
Chapter 2

Effective Approaches on Anti-HIV/AIDS Measures

1. Overview of HIV/AIDS

1-1 Current Situation and Issues in HIV/AIDS: Importance of Anti-HIV/AIDS Measures

As of December 2001, 40 million people were estimated to be living with Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) worldwide. Of this 40 million, 90 percent live in developing countries while 70 percent reside in the sub-Saharan Africa region. There is still no effective treatment for HIV/AIDS. HIV infection causes damage to the body's immune system and requires life-long management. Deterioration of the immune system leads to serious opportunistic infections (Tuberculosis, Pneumocystis Carinii Pneumonia, Candidiasis: onset of AIDS symptom) and death.

HIV/AIDS leads not only to physical suffering, but also mental and social suffering such as discrimination.

HIV infection and AIDS cause not only physical suffering but also mental and social suffering. The former is an opportunistic infection resulting from immune deficiency while the latter includes suffering from living with HIV/AIDS itself, prejudice from others, and loss of employment opportunities. Since HIV/AIDS is mainly transmitted via sexual intercourse, the majority of new infections occur in young people especially women. Children are also vulnerable to HIV infection via mother-to-child transmission. In addition, there is also an increased number of orphans due to the deaths of their parents from AIDS. Consequently, the HIV/AIDS issue could be considered not only a health care problem but also an obstacle for social development in the next generation.

Decreased labor supply and a rise in health expenditure/social security expenses influences national decisions.

There are various problems at the national level regarding HIV/AIDS. The increase in the number of HIV infections and AIDS cases among young people of reproductive age has led to a fall in the labor force due to death or hospitalization. Furthermore, the HIV/AIDS issue has caused health expenditure for research and treatment on symptoms related to opportunistic infections as well as social security expenditure to rise. Therefore, HIV/AIDS could hinder overall development and poverty alleviation efforts at the national level.

HIV Infection:
The state of propagation of HIV in the body

AIDS:
The final stage of HIV infection following the outset of opportunistic infections within an immunologically deficient state

1-2 Definition of HIV/AIDS

AIDS stands for Acquired Immunodeficiency Syndrome, the state with opportunistic infections caused by weakened immune system through the HIV infection. HIV infection damages the immune system, leading to an inability to maintain good health and causing the infected person to be in a critical condition, with opportunistic infections, diseases that would otherwise pose no problems in healthy people.

HIV disease proceeds in the following stages; acute infection, asymptomatic carrier, and AIDS. AIDS is a chronic disease and its latent period is extremely long. The time that elapses between infection and the onset of symptoms varies from 2 to 20 years. The asymptomatic carrier period is reported as 5 years on average at the most serious level and in the most seriously affected countries. Basically, clinical classification methods for stages of diseases as defined by the World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) are often applied. Based on these classifications in principle, this chapter will define HIV and AIDS as follows; **HIV will be defined as the state of propagation of HIV in the body, and AIDS as the final stage of HIV infection following the outset of opportunistic infections within an immunologically deficient state.**

1-3 International Trends

In the 1970s, unique clinical symptoms called Pneumocystis Carinii Pneumonia, etc., which occur when one's immune system is not functioning well, were identified in Europe and the United States. The existence of HIV was confirmed by the National Cancer Institute (NCI) and the Pasteur Research Center, France in 1981 when similar symptoms among men who have sex with men (MSM) in the United States were identified.

WHO has become the core organization in implementing international measures on HIV issues since 1986. However, the HIV epidemic and its impact on economic and social development have resulted in calls for the expansion of the United Nations interventions on these problems. The **Joint United Nations Programme on HIV/AIDS (UNAIDS)** was established in 1996 as a joint supporting program to deal with HIV/AIDS on an international level and consequently took over the service provided by the Global Programme on AIDS (GPA) under WHO. The mission of UNAIDS is to lead, strengthen and support an expanded response to the HIV/AIDS epidemic that will, prevent the spread

Establishment of the Joint United Nations Programme on HIV/AIDS (UNAIDS) in 1996

of HIV, reduce the vulnerability of individuals and communities to HIV/AIDS, provide care and support for those infected and affected by the disease, alleviate the socio-economic and human impact of the epidemic.

HIV/AIDS began to be widely recognized as a global issue in the late 1990s. Initiatives in anti-HIV/AIDS measures were inaugurated regionally, such as the International Partnership against AIDS in Africa (IPAA) and the Baltic Sea Declaration on HIV/AIDS Prevention.

In July 2000, the issue of strengthening health care development, including reducing HIV prevalence was addressed at the Kyushu-Okinawa G8 Summit. Furthermore, the prevention of an HIV/AIDS epidemic was announced as one of the Millennium Development Goals (MDGs) adopted by the United Nations General Assembly (Millennium Summit) in September 2000.

The United Nations General Assembly adopted Millennium Development Goals (MDGs) in 2000

Global Fund to Fight AIDS, Tuberculosis and Malaria in 2001

The United Nations General Assembly Special Session on HIV/AIDS in June 2001 addressed the issue of international cooperation on against HIV/AIDS for the target period. It also issued a reminder that the global HIV/AIDS epidemic, which undermines social and economic development throughout the world, constitutes a global emergency and is one of the most formidable challenges to human life and dignity, and to the effective enjoyment of human rights. As a result of this United Nations General Assembly Special Session on HIV/AIDS, the Secretary General and G8 countries raised a contribution of 1.3 billion dollars in their joint communiqué at the G8 summit in July 2001, for the establishment of a global HIV/AIDS and health fund. The fund was later renamed the **Global Fund to Fight AIDS, Tuberculosis and Malaria**.

The United Nations General Assembly Special Session in 2001

1-4 Japan's Assistance to Anti-HIV/AIDS Measures

Fully aware of the impact of HIV/AIDS on society, Japan has been working on the **Global Issues Initiative on Population and AIDS (GII)** as part of its own action plan since 1994. The GII initiated active engagement in anti-AIDS measures in developing countries. GII supports comprehensive approaches on family planning and population statistics (Direct Cooperation for Population), promotion of primary education, literacy education, and the empowerment of women (Indirect Cooperation for Population), together with testing and research on HIV/AIDS and the dissemination of knowledge on HIV/AIDS (Cooperation for anti-HIV/AIDS Pandemic).

Global Issues Initiative on Population and AIDS (GII) in 1994

The Okinawa ID (Infectious Diseases) Initiative was declared at the above-mentioned Kyushu–Okinawa G8 Summit in July 2000 with a pledge of 3 billion dollars over 5 years to fight infectious diseases, with HIV/AIDS being

Initiative in the fight against infectious and parasitic diseases on the occasion of the Kyushu-Okinawa G8 Summit in 2000 Declaration of 3 billion dollars assistance over 5 years on anti-infectious disease initiatives

Increasing tendency of ODA funding for health and medical sector

JICA's assistance is mainly through Project-type Technical Cooperation, Provision of Equipment, and Training Program schemes.

a central issue in development programs. The 3 basic philosophies of the incentives are, fighting infectious diseases as a central issue of development programs in developing countries, particularly in respect to efforts to reduce poverty, promotion of global partnerships and community-based action, provision of assistance to developing countries by applying Japan's own experiences on public health and anti-infectious disease measures. The Okinawa International Conference on Infectious Diseases was held in December 2000 as a follow-up to the Kyushu-Okinawa G8 Summit. In this conference, the strengthening of efforts on anti-HIV/AIDS as a major issue in fighting infectious diseases was confirmed.

Among Official Development Assistance (ODA) funding on health and the medical care sector¹, Grant Aid grew from 15 billion yen (7.8%)² in fiscal year 1995 to 24 billion yen (20.6%) in fiscal year 1999. In the technical cooperation sector, the number of trainees accepted increased from 1,281 (12.2%) to 3,154 (17.6%) and the number of experts dispatched from 478 (15.2%) to 553 (13.8%) in fiscal years 1995 and 1999, respectively.

The funding for GII (Population/AIDS sector) was 77.6 billion yen in fiscal 1999, while HIV/AIDS related issues were allocated 1.31 billion yen (1.7%).

In terms of statistics on JICA's cooperation in the health and medical sector, the figure increased from 13 billion yen in fiscal year 1995 to 15.5 billion yen in fiscal year 1999. HIV/AIDS related issues were allocated 550 million yen (3.5%).

JICA's assistance on anti-HIV/AIDS measures is mainly through Project-type Technical Cooperation, Provision of Equipment, and Training Program schemes. For Project-type Technical Cooperation, prevention, testing, research, and advocacy on HIV/AIDS in Thailand, the Philippines, Brazil, Ghana, Zambia etc., have been conducted. Additionally, prevention, testing, and research assistance on HIV/AIDS have been implemented in the Tuberculosis Control Project in Cambodia. New budgets for Equipment Supply Program for AIDS Control and Blood tests were allocated in 1996 and the provision of equipment for campaigning, equipment required for safe blood transfusion and donation, and equipment for AIDS diagnosis and HIV testing have also been provided.

¹ Percentage as of whole

² Percentage as of whole general Grant Aid (Debt relief, Non-project Aid, Grant Assistance for Grass-roots Project, Grant Aid for Human Resource Development Scholarship are excluded.)

2. Concept of Assistance for Anti-HIV/AIDS Measures

2-1 HIV/AIDS Issues

HIV/AIDS has physical, mental and social implications. The target of the problem is people living with HIV, AIDS patients and their families.

AIDS was previously thought to be a problem among high-risk groups such as homosexuals and injection drug users (IDUs). However, the number of people infected with HIV has increased among the general population since the 1990s. Since HIV is transmitted mainly via sexual intercourse, it cannot be separated from reproduction, thereby creating a threat to mankind. **HIV/AIDS has physical, mental and social implications for those infected and their families.**

As HIV has spread throughout the world, it has become a priority issue. However, there are still problems with the availability of accurate information, limited budgets, and an insufficient level of technical skills among healthcare providers. As a result, effective national strategies and measures on HIV/AIDS have yet to be formulated. Moreover, although smallpox has been eradicated and poliovirus has been targeted for eradication, anti-HIV/AIDS measures still require funds from donors for at least the next 10 years, unless current measures change dramatically.

Since there is still no effective treatment for AIDS and the cost of anti-HIV drug is still extremely high, prevention of HIV infection is important.

There is still no effective treatment for HIV disease. Although Highly Active Anti-Retroviral Therapy (HAART), i.e., the anti-HIV combination therapy, could delay the onset of AIDS, it is extremely expensive and can be rarely applied to people living with HIV/AIDS in developing countries. To cope with this problem, some countries have implemented legal reforms that would allow for parallel importation and use of anti-HIV medicine and reproduced non-licensed drugs. Since an AIDS vaccine is still in the research stage, time is required for development and application, which is estimated to take several decades before they are available in developing countries. Consequently, **the most important countermeasure at the moment is the prevention of HIV infection.** Situations and possible countermeasures vary across countries. If risks of infection through sexual transmission, mother-to-child transmission and blood transmission are high, it is necessary to focus on reducing these risks.

Mental and social care such as measures against prejudice are also important.

It takes several to 20 years for the onset of AIDS symptoms. In addition to physical suffering, prejudice toward HIV/AIDS (due to its historical characteristics) commonly causes a deterioration of quality of life both in mental and social aspects. Therefore, **the measures for these mental and social issues**

Cooperation between the state and people on comprehensive measures at the national level is also necessary.

should not be forgotten.

At the national level, there should be cooperation among central governments, local governments and private organizations to minimize HIV infection. **It is essential for governments to identify HIV/AIDS issues correctly and to consider taking effective action to minimize the influence of HIV/AIDS.** Among those actions, there should be action taken to prevent the spread of infection to regions still unaffected. For regions where the infection has already spread to the general population such as sub-Saharan Africa, it is also necessary to establish a support system for the regional community to assist people living with HIV/AIDS and their families.

HIV/AIDS hinders development and affects national health and welfare, and labor supplies.

2-2 Significance of Assistance

HIV/AIDS issues should be understood as a phenomenon that hinders development, affects national health, national welfare, and labor supplies in developing countries. The issues should be taken not only as a health and medical care problem, but also as poverty, social development, economic, and global issues. It is essential to cooperate with each other in order to solve these problems.

2-3 Effective Approaches on Anti-HIV/AIDS Measures

2-3-1 Formulation of “Development Objectives Chart”

Problem analysis and objective analysis on HIV/AIDS issues have been undertaken from several perspectives to clarify how HIV/AIDS problems should be acknowledged. Based on the results, the **“Development Objectives Chart”** was formulated by systematically arranging the goals and means. Specifically, three Development Objectives for HIV issues were identified (presented below). Furthermore, each Development Objective was broken down into the following; Mid-term Objectives, Sub-targets of Mid-term Objectives, and Examples of Activities by clarifying the goals-means relationship.

Three Development Objectives

<Development Objectives>

1. Prevention and Control of HIV/AIDS
2. Care and Support for People living with HIV/AIDS and their Families
3. Implementation of Effective Measures at the National Level

Figure 1 Development Objectives Chart on HIV/AIDS Control

Development Objectives	Mid-term Objectives
1. Prevention and Control of HIV/AIDS Number of people infected with HIV and people newly infected Number of AIDS patients Deaths due to AIDS (Number classified by gender and age, together with culture, religion and poverty background should also be noted.)	1-1 Reduction of Sexual Transmission Risk Prevalence rate and incidence rate of HIV in general population Prevalence rate and incident rate in commercial sex workers (CSWs) Percentage of sexual transmission cases in all cases
	1-2 Reduction of Mother-to-Child Transmission (MTCT) Risk Percentage of MTCT cases in all cases Prevalence of HIV in pregnant women
	1-3 Reduction of Infection Risk through Blood Transfusions Percentage of cases through blood transfusion in all cases Percentage of HIV contamination in blood supply and HIV screening rate in blood supply
	1-4 Reduction of HIV Infection Risk among Injection Drug Users (IDUs) caused by Contaminated Needles HIV infection rate among IDUs
	1-5 Development and Practical Application of Effective Vaccines Immunization rate of developed vaccines Efficacy of vaccines
	1-6 Development and Practical Application of Effective anti-HIV medicine or anti-retroviral (ARV) Application rate of developed ARV Efficacy of ARV
2. Care and Support for People living with HIV/AIDS and their Families	2-1 Relief of Suffering caused by Physical Symptoms including AIDS-related Opportunistic Infections Percentage of people living with HIV/AIDS who receive medical support
	2-2 Human Rights of People living with HIV/AIDS and their Families Level of public acceptance of people living with HIV/AIDS
3. Implementation of Effective Measures at the National Level Adequacy of relevant HIV/AIDS programs being implemented and cover ratio of population	3-1 Planning of Appropriate Measures at the National Level Examination results on the feasibility of implementing national strategic measures Examination results on the feasibility of implementing an action plan
	3-2 Improvement of Administrative Capability of Measures against HIV/AIDS Action plan progress Evaluation results by administrative auditing agencies
	3-3 Moderation of Public Finances for Health Care Percentage of national budget given to medical and health care sector Percentage of the medical and health care sector budget allocated to HIV/AIDS Percentage of budget among other sectors given to HIV/AIDS measures

*Circled numbers imply major indicators.

The chart presents an overall picture of HIV/AIDS issues and also includes activities that are difficult to implement in the context of JICA's current cooperation. Activities listed in the 'Examples of Activities' column are those required to achieve the Sub-targets of the Mid-term Objectives. Actual activities are not limited to these examples.

Examples of Activities:
 JICA has considerable experience
 JICA has certain experience
 JICA has experience as a component of projects
 × JICA has little experience

Four symbols () (×) were utilized to describe the extent of experience on each project in the column "Examples of Activities" in the chart. means that JICA has considerable experience, represents the fact that JICA has certain experience, indicates experience as a component of the projects, and × areas signify where JICA has little experience.

With regard to the Sub-targets of Mid-term Objectives, JICA's main interventions in the HIV/AIDS field are listed in the "JICA's Schemes" column. The symbol represents a project which will potentially serve as a model for other similar projects.

JICA's Schemes:
 A project which will potentially serve as a model for other similar projects.

A list of JICA's "Relevant Projects on HIV/AIDS" is attached in Appendix 1 "JICA's Operations in Anti-HIV/AIDS Measures". Those projects were classified based on the "Examples of Activities" described in the "Development Objectives Chart" and were put in the column "Case No." in this chart. Accordingly, the Development Objectives Chart shows the trend of JICA's relevant projects on HIV/AIDS. From this chart, it is hoped that the kinds of activities carried out for achieving the objectives can be identified.

2-3-2 Overview of "Development Objectives Chart"

The following is an outline of approaches and points of each Development Objective.

Development Objective 1: Prevention and Control of HIV/AIDS

【Development Objective 1: Prevention and Control of HIV/AIDS】

As there is still no cure for HIV/AIDS, it is necessary to prevent HIV infections to reduce the prevalence rate by mitigating the root cause of the problem. Eradicating the origin of the problem is very important in terms of national development as an increase in infected people leads to an increase in medical and social security expenses. With regards to a reduction in the HIV prevalence rate, the 'halting and reduction of the spread of HIV/AIDS by 2015' was set as one of the Millennium Development Goals (MDGs) adopted by the United Nations General Assembly in September 2000. The following goals

were announced at the Declaration of Commitment on HIV/AIDS³ by the United Nations General Assembly Special Session on HIV/AIDS in June 2001. As Japan has taken an initiative in formulating these goals, it will need to take this into consideration when it undertakes anti-HIV/AIDS measures.

Goals of the United Nations General Assembly Special Session on HIV in 2001

Examples of Goals Declared in the Declaration of Commitment on HIV/AIDS by United Nations General Assembly Special Session

- By 2005, reduce HIV prevalence among young men and women aged 15 to 24 in the most affected countries by 25%, and by 25% globally by 2010.
- By 2005, ensure that at least 90%, and by 2010 at least 95% of young men and women aged 15 to 24 have access to the information and education on HIV infection.
- By 2005, reduce mother-to-child transmission by 20% and by 50% by 2010.

HIV is transmitted through blood and bodily fluid (seminal liquid or vaginal lubrication) and is largely divided into “**Sexual Transmission (ST)**”, “**Mother-to-child Transmission**” and “**Blood Transmission**”. The “Development Objectives Chart” divides the transmission path into; infection through blood transfusion and infection due to the reuse of syringes and needles without sterilization.

Mid-term Objective 1-1: Reduction of Sexual Transmission Risk

Mid-term Objective 1-1: Reduction of Sexual Transmission Risk

HIV Infection was first expanded among men who have sex with men (MSM). However, in several countries **heterosexual intercourse has become the main route of HIV transmission now**. Particularly in settings where HIV prevalence is low, it has a tendency to be transmitted via commercial sex workers (CSWs). **Based on the result of surveillance, it is necessary to identify target groups and disseminate information that enables them to gain correct knowledge on HIV/AIDS and safer sex. In addition, it is important to promote safer sex by raising awareness on condom use and by distributing condoms.**

Moreover, women’s risk of infection is higher since the structure of women’s reproductive organs is biologically easier to infect. Women are vulnerable to be forced into sexual intercourse and hardly ever take the initiative in using either male or female condoms. Bearing this in mind, it is necessary to integrate the activities on HIV/AIDS into the reproductive/maternal and child health projects to enable work on; **sharing responsibility for safe sex among**

³ United Nations (2001)

Mid-Term Objective 1-3 Reduction of Infection Risk through Blood Transfusions			
Indicators: Percentage of cases through blood transfusion in all cases Percentage of HIV contamination in blood supply and HIV screening rate in blood supply			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Reduction of HIV Contaminated Blood Percentage of blood banks per region	<ul style="list-style-type: none"> × Establishment of blood bank to counter the decrease of blood selling and emergency blood transfusion supply Development of legal and organizational control for preventing blood selling × Promotion of safe blood transfusion Provision of clean medical equipment 	14 18	<ul style="list-style-type: none"> • Study on current situation of blood transfusion (Overseas Development Study) • Provision of equipment for safe blood donation (Provision of Equipment)
Enforcement of Blood Screening Screening rate of blood supply for transfusion Accuracy of HIV testing such as false negative rate	<ul style="list-style-type: none"> Establishment of testing techniques Education of testing techniques Establishment of testing system for blood screening Development of screening kits, equipment and facilities Development of blood screening kits tailored to local requirements × Establishment of own-supplied testing reagent system for blood screening Training to improve blood screening systems 	10, 11, 20 11, 29 11, 14 16, 19 10, 11 11, 29	<ul style="list-style-type: none"> • Support for effective implementation of blood screening (Project-type Technical Cooperation/ Provision of Equipment) • Technology transfer for blood screening (Overseas Training) • Study on current situation of blood screening (Overseas Development Study)

Mid-Term Objective 1-4 Reduction of HIV Infection Risk among Injection Drug Users (IDUs) caused by Contaminated Needles			
Indicator: HIV infection rate among IDUs			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Reduction of Drug Injection Behavior Number of injecting drug users (IDUs) Number of drug injections	<ul style="list-style-type: none"> × Drug dependence treatment <ul style="list-style-type: none"> • Counseling • Usage of drug substitutes • Campaign for reduction of illegal drug use 		
Reduction of Syringe and Needle Reuse Percentage of syringe and needle reuse	<ul style="list-style-type: none"> × Replacement of used syringes and needles × Education on sterilization method of syringes and needles 		

Mid-Term Objective 1-5 Development and Practical Application of Effective Vaccines			
Indicators: Immunization rate of developed vaccines, Efficacy of vaccines			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Vaccine Development Number of vaccines in each phase of clinical testing Number of vaccines being developed Efficacy of vaccines	Joint research and development support for vaccines and related basic medical areas	4	Establishment of evaluation system on vaccines (Project-type Technical Cooperation)
Establishment of Vaccine Purchase and Handling System Price of vaccines Vaccine supply system	<ul style="list-style-type: none"> × Vaccine supply × Distribution planning and implementation 		

Mid-Term Objective 1-6 Development and Practical Application of Effective anti-HIV medicine or anti-retroviral (ARV)			
Indicators: Application rate of developed ARV, Efficacy of ARV			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Medicine Development Number of curative medicines in each phase of clinical testing Number of medicines being developed	<ul style="list-style-type: none"> × Joint research and development support on medicine and experimental medical-related area × Drug resistance research cooperation 	4	
Development of Purchase of Medicine and Handling System Price of medicine Medicine supply system	<ul style="list-style-type: none"> × Medicine supply × Distribution planning and implementation 		

* "Case No." corresponds to the number in the list of relevant projects (see appendix 1.)

Examples of Activities:	<ul style="list-style-type: none"> JICA has considerable experience JICA has certain experience JICA has experience as a component of projects × JICA has little experience
JICA's Schemes:	A project which will potentially serve as a model for other similar projects

Sexual transmission is the main mode of HIV infection. Dissemination of clear knowledge to target groups, promotion of safe sex, empowerment for men and women, promotion of VCT, and early detection and treatment of other STIs are important.

partners, promotion of implementation of a method to protect oneself, and empowerment which is beyond gender differences between men and women in order to allow women to enjoy human rights equivalent to men.

Like other **Sexually Transmitted Infections (STIs)**, most people do not notice that they are infected until symptoms appear. Therefore, an effective way to prevent the disease from spreading is to make people aware of their infection in order to prevent it from being transmitted to others. It is thought that people who are fully aware of HIV infection risks and transmission risks to others will avoid those risks and have safer sex. In this regard, **Voluntary Counseling and Testing (VCT)** is believed to be a significant key to prevent the spread of HIV. VCT is a combination of HIV testing and pre and post counseling services, which ensures one's confidentiality and encourages behavioral change. Since **early detection and early treatment of other STIs** can lower the probability of HIV infection, this is also an effective approach in enhancing the level of knowledge of STIs through education and promoting the treatment of curable STIs.

**Mid-term
Objective 1-2:
Reduction of
Mother-to-Child
Transmission Risk**

Mid-term Objective 1-2: Reduction of Mother-to-Child Transmission (MTCT) Risk

Numbers of Infection through mother-to-child transmission is second to sexual transmission. Deciding to have or not to have breast-feeding should be made depending on the hygienic conditions of the region.

Mother-to-child transmission is the second major infection path. A short-term regimen of AZT or Nevirapine is being used to prevent infection at present. Much attention has been given to this treatment because it can reduce HIV transmission risks with only a small amount of application. Although this kind of intervention can prevent HIV transmission to children, it is not effective in improving the mother's health. This is why it requires more discussion not only from a technical point of view, but also from other aspects. Some are concerned about the increased number of orphans and the possible epidemic of drug resistant viruses. Breast-milk substitutes have proven to be another effective measure in preventing HIV transmission to the newborn. However, replacement feeding is not easily implemented in developing countries where hygiene conditions are poor and water sources and appliances for breast-milk substitutes are unsanitary. In addition, it is likely that breast-milk substitutes are not affordable in a majority of these countries. On the other hand, breast-feeding is considered to be effective in improving the body's immune system and preventing the prevalence of other infectious diseases. Consequently, necessary measures should be taken based on the economic and hygienic conditions of each country and region.

**Mid-term
Objective 1-3:
Reduction of
Infection Risk
through Blood
Transfusions**

HIV infection risk through blood transfusion is high, but actual transmission has been reduced. It is necessary to improve blood-screening techniques and strengthen medical interviewing techniques with blood donors in order to supply safer blood.

**Mid-term
Objective 1-4:
Reduction of HIV
Infection Risk
among Injection
Drug Users (IDUs)
caused by
Contaminated
Needles**

**Mid-term
Objective 1-5:
Development and
Practical Application
of Effective
Vaccines
Mid-term
Objective 1-6:
Development and
Practical Application
of Effective anti-HIV
medicine or anti-
retroviral (ARV)**

Mid-term Objective 1-3: Reduction of Infection Risk through Blood Transfusions

Considering that HIV can be transmitted with only one exposure to contaminated blood, the risk of **HIV infection per contract through blood transfusion** may be relatively high compared to sexual transmission. However, HIV transmission through blood transfusion has fallen since HIV-antibody testing techniques were developed. Nevertheless, since the amount of HIV-antibodies included in the blood is very little at the initial stage of HIV infection, it cannot be detected by current screening techniques during the window period, i.e. 6-8 weeks after infection. During this period, it is impossible to completely detect HIV contaminated blood even in developed countries. This is more difficult in developing countries where the screening of blood for transfusion is yet to be implemented. **Thus, it is necessary to improve blood-screening techniques that ensure accuracy, as well as strengthen medical interviewing techniques with blood donors** to supply safer blood.

Mid-term Objective 1-4: Reduction of HIV Infection Risk among Injection Drug Users (IDUs) caused by Contaminated Needles

Promotion for behavioral change in drug use is indispensable in preventing HIV infection among injection drug users (IDUs). Some countries have taken practical measures such as encouraging users to use disposable syringes and needles, changing used syringes for new ones as well as providing oral administration treatment drugs for drug dependence. However, since drug use for non-medical purposes is considered illegal, drug abuse related activities are usually not supported by both donors and recipient countries.

Mid-term Objective 1-5: Development and Practical Application of Effective Vaccines

Mid-term Objective 1-6: Development and Practical Application of Effective anti-HIV medicine or anti-retroviral (ARV)

Although HIV/AIDS treatment is not well established, there is a significant amount of relevant research going on. One study is researching the application of diagnosis and treatment for opportunistic infections based on the situation of concerned countries. Others include detection of HIV strains for surveillance in relevant countries, dissemination of knowledge, and research on society, culture and behavior for behavioral change, etc. These studies are contributing to reduce the infection rate by each mode of transmission.

However, **further research and development** on medicine and vaccines as well as research on society, culture and behavior are still required through collaboration between the public and the private sectors together with financial support.

JICA's Activities

JICA's cooperation has been focused mainly on improving testing techniques to prevent and control the HIV/AIDS epidemic.

Until present, JICA's assistance has been focused mainly on improving testing techniques to prevent and control the HIV/AIDS epidemic. Aiming at technical improvement for early detection of HIV-infected people, JICA has established research institutes and hospitals with Grant Aid. It has also supported basic HIV research, development of test kits for early detection of HIV, and promotion of laboratory diagnosis techniques as technical assistance for developing countries. Through Grant Aid, JICA has not only established laboratories at the national level, but has also taken measures against sexual transmission such as providing condoms in Viet Nam.

As indicated in the HIV/AIDS Development Objectives Chart, JICA's assistance for HIV/AIDS prevention and control is classified by mode of transmission. JICA's assistance in conducting basic research on HIV in laboratories at the national level and improving detection techniques for promoting laboratory diagnosis has finally improved detection capability. Furthermore, JICA's assistance has contributed to the effective implementation of VCT and blood screening. **It is important to improve such basic detection capabilities of HIV, sexual transmitted diseases and opportunistic infections as well as to take preventive measures against each mode of transmission.**

It is essential to improve detection capabilities by strengthening counseling capability and referral systems for VCT.

It is also essential to improve detection capabilities by strengthening both the counseling capability and a referral system for VCT, in which HIV testing and pre and post counseling are implemented. Although training counselors may be one of JICA's potential cooperation activities, human resources such as experts in this field are still limited because it is a new field in Japan. In addition to HIV testing and counseling, assistance should be focused on eliminating people's prejudice toward HIV/AIDS and promoting awareness and education activities that promote medical health check-ups. The success of VCT largely depends on an effective support system for infected people after receiving medical treatment. Therefore, **there should be comprehensive project formulation that gives consideration to cultural and social aspects of HIV/AIDS. In this regard, partnerships with NGOs**

through the Community Empowerment Program and JICA Partnership Program should also be considered. This issue is also related to Development Objective 2 “Care and Support for People living with AIDS and their Families”.

Appropriate approaches using IEC are necessary to change behavior and avoid infection.

In terms of activities that promote behavioral change to avoid infection, messages for target groups, including high-risk groups and young people, should be well clarified. **The most appropriate approaches** (use of peer educators of the same age and occupation, multimedia such as TV and radio, folk media such as drama groups, and school education) **for the target groups** should also be selected based upon studies on access to each approach. **Those approaches should be taken by using effective Information Education and Communication (IEC).**

**Development Objective 2:
Care and Support for People living with HIV/AIDS and their families**

【Development Objective 2: Care and Support for People living with HIV/AIDS and their Families】

If one fails to prevent infection, they will face not only physical suffering but also mental and social suffering. Physical suffering is caused by the onset of AIDS or opportunistic infections following a certain asymptomatic period. Mental suffering will be caused by the infection itself while social suffering will be caused by prejudice or rejection of employment. All these issues will lead to deterioration of the quality of life of those infected. Consequently, it is necessary to prevent HIV infection and **support people living with HIV/AIDS and their families from physical, mental and social suffering.**

**Mid-term Objective 2-1:
Relief of Suffering caused by Physical Symptoms including AIDS-related Opportunistic Infections**

Mid-term Objective 2-1: Relief of Suffering caused by Physical Symptoms including AIDS-related Opportunistic Infections

In order to relieve physical suffering it is necessary to **develop a medical care system, improve access to health and medical institutions and access to HIV/AIDS related medicines for treatment.** These measures should be integrated through cooperation with international organizations, governments, industries, and local communities as a national policy supported by an international strategy. Although chemotherapy for anti-retroviral (ARV) is becoming more affordable, necessary medicines still remain extremely expensive. Consequently, the provision of medicine to prevent or treat opportunistic infections seems to be a possible measure. Moreover, further research on treatment of HIV/AIDS and opportunistic infections is also required

Figure 3 Development Objective 2
“Care and Support for People living with HIV/AIDS and their Families”

Mid-term Objective 2-1 Relief of Suffering caused by Physical Symptoms including AIDS-related Opportunistic Infections			
Indicator: Percentage of people living with HIV/AIDS who receive medical support			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Access to Medication Availability of medicine	Provision of anti-retroviral (ARV) Establishment of medical supply system for AIDS-related and sexually-transmitted infections (securing the procurement route, domestic production) × Support for research and development of low-cost medicine Research and development of traditional medicine Establishment of transportation system for anti-HIV and basic medicine	23 12 10, 11 12	• Provision of medicine and treatment for sexually-transmitted infections and Tuberculosis (Project-type Technical Cooperation)
Improvement of Access to Health Care and Medical Institutions Access to medical services (number of hospitals dealing with HIV/AIDS, number of hospitalizations) Implementation rate of Voluntary Counseling and Testing (VCT)	Strengthening of cooperation between concerned institutions and communities (implementation of Voluntary Counseling and Testing) × Improvement of health care and medical facilities × Implementation of home visits Training of health care volunteers × Improvement of medical expense reduction and exemption system	12, 24 20	• Testing of people infected with HIV and referral (Project-type Technical Cooperation/Community Empowerment Program)
Quality Improvement of Health and Medical Care Percentage of medical staff in medical institutions with knowledge of HIV/AIDS	Quality Improvement of health care and medical service providers • Planning guidelines • Training health care and medical staff • Maintaining stock of commodities and establishing procurement system • Improving of medical equipment and establishing maintenance system • Improving health care and medical center management Research on treatment and care methods	1, 2, 8, 9, 12, 13, 20, 23, 27, 28 1, 8, 9, 11, 20	• Technical guidance for care staff (Project-type Technical Cooperation/Community Empowerment Program/Overseas Training) • Basic research on treatment and care for AIDS-related opportunistic infections

Mid-term Objective 2-2 Human Rights of People living with HIV/AIDS and their Families			
Indicator: Level of public acceptance of people living with HIV/AIDS			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Securing and Enlarging Mental Care and Social Services Implementation rate of VCT Number of shelter groups	× Implementation of Voluntary Counseling and Testing (VCT) (refer to 1-1 "Promotion of VCT" for detailed activities) Improvement of supporting group and networking × Development of legal protection against discrimination and compensation issues	20, 23, 25	• Strengthen supporting system and organizational management (Project-type Technical Cooperation/Community Empowerment Program)
Financially Secure Livelihood Income and employment conditions School attendance of AIDS orphans Number of shelter groups	× Promotion for better understanding of HIV/AIDS to business enterprises × Support for employment of people living with HIV/AIDS and their families × Establishment of financial support for AIDS orphans × Improvement of supporting group and networking		
Promotion of Proper Knowledge and Understanding on HIV/AIDS Extent of local residents understanding on AIDS	Health Education on HIV/AIDS for local residents • Promotion campaigns • Development and dissemination of materials and manuals for promotion campaigns • Establishment of system for promotion by health care volunteers and coordinators	4, 16, 17, 20-23 30	• Health education and elimination of prejudice against AIDS (Project-type Technical Cooperation/Community Empowerment Program/Overseas Training)

*"Case No." corresponds to the number in the list of relevant projects (see appendix 1.)

Examples of Activities:	JICA has considerable experience JICA has certain experience JICA has experience as a component of projects × JICA has little experience
JICA's Schemes:	A project which will potentially serve as a model for other similar projects

To relieve physical suffering, development of a medical care system, improvement of access to health and medical institutions, and access to HIV/AIDS related medicines for treatment is necessary.

JICA offers a lot of assistance on measures against diseases that are deeply related to HIV/AIDS.

ARV combination therapy is still expensive and there are still problems such as drug resistance. Consequently, technology transfer and provision of medicine for opportunistic infection should also be considered.

hereafter. Among the opportunistic infections, Tuberculosis (TB) is one of the leading causes of the deterioration of the immune system because active TB bacillus accelerates the course of HIV infection. **A Directly Observed Treatment, Short-course (DOTS) program should be implemented in order to control TB.** Moreover, **particular attention should be paid to the trend of TB** since it is one of the first chance to detect those who are infected with HIV, providing a warning sign that offers opportunities for intervention.

JICA's Activities

Regarding this Mid-term Objective, few activities that are directly involved with HIV/AIDS, such as the provision of anti-retroviral (ARV), are being implemented. However, there are a number of cooperation examples such as the Project-type Technical Cooperation in the Philippines that focus on HIV/AIDS related diseases including opportunistic infections and sexually transmitted infections. Recently, the number of projects including anti-Tuberculosis measures has increased. For example, JICA has carried out such projects in Cambodia and Zambia.

JICA should take measures for HIV/AIDS and other infectious diseases with consideration to both the current situation of the AIDS epidemic and the limited resources of each country. From the same perspective, JICA should assist in research development and quality improvement of health care services as its main thrust of cooperation.

Moreover, in response to a rise of international public opinion, developing countries have been given some consideration in the procurement of low-cost ARV, making it easier to obtain medicine. Nevertheless, further discussion on the following problems is necessary to provide ARV under Grant Aid and Provision of Equipment schemes; the high cost of Highly Active Anti-retroviral Therapy (HAART) which requires ARV combination therapy, the abandonment of treatment due to side-effects, and the issue of drug resistance. **Cooperation on established technology transfers and provision of medicine for opportunistic infections to eradicate physical suffering should also be considered.**

**Mid-term
Objective 2-2:
Human Rights of
People living with
HIV/AIDS and their
Families**

Mid-term Objective 2-2: Human Rights of People living with HIV/AIDS and their Families

It is important to develop a comprehensive care strategy in order to support and solve problems of people living with HIV/AIDS; people infected with HIV, AIDS patients, AIDS orphans, or people somehow affected by AIDS. Such a comprehensive strategy should include law enactment, improvement of health care system, strengthening of shelter groups including NGOs, and networking of **families and communities**.

The human rights of people living with HIV/AIDS should also be protected. It is important to provide health education and enhance the level of knowledge among the general population. **The promotion of the level of understanding and knowledge of HIV/AIDS** among the general population will lead to the enactment and reinforcement of regulation and laws required to protect the human rights of people living with HIV/AIDS, and to encourage them to receive VCT.

Mental, economic and social support for people infected with HIV

Focus areas for countermeasures vary according to each target group. For **people infected with HIV**, mental support will be focused to enable them to face the HIV infection itself. HIV is not directly infected to others in daily life, however, people are frequently discriminated just because they are infected with HIV. In order to combat this discrimination, economic and social support should be provided. In addition, it is expected that this support will enable people infected with HIV to live and work as other people do.

Physical care for AIDS patients

As their symptoms become more severe, the burden of **AIDS patients** increases in terms of the cost of long-term medical treatment. It is necessary to alleviate this burden and provide economic and social support. Furthermore, physical care such as the treatment of opportunistic infections will be required for AIDS patients.

Mental, economic and social support for the families of patients

Activities are focused on alleviating prejudice in the community and providing economic support to **HIV/AIDS patients' families** that have lost their breadwinner. Activities should be identified based on the characteristics of the target groups or target communities.

JICA's Activities

For countries where the HIV infection has spread among the general population including those in sub-Saharan Africa, it is urgent to establish a support system in the community that can help people infected with HIV and

Until now, Japan has limited experience in providing assistance to support people living with HIV/AIDS and their families. Partnerships with NGOs are an important issue.

their families. **However, Japan has limited experience in providing assistance in this field.** Nevertheless, JICA has recently carried out Project-type Technical Cooperation in Thailand. In this project, JICA promoted awareness activities for anti-HIV measures in the community and improved mental and social care services. In addition, it focused on the establishment of patient networks and implemented peer counseling. **Collaboration with several NGOs** has also been implemented for strengthening support groups and providing health education targeting the general population under the Community Empowerment Program.

JICA's activities mainly provide side support to government implementing organizations. Although several countries have recently established high-level coordination committees such as an "AIDS control committee", such a committee is not usually involved in direct implementation. Since the actual implementing body is basically the government, **it is extremely important to select a counterpart organization that has a certain number of qualified staff with a high implementing capability from a project management perspective.** If the NGO is the implementing agency, **it is imperative to select qualified NGO(s) with sufficient capabilities.** Due to JICA's previous experience, there is little established know-how on mental and social care services. However, there are some qualified and experienced international, national, and local NGOs undertaking activities at the community level. Support for people living with HIV/AIDS and their families as well as HIV/AIDS prevention is an important issue for countries with high HIV prevalence. Therefore, collaboration with NGOs or support groups and the sharing of information among NGOs, governments and international organizations is essential.

**Development Objective 3:
Implementation of Effective Measures at the National Level**

【Development Objective 3: Implementation of Effective Measures at the National Level】

When dealing with HIV/AIDS, which should be taken as an important national issue, it is necessary to give consideration to each country's situation. **The planning of a national strategy and execution plan together with strengthening of organization administrative capabilities** will become necessary to implement effective measures at the national level.

**Mid-term
Objective 3-1:
Planning of
Appropriate
Measures at the
National Level**

Mid-term Objective 3-1: Planning of Appropriate Measures at the National Level

The Declaration of Commitment⁴ on HIV/AIDS by the United Nations General Assembly Special Session targets the planning of national measures and financing plans through cooperation of multi-sectors. Moreover, it emphasizes the integration of HIV/AIDS prevention, care, treatment and support, and the impact of mitigation priorities mainstreamed into development planning, including poverty eradication strategies, national budget allocations and the healthcare sector development plan. Strengthening of administrative organization and planning of national HIV/AIDS strategic measures, which are suitable for current situation in the target country, should be implemented based on these issues.

Establishment of an information system is necessary to grasp the current situation and formulate an appropriate strategic.

Establishment of an information system is necessary to grasp the current situation and formulate an appropriate strategic plan. **Improvement of HIV testing capabilities and strengthening of surveys on the trend of epidemic symptoms (surveillance)** both in quality and quantity are necessary for cooperation on maintaining national HIV/AIDS related information especially epidemiological statistics. Surveillance will clarify the HIV pandemic situation in areas being studied and will play a major role in providing information that will be the basis of several planning measures.

3 Types of Epidemics
The HIV prevalence rate is over 1% in the general population (generalized epidemics)
The HIV prevalence rate is over 5% in at least one specific group but lower than 1% in the general population (concentrated epidemics)
HIV prevalence rate is less than 5% in any group (low-level epidemics)

In addition, UNAIDS has designed three types of epidemics as indicators of surveillance strategy for the country or a region⁵. The epidemics can be divided into *Generalized epidemics where the HIV prevalence rate is over 1% in the general population*, *Concentrated epidemics where HIV prevalence rate is over 5% in at least one specific group, but lower than 1% in the general population*, *Low-level epidemics where less than 5% of HIV is measured in any group*. These types of epidemics can be used as an important source when making strategic consideration on the selection of specific groups or the general population as a target. Moreover, surveillance results are effective not only in the region or target groups, but also in promoting more effective approach methods and correspondence.

⁴ UNAIDS (2001)

⁵ UNAIDS (2000) pp23-27

**Mid-term
Objective 3-2:
Improvement of
Administrative
Capability of
Measures against
HIV/AIDS
Mid-term
Objective 3-3:
Moderation of
Public Finances for
Health Care**

Mid-term Objective 3-2: Improvement of Administrative Capability of Measures against HIV/AIDS

Mid-term Objective 3-3: Moderation of Public Finances for Health Care

In order to make the planned against HIV successful, HIV/AIDS related information should be collected to **establish a series of processes** from implementation to management. Simultaneously, human resource development through staff training of central and local governments, and relevant national and international organizations should be strengthened to establish a **collaborative relationship** among concerned organizations. Presently, there are many donors assisting in the HIV/AIDS field. In order to avoid the duplication of these interventions and make good use of donors, it is necessary for receiving countries to improve their capacity.

Moreover, it is important for targeted countries to recognize that the HIV/AIDS epidemic is a critical issue, to further increase their commitment, and to allocate an appropriate amount of funds to tackle this issue.

JICA's activities are on laboratory strengthening at the national level and advice on national measures.

JICA's Activities

There is insufficient information on epidemiologic statistics due to a lack of surveillance and relevant surveys. As a result, the current state of HIV/AIDS in the target country is not completely understood. Although the current situation is identified to some extent, there is little progress in planning necessary strategies or implementing activities. These problems constrain the promotion of a national response to HIV/AIDS. **JICA also provided advice on the promotion of national measures such as strengthening laboratories at the national level, establishing high-level testing techniques, and promoting research on HIV/AIDS in Thailand and Kenya.**

In implementing measures at the national level, the establishment of a referral system and surveillance system are required in order to grasp the extent of the epidemic. As previously noted, a key laboratory should be established at the top level with local laboratories which possess techniques for collecting appropriate information at lower levels. In addition, it is important to **establish national programs for HIV/AIDS based on the economic constraints of each country or region.** Despite these constraints, it is expected that planned programs will be implemented appropriately. In countries where programs have already been set up, it is essential to follow up the activities of

- Cooperation points:
- Establishment of surveillance system
 - Establishment of national countermeasure programs based on economic constraints
 - Assistance coordination

Figure 4 Development Objective 3
"Implementation of Effective Measures at the National Level"

Mid-term Objective 3-1 Planning of Appropriate Measures at the National Level			
Indicators: Examination results on the feasibility of implementing national strategic measures Examination results on the feasibility of implementing an action plan			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Establishment of Political Commitment Recognition of each activity on the national and international level	<ul style="list-style-type: none"> × Planning of health sector program based on international agreements, current situation, national development policy, and citizens' needs Planning of HIV/AIDS program giving consideration to current situation, citizens' needs, and overall projects × Planning of action plan and basic strategy which complies with budget allocation and implementing system condition × Development of legal system on human rights and HIV/AIDS prevention × Establishment and management of multi-sectoral organizations 	4, 20	Analysis on policy and current situation of program (Project-type Technical Cooperation)
Assessment of Condition and Mode of HIV transmission Information development on infection path of people infected with HIV	<ul style="list-style-type: none"> × Establishment of health information system (enhancement of administrative capability by using health and medical information) Development of statistics on HIV/AIDS epidemiology (surveillance system) Development of testing and diagnosis techniques 	1-3,5,7,8 11,12,14,15 2-6,8, 10,31,32	<ul style="list-style-type: none"> • Development of statistics and establishment of analysis system (Project-type Technical Cooperation) • Research and development for improvement of testing and diagnosis techniques (Project-type Technical Cooperation)
Assessment of HIV/AIDS Economic and Social Factors Appropriate understanding based on HIV/AIDS information	<ul style="list-style-type: none"> Research on economic and social factors of HIV/AIDS × Gender analysis 	4	Cohort study to grasp the actual situation of HIV/AIDS (Project-type Technical Cooperation)
Assessment of Economic and Social Effects of HIV/AIDS Information development on productivity decline caused by HIV/AIDS	<ul style="list-style-type: none"> × Research on economic and social effects of HIV/AIDS 		
Decrease in Prejudice of Government Officials Government officials' awareness on HIV/AIDS issues	<ul style="list-style-type: none"> × Seminar for government officials on better understanding of HIV/AIDS 		

Mid-term Objective 3-2 Improvement of Administrative Capability of Measures against HIV/AIDS			
Indicators: Action plan progress, Evaluation results by administrative auditing agencies			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Strengthening of Central Health Care Administration for measures against HIV/AIDS Measures System of measures against HIV/AIDS by central government	<ul style="list-style-type: none"> × Training of central administrative officials × Clarification of jurisdiction 		
Strengthening of Local Health Care Administration for measures against HIV/AIDS System of measures against HIV/AIDS by local governments	<ul style="list-style-type: none"> Training of local administrative officials × Support for decentralization of health care administration 	13, 20	• Technological improvement of local laboratories (Project-type Technical Cooperation)
Strengthening of national and international Network for measures against HIV/AIDS Access to national and international network	<ul style="list-style-type: none"> Establishment of north-south and south-south cooperation system Strengthening of the partnerships with NGOs and international organizations Establishment of national cooperation system 	11, 32 2, 8 13,20,28	• Comprehensive measures through cooperation with NGOs and other schemes (Project-type Technical Cooperation/Community/Empowerment Program/Overseas Training)

Mid-term Objective 3-3 Moderation of Public Finances for Health Care			
Indicators: Percentage of national budget given to medical and health care sector, Percentage of the medical and health care sector budget allocated to HIV/AIDS, Percentage of budget among other sectors given to HIV/AIDS measures			
Sub-targets of Mid-term Objective	Examples of Activities	Case No.*	JICA's Schemes
Increasing the Health Budget Revenue Percentage of funds allocated for medical and health care budget in the national budget Input of aid fund into measures against HIV/AIDS	× Planning of public finance distribution and expansion of health care budget × Financial support through the common basket system, etc.		
Review of Financial Distribution of Health Care and Priority Directing Percentage of HIV/AIDS budget in the medical and health care budget	× Support for overall planning of budget distribution and mid-term expenditure in the health care sector × Cooperation for appropriate and effective fiscal expenditure and budget execution for sub-sectors and local budgets × Amelioration of fund application through audits		

*"Case No." corresponds to the number in the list of relevant projects (see appendix 1.)

Examples of Activities:	JICA has considerable experience JICA has certain experience JICA has experience as a component of projects × JICA has little experience
JICA's Schemes:	A project which will potentially serve as a model for other similar projects

the AIDS coordination committee (i.e. a multi-sectoral and high-level coordination committee in most cases), ensuring consistency with each national program and formulate and operate the project.

Since HIV/AIDS is a global issue that requires a large amount of funds, coordination among donor agencies has been actively promoted. This issue should be considered not only from a national measure's view, but also with respect to aid collaboration and cooperation. Therefore, **close cooperation with implementing organizations is essential.**

JICA's Priority

Prevention and Control

- Promotion campaigns
- Early diagnosis, early treatment of sexually transmitted infections.
- Research on treatment/ testing techniques

2-3-3 JICA's Priority

(1) Prevention and Control of HIV/AIDS

For effective measures on HIV/AIDS, it is necessary to identify problems as well as target groups at an early stage and provide effective input to the concerned country. At present, more than 99% of the world population is not infected. However, since an effective treatment does not exist at this time, the **prevention of infection appears to be the most essential measure** to reduce the rate of infection.

In order to prevent sexual transmission, the main mode of HIV infection, there are several key effective measures. The first is **awareness activities for safe sex targeting high-risk groups**, such as commercial sex workers, truck drivers, and **sexually active youths**. The second measure is to **improve testing techniques and strengthen systems for early detection** since most people do not realize they are infected with HIV. The third measure is to provide **technical assistance for early diagnosis and early treatment for STIs that are closely related to HIV infections**. These measures have been taken in the context of JICA's cooperation up to now, and should be further focused on. In addition, it is also important to study **treatment and testing methods of STIs based on resources and the social and cultural backgrounds** of the target countries.

Prevention measures are crucial for regions where HIV/AIDS has spread. At the same time, it is necessary to focus on preventive measures for low HIV-prevalence regions, which may face pandemic.

(2) Care and Support for People Living with HIV/AIDS, and their Families

Considering sustainability after the phasing-out of a project and the limited resources provided by JICA, further discussion is required on drug

Care and Support

- Medical support, education for health care staff.
- Provision of equipment, technical improvement for health care staff
- Promotional campaigns
- Establishment of network with NGOs
- Development of legislation

resistance in the provision of ARV. With respect to JICA's limited resources, **training medical and health care staff is an effective way to provide therapy for opportunistic infections or complications** to relieve suffering and to improve the quality of life of people living with HIV/AIDS. It is also necessary to **supply the required equipment** after arranging a management system. The equipment will be used to provide the most appropriate medical services to cope with HIV/AIDS and opportunistic infections.

In terms of mental and social support, there are several effective tools such as campaigns for disseminating correct knowledge on HIV/AIDS, **networking with organizations (including NGOs)** required for social and community activities, and **lobbying the central government for necessary development of laws.**

Cooperation in this field is still important in the countries where HIV/AIDS is not taken as an imperative issue. However, in countries where HIV/AIDS has spread to the general population and where prevention measures have been sufficiently carried out, cooperation should also still be considered.

Measures at the National Level

- Information development
- Policy Advice
- Improvement of administrative capability

(3) Implementation of Effective Measures at the National Level

Since commitment by the central government is crucial in HIV/AIDS measures, it is necessary to **incorporate HIV/AIDS issues into national planning** and give it a high priority. With the purpose of establishing commitment, it is necessary to work with administrative officers who have authority in deciding national measures. In case sufficient awareness has already been paid to the significance of HIV/AIDS, information network development and **cooperation on surveillance system establishment** to collect accurate information is essential.

Measures at the national level are key to implement anti-HIV/AIDS measures in any country. Cooperation on **information analysis and policy advice** will be needed in countries where a national measure program has not been implemented. In countries where appropriate measures are available, **training to improve administrative structure and build information infrastructure** that complies with these programs should be implemented.

3. Toward Future Cooperation

Points of Concern

- Measures in line with HIV/AIDS epidemic and resources restriction
- Measures based on influence analysis
- Consideration for the vulnerable
- Cooperation with other assistance organization
- Development of national resources
- Consideration of HIV/AIDS issues when assisting other sectors

The following should be especially considered for JICA's cooperation on measures against HIV/AIDS.

Since HIV/AIDS issues differ by country, JICA should implement **cooperation with consideration to both the HIV/AIDS epidemic situation and the fact that resources are restricted in target countries or regions.** However, as repetitively stated, prevention of HIV spreading is paramount, and it is important that cooperation focuses on prevention of the HIV epidemic with consideration of sustainability of developing countries.

It is also important to strengthen the support system for infected people in countries which face a severe HIV/AIDS problem. A first step should be taken to analyze **the HIV/AIDS influence in each country and clarify which areas should be focused on in terms of countermeasures.**

All people, rich and poor, without distinction of age, gender or race, are affected by HIV/AIDS. It should be noted that people in developing countries are the most affected, and that women, young adults and children, in particular girls, are more vulnerable. In this regard, **effective assistance that has a positive impact on vulnerable people should be provided.**

As an international framework of HIV/AIDS issues has been formulated, input from each donor agency has increased. Therefore, it is necessary to identify HIV/AIDS control measures in the countries concerned and consider which approaches should be taken through **cooperation and collaboration with other organizations.**

The problem associated with the process of formulating a technical cooperation project is the lack of resources on the Japanese side. **It is necessary to cooperate with public and private organizations which have the know-how of measures against HIV/AIDS, and to develop an organization as well as individual experts.**

In the case of assistance in other sectors, adverse effects occasionally occur due to lack of consideration of health issues. If JICA can assist in reducing disparity between men and women and alleviating poverty, which **might**

influence HIV/AIDS issues, the influence of these interventions should always be considered.

Appendix 1. JICA's Main Operations in HIV/AIDS Control

JICA's assistance in against HIV/AIDS are as follows.

- Project-type Technical Cooperation: HIV testing techniques at the national laboratory; Establishment of a referral system
- Grant Aid: Establishment of a national level research institute
- Community Empowerment Program: Grass-root level health education; Strengthening care and support groups for people living with HIV/AIDS and their families
(See "Relevant Projects on HIV/AIDS")

The following is an outline of characteristics and issues of JICA's major cooperation in HIV/AIDS.

**Research
Cooperation for
Improvement of
Testing and
Diagnostic
Techniques**

Since the mid-1990s, project-type cooperation aimed at improving HIV testing techniques in institutions with core laboratories has gradually been implemented.

1. Research Cooperation for Improvement of Testing and Diagnostic Techniques in Core Laboratories (Project-type Technical Cooperation, Grant Aid, Dispatch of Experts)... Case No. 1-14

Japan does not have a long history of cooperation on HIV/AIDS issues. The first example of cooperation on HIV/AIDS aimed at strengthening HIV testing was carried out in research institutes built with Grant Aid in Ghana and Kenya. Originally, technical cooperation at these research institutes focused on research on infectious diseases. Full-scale cooperation on HIV/AIDS control (Case No. 1-4) started in Thailand in 1993 (Case No. 1) to strengthen HIV/AIDS analysis and provide HIV/AIDS education for the general population.

Project-type Technical Cooperation on infectious diseases has been widely implemented since the mid-1990s. A number of Project-type Technical Cooperation projects focus on improving HIV testing techniques in core laboratories in the Philippines, Zambia and Brazil (Case No. 2, 8, 9). The Okinawa Infectious Diseases Initiative initiated increased efforts on Tuberculosis and other infectious diseases and parasitic diseases which included HIV/AIDS components.

Most projects focus mainly on research designed to improve HIV testing capabilities at national research institutes or laboratories. However, there are also some Project-type Technical Cooperations that contribute to the improvement of testing technologies in local laboratories by developing low-

Points of Cooperation

- Contribution to improve the testing capability of local laboratories
- Cooperation concurrently implemented for other infections
- Sharing information with concerned organizations

cost and simple testing techniques. One notable project in Kenya has led to the production of a low-cost screening and diagnosis kit, which is meaningful in terms of sustainability (Case No. 10, 11). Development studies by local consultants have also been conducted, with basic data on blood donations collected at medical institutions so that blood-screening measures could be planned more effectively (Case No. 14).

Recently other infectious diseases and parasitic diseases have also been highlighted. As a result, *HIV cooperation coupled with cooperation in infectious diseases may increase.*

A large part of JICA's cooperation to date has focused on testing. However, *coverage is being extended* to, for example, institution building for vaccine evaluation in Thailand (Case No. 4). As research development is undertaken by several institutions worldwide, *it is important to obtain information from those institutions and share that information among cooperative organizations and research institutes.*

Improvement of Testing Capability and Promotion of Prevention

2. Improvement of Testing Capability and Promotion of Prevention (Grant Aid, Provision of Equipment) ...Case No.6, 15-19

Development of high-level research institutes on health care, such as the Noguchi Memorial Institute for Medical Research in Ghana, the National Institute of Health in Thailand, and the Kenya Medical Research Institute, has been carried out over Grant Aid. Work is conducted on infectious diseases including HIV/AIDS. Technical cooperation for human resource development of these institutes is also conducted.

Provision of equipment that strengthens detection capability, and provision of reagents and condoms

Efforts to repair or upgrade existing research institutes have been intensified through construction of new facilities. The equipment supply program for AIDS control and Blood Tests have been initiated in 1996. Screening kits and reagents for HIV testing were provided to several countries, which helped to improve testing capability (Case No. 15-18).

In terms of provision of equipment, the assistance for anti-AIDS measures mainly focuses on providing HIV testing equipment. In addition to this equipment, condoms were supplied to help prevent HIV infection. In Viet Nam, 7 million condoms were distributed with Grant Aid in 2000 (Case No. 19).

Although provision of HIV testing equipment and condoms remains a

main part of assistance, the *provision of ARV that is linked to the issue of drug resistance*, but is believed to be effective in preventing mother-to-child transmission *requires further discussion*.

Support and Health Education for Patients and their Families

Cooperation focusing on care and support is still limited. Samples could be seen in Project-type Technical Cooperation in Thailand and projects in collaboration with NGOs. Consideration about developing a model of partnership with NGOs is needed.

3. Strengthening of Community-based Support System for People living with HIV/AIDS and their Families: Promotion of Better Understanding through Health Education... Case No. 20-26

Cooperation for the relief of physical symptoms has been implemented mainly by improving the quality of health care personnel and research on health care services. Staff working in core or local health care institutes where there is research on STIs is usually targeted for training. However, this type of cooperation is still limited compared to assistance for infection prevention. On the other hand, cooperation on care and support was initiated in 1998 in Thailand through Project-type Technical Cooperation (Case No. 20). This project aimed at creating a model for comprehensive HIV/AIDS prevention and care processes, and at subsequent expansion to other regions. The model was created based on the necessity to improve the care system so that non-infected people and AIDS patients could live together. Recently, dissemination of HIV/AIDS knowledge by empowering AIDS patients' families and by peer counseling that targets youth groups has been undertaken (Case No. 21-26). These kinds of Community Empowerment Programs are undertaken through cooperation with local NGOs.

As previously stated, cooperation on HIV/AIDS issues has to date been mainly based on infection prevention activities. However, as more and more people become infected with HIV/AIDS, social support and understanding for affected people has become crucial. Since very little assistance has been carried out in this area, support systems set up through the Community Empowerment Program and Grant Assistance for Grass-roots projects for NGOs working in the countries concerned have become necessary. As successful models can be applied to other regions or other countries, *cooperation commencing with the Community Empowerment Program and the development of cooperation model should be carried out*.

Expansion of Cooperation through Training Projects

Effective cooperation is strived for on anti-HIV/AIDS measures by expanding testing and diagnosis techniques through Third-country Training. Application of successful cases from those which have had success, is another type of cooperation that needs to be considered.

4. Expansion of Cooperation through Training Projects ...Case No.27-32

In the Philippines, Local in-country Training programs have been undertaken since 1996. In the following year, Third-country training on HIV/AIDS and opportunistic infection diagnosis was implemented for Asia-Pacific countries. In addition, a central laboratory for HIV/AIDS and sexually transmitted infections in the Philippines, which was constructed by the project (Case No. 27-32) and authorized as a national center, has conducted HIV/AIDS laboratory diagnosis research and expanded its experience and technologies to other regions within the country and neighboring countries. In 1999, Kenya implemented Third-country Training on HIV and Hepatitis B virus blood testing for Southeast African nations.

Japan has implemented Specially-offered Training and received project counterpart trainees from several countries. This has led to global collaboration between countries and improved HIV laboratory diagnosis technology in the countries concerned.

It is hoped that transferring Japan's knowledge, experience and latest technology will foster core human resources in the countries concerned. In addition, *effective cooperation is strived for on anti-HIV/AIDS measures by expanding testing and diagnosis techniques at the laboratories and research institutes at the national level to other countries or regions. This could also be achieved by implementing Third-country Training courses which would transfer knowledge to countries experiencing similar HIV/AIDS problems.* Since HIV/AIDS is a global issue, *the application of successful cases is another type of cooperation that needs to be considered* for the fight against HIV/AIDS.

Relevant Projects on HIV/AIDS (Major Cases)

No	Country	Project Name	Period	Type of Schemes	Mid-term Objectives	Characteristics
1. Research Cooperation for Improvement of Testing and Diagnostic Techniques in Core Laboratories (Project-type Technical Cooperation, Grant Aid, Dispatch of Experts)						
1	Thailand	Project for Prevention and Control of AIDS	1993.7-1996.6	Project-type Technical Cooperation	1-1, 1-2, 2-1, 3-1	Strengthening of research capability to improve diagnostic techniques at National Institute of Health built in 1984 and 1985 with Grant Aid Cooperation. Mobile health education targeting people in rural areas in the context of community health and providing guidance on universal precaution at prefectural hospitals was implemented. Project was divided into the NIH's capability strengthening project and an AIDS prevention regional care network project after phase-out.
2	Philippines	Project for Prevention and Control of AIDS	1996.7-2001.6	Project-type Technical Cooperation	1-1, 2-1, 3-1, 3-2	Project was formulated in cooperation with USAID. Aimed to improve STI/AIDS diagnosis capability at the STD/AIDS Cooperative Central Laboratory (SACCL) and improve education on HIV/AIDS prevention at the public health service center.
3	Philippines	Virology	2001.7-2002.6	Dispatch of Experts	3-1	Aimed at improvement of safety management for full-scale operation of SACCL which was completed on Project-type Technical Cooperation Program and guidance for testing development and improvement of virus testing kits.
4	Thailand	Project for Strengthening the National Institute of Health's Capabilities for Research and Development on AIDS and Emerging Infectious Diseases	1999.3-2004.2	Project-type Technical Cooperation	1-1, 1-5, 1-6, 2-2, 3-1	Project is implemented at the NIH based on the results of measures of AIDS prevention projects. Aims to improve the research environment regarding Emerging/Reemerging Infectious Diseases including HIV/AIDS, improve basic research skills for development of AIDS vaccines, and strengthening pathogenic research on the HIV through blood sampling and registration of infected people at HIV day care centers.
5	Ghana	The Noguchi Memorial Institute Project, Phase II	1991.10-1996.9	Project-type Technical Cooperation	3-1	Newly constructed in 1977 and 1978 with Grant Aid Cooperation. The project brought out health care administration based on research and cooperation from Phase 1 (1986). Established diagnostic method at HIV laboratory and conducted epidemiological research.
6*	Ghana	The project for Improvement of Noguchi Memorial Institute for Medical Research	1997.1998	Grant Aid	3-1	Aimed at maintenance of high quality experimental facilities for research on anti-HIV/AIDS and anti-infectious diseases measures, laboratory equipment, equipment for animal experiment unit, and repair of existing equipment.
7	Ghana	The Infectious Disease Project at the Noguchi Memorial Institute for Medical Research	1999.1-2003.12	Project-type Technical Cooperation	1-1, 3-1	In collaboration with Grant Aid Cooperation. Aims for epidemiological and etiological research on HIV/AIDS and to improve laboratory diagnostic techniques for STI among reproductive aged women. As part of global parasitic disease control programs, third-country group training will be implemented at Noguchi Memorial Institute for Medical Research.
8	Zambia	Infectious Diseases Control Project	1995.4-2000.3	Project-type Technical Cooperation	2-1, 3-1, 3-2	Strengthened sexually transmitted virus diagnosis at public health laboratories, surveillance system for HIV, Poliovirus, Measles, Acute Respiratory Infection (ARI), promoted information exchange with international organizations such as WHO and public relations by newsletters.
9	Brazil	The Clinical Research Project of State University of Campinas	1997.4-2002.3	Project-type Technical Cooperation	2-1	Aimed at implementation of research cooperation on child immunodeficiency and opportunistic infection caused by fungus. Government of Brazil established AIDS center at University of Campinas.
10	Kenya	The Research and Control of Infectious Diseases Project: Phase II	1996.5-2001.4	Project-type Technical Cooperation	1-2, 1-3, 2-1, 3-1	Implemented basic research on HIV/AIDS, development of hepatitis virus/HIV/AIDS blood screening kits, practical use of research achievements in local production, screening of medical plants with anti-HIV activity, and establishment of prevention methods for mother-to-child transmission.
11	Kenya	Research and Control of Infectious and Parasitic Diseases Project	2001.5-2006.4	Project-type Technical Cooperation	1-3, 2-1, 3-1, 3-2	Aims for basic research on safe bloods for HIV/AIDS/viral hepatitis and traditional medicine, development of blood screening kits as an accomplishment of research cooperation, establishment of an information network through the Internet, and planning of training on Global Parasitic Disease Control in third countries.
12	Cambodia	National Tuberculosis Control Project	1999.8-2004.7	Project-type Technical Cooperation	2-1	In cooperation with Grant Aid Project. Aims for care of co-infection with HIV and tuberculosis, implementation of HIV serological tests for tuberculosis patients, and expansion of DOTS strategy by WFP ratio distribution as an incentive.
13	Zambia	The Strengthening of Laboratory Systems for HIV/AIDS and TB Control Project	2001.3-2006.3	Project-type Technical Cooperation	2-1, 3-1, 3-2	Aims for improvement of testing techniques in the central laboratory for HIV/AIDS/TB surveillance, survey of HIV's genetic features/drug resistance, holding periodical operation meetings with HIV/AIDS/TB working group, and cooperation with the Family Planning and Welfare Association of Zambia (FPWAZ) in affiliation with IPPF.

*Including "Improvement of testing capability and prevention promotion"

No	Country	Project Name	Period	Type of Schemes	Mid-term Objectives	Characteristics
14	Kenya	The Study on the Blood Transfusion System	2001	Overseas development studies	1-3, 3-1	Survey of current situation of blood donation, blood screening and blood transfusion targeting more than 250 medical institutions in Kenya. Basic data was compiled for policy-making and measures against infectious diseases.
2. Improvement of Testing Capability and Promotion of Prevention (Grant Aid, Provision of Equipment)						
15	Philippines	Equipment Supply Program for AIDS Control and Blood Test	2000	Provision of Equipment	1-1, 1-3, 3-1	Strengthened test system of surveillance laboratory and core laboratory facilities by providing reagents for HIV testing, testing kits for Hepatitis B - C/Malaria, testing instruments, and recording and tabulation equipment.
16	Myanmar		2000	Provision of Equipment	1-3, 2-2	Aimed at HIV testing reagents for screening in order to secure supplies of safe blood.
17	South Africa		2000	Provision of Equipment	1-1, 2-2	Provided equipment such as vehicles, computers, projectors, videos and cameras for the purpose of promotion activities in communities.
18	Tanzania		2000	Provision of Equipment	1-1	Strengthened testing capability of medical institutions by providing HIV testing reagents and syphilis testing reagents.
19	Viet Nam	The Project for Prevention and Control of HIV/AIDS Transmission	2000	Grant Aid	1-1, 1-3	Provided condoms, screening and testing equipment, blood-donation cars, campaign cars, audio-visual equipment, computers for data processing for prevention of HIV infection and strengthening of blood screening capability.
3. Strengthening of Community-based Support System for People living with HIV/AIDS and their Families/ Promotion of Better Understanding through Health Education						
20	Thailand	Project for Model Development of Comprehensive HIV/AIDS Prevention and Care	1998.2-2003.1	Project-type Technical Cooperation	1-1, 1-2, 1-3, 2-1, 2-2, 3-1, 3-2	Aims for development of a comprehensive model on holistic care for infected people together with prevention of HIV/AIDS infection in order to establish a methodology to apply the advanced experience of Northern Thailand's anti-HIV/AIDS measures to other regions within the country and other countries.
21	Tanzania	Integrated Reproductive Health and Vocational Skills Training for Youth in Peri-Urban Dar Es Salaam (Buguruni Ward)	1999	Community Empowerment Program	1-1, 1-2, 2-2	Aimed at health improvement, reduction of unintended pregnancy, STI prevention, and decreasing the rate of infection through awareness campaigns such as peer counseling targeting juvenile groups.
22	Zimbabwe	Reproductive Health Care for Young People	1999	Community Empowerment Program	1-1, 2-2	Planned and implemented campaign on safe sex among young people, conducted STI/HIV prevention activities.
23	Thailand	Northern Thailand AIDS Prevention Care through Community Organizations	2000	Community Empowerment Program	1-1, 2-1, 2-2	Arranged for family and community acceptance of people infected with HIV. Strengthened prevention of mother-to-child transmission by distributing AZT package and implemented HIV/AIDS prevention activities to young people in cooperation with Project-type Technical Cooperation.
24	Mexico	Sexual Health Program for Street Children	2000	Community Empowerment Program	1-1, 2-1	Educational program on information services, survey on sex among street children, and guidance for integrated care and treatment as needed.
25	South Africa	Adolescent Sexual Health HIV/AIDS Project	2000	Community Empowerment Program	1-1, 2-2	Trained young leaders involved in educational activities, implemented prevention campaign at churches and empowerment for teenagers whose family members are living with AIDS and orphans.
26	Zambia	Zambia HIV Prevention Borders Initiative	2000	Community Empowerment Program	1-1	Campaigned on prevention of STI/HIV infection among truck drivers and commercial sex workers, and cooperated with UNAID-supported NGOs under common agenda between Japan and the United States.
4. Expansion of Cooperation through Training Projects						
27	Philippines	Laboratory Diagnosis of HIV Infection and Opportunistic Infections in AIDS	1997-2001	Third-country Training	2-1	Improved diagnosis and testing techniques, and educated doctors in Asia-Pacific region on the diagnosis of HIV/AIDS and opportunistic infections.
28	Philippines	Multidisciplinary Management of HIV/AIDS/STIs	1996-2005	Local Domestic Training	2-1, 3-2	Aimed at improvement of consecutive care of testing, diagnosis and control of AIDS, targeting doctors, nurses, social workers, and laboratory technicians.
29	Kenya	Blood Screening for Viral Hepatitis and HIV/AIDS	1999-2001	Third-country Training	1-3	Aimed at technology transfer of blood screening model which is established by Kenya Medical Research Institute (KEMRI)'s to Southeast African nations.
30	Kenya	HIV/AIDS Counselling	2001-2003	Local in-country Training	1-1, 1-2, 2-2	Aims to promote Voluntary Counseling and Testing (VCT) activities and to campaign on HIV/AIDS in the local regions, in cooperation with Kenya Medical Technical College (KMTC).
31	West Pacific/ South East Asia and Africa	Virological Diagnosis	1993-	Specially-offered Training	1-1, 1-2, 2-2	Aimed at technology transfer of surveillance, diagnosis technique of HIV and opportunistic infection for the accurate virological diagnosis of HIV.
32	Multiple Countries	Seminar on Epidemiology and Control of AIDS/ATL Diseases	1998-	Specially-offered Training	3-1, 3-2	Promoted establishment for global cooperation on anti-AIDS measures through technology transfer of anti-AIDS/ATL (Adult T-cell leukemia) epidemiology, surveillance, and diagnosis.

Figures in the column of "Mid-term Objectives" refer to those in the Development Objectives Chart

Appendix 2. Basic Checklist (HIV/AIDS)

The following are major indicators for understanding the current situation and extent of the HIV/AIDS issues.

In order to accurately grasp the current situation of HIV/AIDS for international cooperation, there are many health indicators and economic/social factors that should be assessed. Information provided below is comparatively accessible and is considered important.

Indicators	Unit	Calculation Method	Remarks	
(HIV/AIDS related Issues)				
1	Number of people with HIV (classified by age and gender)	person	<ul style="list-style-type: none"> • In many cases, the number of people with HIV/AIDS is also used. • On the number of people with HIV/AIDS and deaths due to AIDS, attention should also be paid to the epidemic's starting period, yearly epidemic trends (people newly infected with HIV) and the rate of increase for monitoring of infection outbreak. • Mortality rate will also be considered. • Number of people with HIV/AIDS should count not only the absolute number, but also the ratio to population. 	
	Number of people with AIDS (Classified by age and gender)	person		
2	Deaths due to AIDS (classified by age and gender)	person		
3	Ratio of mode(s) of transmission for people living with HIV/AIDS	%	Number of infected people of each infection path/total infected people	Infection path can be classified as: heterosexual intercourse, homosexual intercourse, mother-to-child transmission, injection drug use, blood transfusion, blood derivatives, etc.
4	Number of AIDS orphans	person		
5	Prevalence of sexually transmitted infections (STIs)	%	Number of people infected with STI/targeted population	People infected with Syphilis, Chlamydeous infection, and Gonorrhea, which are infectious diseases closely related to HIV, are considered to be part of high-risk groups. High ratio of HIV infection has also been observed.
6	Estimated number of Tuberculosis patients	person		Tuberculosis is one of the opportunistic infections, and examinations of Tuberculosis patients may sometimes detect people living with HIV/AIDS.
(General Health Issues)				
7	Life expectancy at birth	age		Life expectancy at birth (at the age of zero).
8	Infant mortality rate (IMR)		(Infant Mortality/Number of births) × 1,000	Infant mortality: death at under 1 year of age after birth.
9	Under 5 mortality rate (U5MR)		(Number of under 5 mortality/Number of births) × 1,000	Mortality rate of children under 5 years of age after birth.
10	Total fertility rate (TFR)		Total fertility rate of women aged 15-49	Number of child (children) believed to be born during one life span at each age category of the specific year.
11	Maternal mortality ratio (MMR)		(Maternal Mortality Ratio/ Number of Births) × 100,000	Definition of maternal mortality is defined in the "International Statistical Classification of Diseases and Related Health Problems (10th Revision)" (ICD-10) established by WHO. It can generally be described as mortality during pregnancy or less than 42 days after pregnancy.
12	Births that are attended by skilled personnel	%	Rate of births that are attended by skilled personnel to total births	Percentage of births that are attended by doctors, nurses, certified midwives, or basic health staff who received training.
13	Budget for health (percentage in government expenditure)		Budget for health sector/ Overall government budget	
14	Health care facilities (type/number)			Types and numbers of health care facilities from primary level(health centers) to higher level (central hospitals). Building establishment standards.
15	Health care workers	person		Doctors, nurses, certified midwives, pharmacists, clinical detection staff, and etc.
16	Training system for health related workers			Education system for each occupation, qualifications and academic record.

	Indicators	Unit	Calculation Method	Remarks
(Other Basic Statistics)				
17	Total population (classified by age and gender)	person		WHO considers women aged 15-49 in a reproductive stage.
18	Adult literacy rate (classified by gender)	%	Number of literate adults/ people over the age of 15 whole population	
19	Gross enrollment ratio with primary education (classified by gender)	%	Number of children enrolling in primary education/school-aged population with primary level education	

Reference: Indicators mentioned above can mostly be obtained from the United Nation's website and publications. However, some information included cannot be accessed but is worth obtaining for assistance on project planning.

- (1) Indicators related to HIV/AIDS are obtainable from WHO's country fact sheets http://www.who.int/emc-hiv/fact_sheets/index.html
- (2) Basic indicators related to the health sector are obtained from UNICEF's statistics of The State of the World's Children Report <http://www.unicef.org/statis/>
- (3) Comparative indicators of Japan are from "Journal of Health and Welfare Statistics" (Published by the Health and Welfare Statistics Association)

Comparative Examples of Countries using Basic Checklist

Check Items/Indicators		Zimbabwe	Thailand	Philippines	Japan	
(HIV/AIDS related Issues)						
1	Number of people living with HIV/AIDS (1999)	Ages 0-15	56,000 persons	13,900 persons	1,300 persons	7,855 persons (2000)
		Ages 15-49	1,400,000 persons	740,000 persons	26,000 persons	
		Woman (Ages 15-49)	800,000 persons	305,000 persons	11,000 persons	1,643 persons (All ages,2000)
2	Deaths due to AIDS (1999)	160,000 persons	66,000 persons	1,200 persons	150 persons	
3	Ratio of mode(s) of transmission for people living with HIV/AIDS (%)	Homosexual behavior	Approximately 92%			Approximately 34%
		Heterosexual behavior	Rare			Approximately 20%
		Mother-to-child transmissions	Approximately 7%			Approximately 0.5%
		Drug injections	Rare			Approximately 0.5%
		Blood transfusions/ Blood derivatives	Rare			Approximately 26%
4	Number of AIDS orphans (1999)	Cumulative totals	900,000 persons	75,000 persons	1,500 persons	
		Number of present	623,883 persons		1,313 persons	
5	Prevalence of sexually transmitted infections (STI)					
6	Estimated number of Tuberculosis patients	Unknown Approximately 35,000 persons detected (1996)			48,430 persons Number of newly registered Tuberculosis patients (1999)	
(General Health Issues)						
7	Life expectancy at birth (1998)	Whole (age)	44	69	68	Male 77.6 Female 84.6 (2000)
		Female (% to Male)	100	109	106	109
8	Infant mortality rate (1999)	60	26	31	3.4	
9	Under 5 mortality rate (1999)	90	30	42	4.7	
10	Total fertility rate (TFR)	3.6	1.7	3.4	1.34 (1999)	
11	Maternal mortality ratio (1980-1999)	400	44	170	8 6.1 (1999)	
12	Births that are attended by skilled personnel	69%	71%	56%	100%	
13	Budget for health (percentage in government expenditure)	Budget for health care sector	38,180,000 Zimbabwean dollars			Budget for Ministry of Health, Labor and Welfare 18.396 trillion yen
		Percentage of government expenditure	16.1%			21.8%
14	Health care facilities (type/number)	Primary 1,200 rural health centers nationwide (at least 1 center within a 10-kilometer radius) Secondary 1 district hospital estimated per country (58 counties nationwide). Designates a missionary hospital as a county hospital.			To establish a regional and systematic medical supply system, the National Medical Treatment Law provides that each prefectural government should formulate medical plans with the standard number of beds.	

Check Items/Indicators		Zimbabwe	Thailand	Philippines	Japan	
					(As of 2000) 360 secondary medical service areas nation-wide 1,290,250 beds for general patients 358,658 beds for mental disease patients 23,864 beds for Tuberculosis patients	
		Tertiary 1 provincial hospital per prefecture, 8 prefectures nation-wide (Central hospital concurrently serves as provincial hospital in 1 prefecture)			Establishment of public health centers and municipal health centers are prescribed in the Regional Health Bill. 592 public health centers 2,228 municipal health centers	
		Forth level 5 central hospitals nation-wide				
15	Health care workers	Doctors	1,387 persons (1996)		248,611 persons (1998)	
		Nurses	14,855 persons		1,020,289 persons, including practical nurses and health care staff	
		Certified midwives	3,088 persons		24,202 persons	
		Pharmacists	441 persons		205,953 persons	
16	Training system of health related workers	Doctors	Unknown		6 years at university	
		Nurses	Unknown		<ul style="list-style-type: none"> • 4 years at university • 3 years at either junior college or higher vocational college (2 years for practical nurses) 	
		Certified midwives	More than half a year of new educational training after getting nurse's license: 9 courses/year 190 persons/ year Upgrade: 14 courses/ year 119 persons/year		<ul style="list-style-type: none"> • 4 years at university • 1 year at either junior college or higher vocational college for licensed nurse 	
(Other Basic Statistics)						
17	Total population (1999)	Total population	11,529,000 persons	60,856,000 persons	74,454,000 persons	126,505,000 persons
		Population aged 15-49	5,768,000 persons	35,598,000 persons	38,305,000 persons	60,154,000 persons
18	Adult literacy rate (1995-1999)	Male	90%	96%	94%	
		Female	82%	92%	94%	
19	Gross enrollment ratio in primary education (1995-1999) (gross enrollment ratio in elementary schools)	Male	111%	93%	118%	101%
		Female	105%	90%	119%	102%

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Development Objectives	Mid-term Objectives	Sub-targets of Mid-term Objectives	Examples of Activities	
1. Prevention and Control of HIV/AIDS Number of people infected with HIV and people newly infected Number of AIDS patients Deaths due to AIDS (Number classified by gender and age, together with culture, religion and poverty background should also be noted.)	1-1 Reduction of Sexual Transmission Risk Prevalence rate and incidence rate of HIV in general population Prevalence rate and incidence rate in commercial sex workers (CSWs) Percentage of sexual transmission cases in all cases	Promotion of Safe Sex Percentage of those having unsafe sex (promiscuity and unprotected sex of men who have sex with men) Percentage of condom usage Frequency (times/percentage) of prostitution Percentage of condom usage among commercial sex workers (CSWs) Access to condoms (cost, convenience, psychological considerations) Quality of condoms	Dissemination of proper knowledge on HIV/AIDS • Education campaign for the dissemination of knowledge (public education, campaigns targeting a particular group) • Development and dissemination of manual and materials for promotional campaigns • Establishment of a promotion mechanism by health care volunteers and coordinators Promotion of condom usage • Distribution of condoms to high-risk groups • Establishment of condom shipment and distribution systems • Training manufacturers to improve condom quality • Raising demand for condoms • Support for policy planning process of the condom usage promotion	
		Reduction of other STIs Prevalence rate of other sexually transmitted infections (STIs)	Establishment of STI diagnosis and treatment techniques Early diagnosis and treatment Dissemination of knowledge Development of testing system (facilities/staff/equipment) Research and development of diagnosis kits Promotion of condom usage (refer to the above mentioned activities)	
		Promotion of Awareness among People infected with HIV Percentage of HIV testing results notification Awareness of HIV/AIDS risk to others among people infected with HIV Percentage of HIV testing Knowledge and awareness of HIV/AIDS	Promotion of Voluntary Counseling and Testing (VCT) • Promotion campaign for dissemination of proper knowledge about HIV/AIDS • Implementation of campaign for voluntary blood testing • Development of blood testing system (facilities/staff) • Well-established system for testing skills • Education for testing skills • Thorough notification of results • Education on counseling methods Provide social care for HIV positive people (Refer to Development Objective 2 Care and Support for People living with HIV/AIDS and their Families)	
		1-2 Reduction of Mother-to-Child Transmission (MTCT) Risk Percentage of MTCT cases in all cases Prevalence of HIV in pregnant women	Improvement of the Awareness of the Significance of MTCT Health care staff's level of understanding of MTCT issues Percentage of AIDS counseling and testing	× Training of health care staff for better understanding of MTCT issues × Health care center counseling × Blood testing at health care centers Dissemination of knowledge about MTCT issues Promotion of Voluntary Counseling and Testing (refer to Mid-term Objective 1-1 "Promotion of VCT" for detailed activities)
			Improvement of Medical Technology for Preventing MTCT Percentage of artificial milk usage among HIV infected mothers Percentage of breast feeding among HIV infected mothers living in areas where safe water cannot be accessed Number of HIV/AIDS facilities (centers) Medical services required by HIV infected mothers and number of those receiving counseling Percentage of HIV-infected pregnant women using short-term anti-retroviral (ARV)	Prevention of infection due to pregnancy, delivery and breast feeding • Promotion of artificial breast feeding (baby formulas) in areas where safe water is accessible • Promotion of breast feeding for infected mothers living in areas where safe water cannot be accessed • Maintenance of facilities (centers) working on MTCT prevention measures • Dissemination of proper knowledge on HIV/AIDS for mothers • Short-term anti-retroviral (ARV) intervention Research and support for prevention of MTCT
			Reduction of HIV Contaminated Blood Percentage of blood banks per region	× Establishment of blood bank to counter the decrease of blood selling and emergency blood transfusion supply Development of legal and organizational control for preventing blood selling × Promotion of safe blood transfusion Provision of clean medical equipment
	1-3 Reduction of Infection Risk through Blood Transfusions Percentage of cases through blood transfusion in all cases Percentage of HIV contamination in blood supply and HIV screening rate in blood supply	Enforcement of Blood Screening Screening rate of blood supply for transfusion Accuracy of HIV testing such as false negative rate	Establishment of testing techniques Education of testing techniques Establishment of testing system for blood screening Development of screening kits, equipment and facilities Development of blood screening kits tailored to local requirements × Establishment of own-supplied testing reagent system for blood screening Training to improve blood screening systems	
		Reduction of Drug Injection Behavior Number of injecting drug users (IDUs) Number of drug injections	× Drug dependence treatment • Counseling • Usage of drug substitutes • Campaign for reduction of illegal drug use	
	1-4 Reduction of HIV Infection Risk among Injection Drug Users (IDUs) caused by Contaminated Needles HIV infection rate among IDUs	Reduction of Syringe and Needle Reuse Percentage of syringe and needle reuse	× Replacement of used syringes and needles × Education on sterilization method of syringes and needles	
		1-5 Development and Practical Application of Effective Vaccines Immunization rate of developed vaccines Efficacy of vaccines	Vaccine Development Number of vaccines in each phase of clinical testing Number of vaccines being developed Efficacy of vaccines	Joint research and development support for vaccines and related basic medical areas
	Establishment of Vaccine Purchase and Handling System Price of vaccines Vaccine supply system		× Vaccine supply × Distribution planning and implementation	
	1-6 Development and Practical Application of Effective anti-HIV medicine or anti-retroviral (ARV) Application rate of developed ARV Efficacy of ARV	Medicine Development Number of curative medicines in each phase of clinical testing Number of medicines being developed	× Joint research and development support on medicine and experimental medical-related area × Drug resistance research cooperation	
		Development of Purchase of Medicine and Handling System Price of medicine Medicine supply system	× Medicine supply × Distribution planning and implementation	

Examples of Activities: JICA has considerable experience JICA has certain experience JICA has experience as a component of projects × JICA has little experience

Development Objectives Chart on HIV/AIDS (2)

Development Objectives	Mid-term Objectives	Sub-targets of Mid-term Objectives	Examples of Activities	
2. Care and Support for People living with HIV/AIDS and their Families	2-1 Relief of Suffering caused by Physical Symptoms including AIDS-related Opportunistic Infections Percentage of people living with HIV/AIDS who receive medical support	Access to Medication Availability of medicine	Provision of anti-retroviral (ARV) Establishment of medical supply system for AIDS-related and sexually-transmitted infections (securing the procurement route, domestic production) × Support for research and development of low-cost medicine Research and development of traditional medicine Establishment of transportation system for anti-HIV and basic medicine	
		Improvement of Access to Health Care and Medical Institutions Access to medical services (number of hospitals dealing with HIV/AIDS, number of hospitalizations) Implementation rate of Voluntary Counseling and Testing (VCT)	Strengthening of cooperation between concerned institutions and communities (implementation of Voluntary Counseling and Testing) × Improvement of health care and medical facilities × Implementation of home visits Training of health care volunteers × Improvement of medical expense reduction and exemption system	
		Quality Improvement of Health and Medical Care Percentage of medical staff in medical institutions with knowledge of HIV/AIDS	Quality Improvement of health care and medical service providers · Planning guidelines · Training health care and medical staff · Maintaining stock of commodities and establishing procurement system · Improving of medical equipment and establishing maintenance system · Improving health care and medical center management Research on treatment and care methods	
		2-2 Human Rights of People living with HIV/AIDS and their Families Level of public acceptance of people living with HIV/AIDS	Securing and Enlarging Mental Care and Social Services Implementation rate of VCT Number of shelter groups	× Implementation of Voluntary Counseling and Testing (VCT) (refer to 1-1 "Promotion of VCT" for detailed activities) Improvement of supporting group and networking × Development of legal protection against discrimination and compensation issues
		Financially Secure Livelihood Income and employment conditions School attendance of AIDS orphans Number of shelter groups	× Promotion for better understanding of HIV/AIDS to business enterprises × Support for employment of people living with HIV/AIDS and their families × Establishment of financial support for AIDS orphans × Improvement of supporting group and networking	
		Promotion of Proper Knowledge and Understanding on HIV/AIDS Extent of local residents understanding on AIDS	Health Education on HIV/AIDS for local residents · Promotion campaigns · Development and dissemination of materials and manuals for promotion campaigns · Establishment of system for promotion by health care volunteers and coordinators	
	3. Implementation of Effective Measures at the National Level Adequacy of relevant HIV/AIDS programs being implemented and cover ratio of population	3-1 Planning of Appropriate Measures at the National Level Examination results on the feasibility of implementing national strategic measures Examination results on the feasibility of implementing an action plan	Establishment of Political Commitment Recognition of each activity on the national and international level	× Planning of health sector program based on international agreements, current situation, national development policy, and citizens' needs Planning of HIV/AIDS program giving consideration to current situation, citizens' needs, and overall projects × Planning of action plan and basic strategy which complies with budget allocation and implementing system condition × Development of legal system on human rights and HIV/AIDS prevention × Establishment and management of multi-sectoral organizations
			Assessment of Condition and Mode of HIV transmissions Information development on infection path of people infected with HIV	× Establishment of health information system (enhancement of administrative capability by using health and medical information) Development of statistics on HIV/AIDS epidemiology (surveillance system) Development of testing and diagnosis techniques
			Assessment of HIV/AIDS Economic and Social Factors Appropriate understanding based on HIV/AIDS information	Research on economic and social factors of HIV/AIDS × Gender analysis
			Assessment of Economic and Social Effects of HIV/AIDS Information development on productivity decline caused by HIV/AIDS	× Research on economic and social effects of HIV/AIDS
Decrease in Prejudice of Government Officials Government officials' awareness on HIV/AIDS issues			× Seminar for government officials on better understanding of HIV/AIDS	
3-2 Improvement of Administrative Capability of Measures against HIV/AIDS Action plan progress Evaluation results by administrative auditing agencies			Strengthening of Central Health Care Administration for measures against HIV/AIDS System of measures against HIV/AIDS by central government	× Training of central administrative officials × Clarification of jurisdiction
		Strengthening of Local Health Care Administration for measures against HIV/AIDS System of measures against HIV/AIDS by local governments	Training of local administrative officials × Support for decentralization of health care administration	
		Strengthening of national and international Network for measures against HIV/AIDS Access to national and international network	Establishment of north-south and south-south cooperation system Strengthening of the partnership with NGOs and international organizations Establishment of national cooperation system	
3-3 Moderation of Public Finances for Health Care Percentage of national budget given to medical and health care sector Percentage of the medical and health care sector budget allocated to HIV/AIDS Percentage of budget among other sectors given to HIV/AIDS measures		Increasing the Health Budget Revenue Percentage of funds allocated for medical and health care budget in the national budget Input of aid fund into measures against HIV/AIDS	× Planning of public finance distribution and expansion of health care budget × Financial support through the common basket system, etc.	
		Review of Financial Distribution of Health Care and Priority Directing Percentage of HIV/AIDS budget in the medical and health care budget	× Support for overall planning of budget distribution and mid-term expenditure in the health care sector × Cooperation for appropriate and effective fiscal expenditure and budget execution for sub-sectors and local budgets × Amelioration of fund application through audits	