
Additional Annex 19: Supervision Plan
JAMAICA: HIV/AIDS PREVENTION AND CONTROL PROJECT (SECOND PHASE OF THE
MULTI-COUNTRY HIV/AIDS PREVENTION & CONTROL APL FOR THE CARIBBEAN)

The supervision plan for this project would fall within the overall supervision strategy for the
Multi-Country HIV/AIDS Prevention and Control Adaptable Lending Program (APL) for the Caribbean
region.

I. Supervision Objectives:

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

a) ensure that the project is implemented with due diligence to achieve the project development
   objectives;

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

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

d) facilitate collaboration among donors supporting HIV/AIDS control in Jamaica.

Supervision 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). It 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), and wherever applicable, assessments of
impacts and outcomes that may include changes in knowledge, attitudes, behavior, risk factors, disease and
disability.

Progress in project implementation will be tracked against agreed upon benchmark and performance
criteria for both technical M&E (as outlined in the logical framework) and fiduciary M&E (procurement,
financial management, etc.). A high degree of self-supervision of input use and outputs will be encouraged.
The management information systems planned for procurement, financial management and technical M&E
will capture routine data and information in a systematic way to help guide the project team in suitably
executing the project.

II. Roles of different agencies in supervision:

1. PCU and other local entities
   The PCU will play a major role in overseeing and supporting the project activities executed by the MOH,
   line ministries, NGOs, CBOs and other entities. They will supervise the implementing agencies of the
   project and submit periodic reports to IBRD on project progress. Random visits to such agencies would be
   conducted by the PCU. Members of the NAP, NAC, NPC might also participate, if necessary, in field
   visits with PCU staff. The participation of local agencies in project supervision would help strengthen local
   institutional capabilities and increase the cost-effectiveness of IBRD supervision.

2. IBRD
   To get the project off to a good start and to assure quality implementation, IBRD will be actively involved
with at least two supervision missions a year, at least in the early years of the project. As outlined in the
APL, some IBRD supervision missions could also be in the form of a conference for several Caribbean

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countries taking part in the APL. This would help in considerable cross-fertilization of implementation experience between Jamaica and other countries. Supervision during the first year would concentrate on project launch activities and formal and informal training in supervision techniques. During the following years, it would gradually shift toward program management. Outside mission, continuous technical and programmatic supports will be provided to the project team, based on its needs, by IBRD as well as key external partners.

3. Other external partners
IBRD supervision would be carried out in close coordination with external partners active in HIV/AIDS control in Jamaica such as USAID, PAHO/WHO, UNAIDS, CAREC. Special emphasis would be laid on such a collaboration as said agencies have extensive technical expertise and experience in the area and they are expected to provide important technical guidance to help implement the project. In this context, joint supervision missions and full exchange of progress reports and supervision mission reports of donors from their independent missions would be encouraged.

III. Reporting
The PCU through its quarterly and annual progress reports, including the audited accounts, will help provide IBRD an overview of project implementation status on a regular basis. The detailed format of such reports would be agreed upon between IBRD and the PCU. In general, quarterly reports would focus on process, management, fiduciary issues, inputs and outputs. Besides said issues, annual reports would also include reporting on project outcome/impact wherever applicable.

IV. Mid-Term Review
The mid-term review will be carried out in partnership with other external partners (PAHO/WHO, UNAIDS, USAID, CAREC), to assess the program's progress and overall impact on the HIV/AIDS epidemic in the Jamaica, using the agreed upon outcome/impact indicators. 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 as well as implementation strategy. The review would synthesize lessons learned and could lead to any necessary adjustment in the project to improve its effectiveness, and the reallocation of financial resources among project components. Extensive involvement of external partners in mid-term review would ensure the objectivity of the findings. Special surveys and studies (e.g. evaluation of key interventions) would be commissioned to provide the information base for the Mid-Term Review.