



HIV and the Greater Mekong Subregion

Strategic Directions
and Opportunities



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ADB

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Southeast Asia Department
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HIV and the Greater Mekong Subregion: *Strategic Directions and Opportunities*

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Content

	Page
Map	vi
Introduction	1
A. The GMS and ADB	1
B. ADB and HIV	3
C. Regional Cooperation, the GMS, and HIV	3
HIV in the GMS	5
A. Trends	5
B. HIV Transmission: Risk Groups and Risk Factors	5
C. Impact of HIV on Health, Poverty, and the Economy	9
D. Current Response	10
E. ADB Experience in the GMS	12
An ADB Response: Addressing Needs Strategically	14
A. Defining Strategic Directions	14
B. Defining the Actions	15
C. Operational Considerations	19
D. Resources, Coordination, and Partnerships	20
Conclusion	21
Appendixes	22
1. Strategic Directions for ADB in Response to HIV and AIDS in Asia and the Pacific: The Framework	23
2. HIV Profiles of GMS Countries	24
3. ADB-Supported HIV Projects in the GMS	29
4. Program Proposals for Implementing the GMS HIV Strategy	30

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
AIDS	–	acquired immunodeficiency syndrome
ART	–	antiretroviral treatment
DMC	–	developing member country
GFATM	–	Global Fund for AIDS, Tuberculosis and Malaria
GMS	–	Greater Mekong Subregion
HIV	–	human immunodeficiency virus
IDU	–	injecting drug use
JFPR	–	Japan Fund for Poverty Reduction
km	–	Kilometer
Lao PDR	–	Lao People’s Democratic Republic
MSM	–	men who have sex with men
NAP	–	National AIDS Programme
NGO	–	nongovernment organization
PLHIV	–	people living with HIV
PRC	–	People’s Republic of China
RCSP	–	Regional Cooperation Strategy and Program
STD	–	sexually transmitted disease
STI	–	sexually transmitted infection
TA	–	technical assistance
TB	–	Tuberculosis
UNAIDS	–	Joint United Nations Programme on HIV/AIDS
UNDP	–	United Nations Development Programme

NOTES

In this report, “\$” refers to US dollars.

HIV AND THE GREATER MEKONG SUBREGION: STRATEGIC DIRECTIONS AND OPPORTUNITIES



Introduction

The Greater Mekong Subregion (GMS) is a subregional grouping that recognizes the common interests, concerns, and challenges of the six countries around the Mekong River—Cambodia, People’s Republic of China (PRC), Lao People’s Democratic Republic (Lao PDR), Myanmar, Thailand, and Viet Nam. Established in 1992 with the support of the Asian Development Bank (ADB), the GMS Program is aimed at promoting closer economic ties and cooperation and improving the quality of life in the subregion by emphasizing the “three Cs”: connectivity, greater competitiveness, and a stronger sense of community.

The pursuit of economic prosperity and poverty reduction via the “three Cs” cannot be dissociated from the “three Ms”—*men*, *mobility*, and *money*—which together are linked to the high-risk environments and behaviors that fuel the spread of HIV¹ in Asia. Men, particularly young men, are increasingly mobile and migrate from their homes to seek employment in urban or other economic growth centers. They are more likely to use some of the money they earn on alcohol, prohibited drugs, or commercial sex. It is here among young men, injecting drug users and sex clients, that HIV takes hold and spreads: from sex workers to clients, to the wives and girlfriends of these clients, and then to their children.

Other features of these environments that contribute to HIV transmission risk are limited access to health services, especially among those that have crossed borders and face legal, language, and cultural barriers; increased vulnerability of local communities, especially women and young people, when large-scale infrastructure opens the doors to external factors, economic pressures, and social change; and low awareness and resilience in poor rural, ethnic minority and cross-border areas. Failure to recognize and deal with these factors will undermine the economic growth, poverty

alleviation, and social development goals of the GMS Program.

The GMS was an original epicenter of the HIV epidemic in Asia, starting in Thailand in the late 1980s, and Cambodia and Myanmar in the early 1990s. The epidemic in these countries is now mature, and HIV prevalence in both Cambodia and Thailand has declined in recent years as a result of significant public investment in prevention and care programs. In Yunnan and Guanxi provinces of the PRC and in Viet Nam, however, an epidemic strongly linked to injecting drug use (IDU) has emerged and is growing rapidly, while HIV prevalence in the Lao PDR is still low but is doubling every 1–2 years (Table 1).

More than 1.6 million of the GMS population of 320 million—one in 80 adults of reproductive age and involving some 3–4% of households—are believed to be living with HIV and AIDS.² More than 125,000 have died from AIDS since the early 1990s. Nearly a quarter of those infected are women, and this proportion is growing.

With this serious epidemic escalating, and ADB investing more in the GMS, there is a need to consider how these issues interact and what actions must be taken to mitigate risk and ensure that the investments contribute to social inclusion, poverty reduction, and sustainable economic growth to its maximum potential. ADB has stepped up its response to the HIV epidemic in recent years, as more resources have become available. This paper outlines the key issues and risks and proposes a framework for ADB’s strategic response to HIV and AIDS in the GMS.

A. The GMS and ADB

The GMS³ covers 2.6 million square kilometers and is rich in human and natural resources. But even

¹ Human immunodeficiency virus.

² Acquired immunodeficiency syndrome.

³ The information in this section is from Asian Development Bank (ADB). 2005. *The Greater Mekong Subregion—Beyond Borders: Regional Cooperation Strategy and Program Update, 2006–2008*. Manila; and ADB. 2005. *Competitiveness, Connectivity, Community: Connecting Nations, Linking People*. Manila.

Table 1: HIV Prevalence and AIDS-Related Deaths in the GMS, 2003 and 2005

Country	Estimated No. of Adults ^a and Children Living with HIV, 2003	HIV Prevalence among Adults ^a (%), 2003	Estimated Number of Adults and Children Living with HIV, 2005	HIV Prevalence among Adults ^a (%), 2005	AIDS-Related Deaths in Adults ^a and Children, 2005	Women ^b Living with HIV, 2003
Cambodia	140,000	2.0	130,000	1.9	16,000	65,000
Lao PDR	1,700	0.1	3,700	0.1	<100	<500
Myanmar	380,000	1.4	360,000	1.3	37,000	120,000
Thailand	570,000	1.4	580,000	1.4	21,000	220,000
PRC ^c	530,000	0.1	650,000	0.1	31,000	130,000
Yunnan Province			30,000–40,000			
Guangxi Province			10,000–30,000			
Viet Nam	210,000	0.4	260,000	0.5	13,000	64,000
Asia ^d	7,160,000		8,280,000		593,000	2,140,000
Worldwide	36,200,000	1.0	38,600,000	1.0	2,800,000	17,300,000

AIDS = acquired immune deficiency syndrome, PRC = People's Republic of China, GMS = Greater Mekong Subregion, HIV = human immunodeficiency virus, Lao PDR = Lao People's Democratic Republic.

^a 15–49 years.

^b 15 years and above.

^c There are no readily available estimates for Yunnan and Guangxi provinces. According to the official report of the Office of the State Council Working Committee on AIDS (December 2005), 30,000–40,000 were living with HIV in Yunnan province and 10,000–30,000 in Guangxi province in 2005, and HIV prevalence was more than 50% among injecting drug users in some areas of Yunnan and more than 1% among sex workers in some parts of Yunnan and Guangxi province.

^d East, South, and Southeast Asia (but not Central Asia or Oceania), according to the reporting definitions of the Joint United Nations Programme on HIV/AIDS (UNAIDS).

Sources: UNAIDS. 2006. *2006 Report on the Global AIDS Epidemic*. Geneva; and Office of the State Working Committee on AIDS, People's Republic of China. 2005. *Progress on Implementing UNGASS (United Nations General Assembly Special Session) Declaration of Commitment in China 2005*. Beijing.

with such resources and the subregion's geographic advantage, about 50 million of its 320 million people still live in poverty on less than the equivalent of \$1 a day.

The GMS Program aims to promote closer economic and social ties and cooperation among the six countries. The goal is a more integrated, prosperous, and equitable Mekong subregion, complementing national efforts to promote economic growth and reduce poverty. To create subregional opportunities that will augment domestic development opportunities, the program seeks to encourage trade and investment, ease the cross-border movement of people and goods, and meet common resource and policy needs among GMS countries.

With its focus on connectivity, increased competitiveness, and a greater sense of community, the

GMS Program promotes subregional cooperation in nine sectors: transportation, energy, telecommunications, human resource development, tourism, environment, trade, investment, and agriculture. Activities are grouped into three main areas:

- (i) physical infrastructure—transport, power, and telecommunication facilities—to promote overall economic growth and greater trade, investment, and tourism flows;
- (ii) policy and institutional initiatives, to maximize the benefits and opportunities from physical infrastructure; and
- (iii) initiatives that address common concerns related to social development and environmental sustainability.

B. ADB and HIV

ADB has supported HIV-related actions in the Asia and Pacific region since 1993. In 2005, ADB outlined its first institutional strategy for responding to HIV and AIDS, relating the issue directly to development and poverty reduction.⁴ The stated goal of ADB's strategic response to the HIV and AIDS epidemic is to support developing member countries (DMCs) in achieving Millennium Development Goal 6, Target 7: to have halted and begun to reverse the spread of HIV by 2015. ADB-supported interventions are meant to ensure an effective response by the countries and the region to HIV and AIDS. In view of ADB's experience and comparative strengths, the identified priorities for action are:

- (i) leadership support—strengthening the commitment of regional leaders to address HIV;
- (ii) capacity building—increasing the capacity of the individual countries and the region as a whole to respond to HIV; and
- (iii) targeted programs—expanding critical HIV interventions that mitigate risk among the poor and the vulnerable, and in high-risk situations.

The goal, purpose, and priorities for action, along with operational principles for ADB's response to HIV, are outlined in the framework for strategic directions (Appendix 1). The framework specifies that ADB will consider both country and regional priorities depending on the severity of the epidemic, available resources, and the need for strategic inputs that fill gaps in the current response consistent with its objectives and priorities for action. National HIV and AIDS strategies (or their equivalent) will be the starting point for all activities and coordination within existing portfolios. Careful attention to implementation capacity will also be a key consideration in all planning.

In defining a niche role for ADB, the strategy paper recognizes the institution's strong relationship with finance, planning, and infrastructure ministries

and notes this to be a comparative advantage over most other international organizations in the response to HIV. Partner governments and technical agencies operating in the region recognize this strength and are keen to see ADB increase its work in this area. Governments and development partners in particular are looking to ADB to fill an area of need and perceived comparative advantage in designing and implementing activities that mitigate HIV infection risks and enhance prevention opportunities associated with large-scale infrastructure projects and other non-health sectors.

C. Regional Cooperation, the GMS, and HIV

Since increased connectivity and regional integration can bring both benefits and costs, ADB's Regional Coordination and Integration Strategy (2006) includes support for creating and disseminating regional public goods as a central pillar. According to the strategy, regional public goods can be promoted through (i) coordinated actions to supply regional public goods such as clean air, environmental protection, control of communicable diseases, and management of natural disasters; and (ii) dissemination of analysis and research findings in the public domain through publications, workshops, and shared standards. The strategy also states that in the GMS region, ADB plays a multifaceted role—as an honest broker, a catalyst for dialogue and cofinancing, a provider of advisory and secretariat services, and a major financier of projects.

The GMS, one of the world's fastest-growing subregions, has been especially vulnerable to, and affected by HIV. As a land bridge between South and East Asia, it is well positioned for trade with its neighbors, yet this same advantage and connectivity exposes the subregion to the rapid spread of HIV. Where opium is trafficked, IDU follows. HIV spreads rapidly among injecting drug users and then passes into the broader community to become an epidemic, fueled by unsafe sex. The legal and illegal movement of people facilitates both the rapid transmission of the virus and the risk factors that bring it to local communities. Poverty and social displacement hasten the spread of the epidemic.

⁴ ADB. 2005. *Development, Poverty, and HIV/AIDS: ADB's Strategic Response to a Growing Epidemic*. Manila.

The response to HIV is an integral part of ADB's GMS Program, which recognizes the HIV risks created by increased connectivity and integration, and underscores the need to systematically and comprehensively mitigate such risks. There is broad awareness that supporting the response to HIV is a regional public good with benefits across and beyond borders that cannot be readily costed. Thus, in ADB's GMS Program, the critical role and impact of HIV is a crosscutting, multisectoral issue—one that potentially

affects, or is affected by, programs in at least six of the nine GMS sector areas (transportation, energy, human resource development, tourism, environment, and investment). Prevention can be promoted and risk mitigated in many program areas. As an institution financing investment in these sectors, ADB has both an opportunity and an obligation to lessen the associated risks and ensure the full realization of the poverty alleviation and economic development potential.

HIV in the GMS

HIV infection has become a generalized epidemic—firmly established in the general population⁵—in Cambodia, Myanmar, and Thailand. At the national level in the PRC and Viet Nam, the epidemic is considered concentrated (HIV has spread within a defined subpopulation but not more generally), but at the subnational level, including Yunnan province in the PRC, there are regions where the epidemic is readily described as generalized. The epidemic in the Lao PDR is still considered to be of low prevalence although, given the doubling of infection rates every 1–2 years, that classification should eventually change.

A. Trends

While the situation of HIV across the GMS is serious, the history and trends of the epidemic are quite different for each country:⁶

- (i) Cambodia has a mature epidemic driven by heterosexual transmission. With a concerted prevention program led by government and well supported by donors, HIV prevalence declined from 2.2% of the population aged 15–49 in 2001 to 1.9% in 2005, and in early 2007 there are indications it may be lower still.
- (ii) The PRC has a concentrated epidemic driven mainly by IDU but spreading among sex workers and the general population. Yunnan and Guangxi provinces have some of the highest infection levels in the country. Most infections in the PRC at this time are the result of contaminated blood distribution in the 1990s.
- (iii) The Lao PDR has a small epidemic, mostly confined to major urban areas (e.g., Bokeo, Vientiane, and Savannakhet). Transmission is largely heterosexual, but, according

to the Joint United Nations Programme on HIV/AIDS (UNAIDS), HIV prevalence is doubling in the Lao PDR every 1–2 years.

- (iv) Myanmar appears to have a large, if poorly understood and documented, epidemic, with an estimated 1–2% of the population aged 15–49 infected with HIV. In addition to heterosexual transmission, IDU and contaminated blood are important modes of transmission, but the picture varies widely by geographical location and population subgroup.
- (v) Thailand has a mature epidemic of mixed origin, although about 88% of current infections are from heterosexual transmission. HIV prevalence has declined in the general population to about 1.5% after a concerted effort by government, including a policy of 100% condom use.
- (vi) Viet Nam has a mixed epidemic that owes its existence to IDU in some places and to sex workers and their clients in others. HIV prevalence is still low nationwide, but it is 30–70% among injecting drug users and 10% among sex workers, and growing steadily.

Table 2 describes the epidemic in the GMS countries and regions according to the international classification system for the stage of development of a national epidemic. Understanding the epidemic in the context of this system is important in defining and targeting response.

B. HIV Transmission: Risk Groups and Risk Factors

The HIV epidemic in the GMS is due largely to IDU and sex work. The spread from injecting drug users

⁵ This classification of HIV epidemics is based on the levels of infection found in high-risk groups such as sex workers and injecting drug users, and among women attending prenatal clinics, the latter being taken as a proxy for the general population.

⁶ Further information on the epidemic in each country is also found in Appendix 3.

Table 2: Classification of the HIV Epidemic in the GMS Countries

Stage of Development	Stage Description	GMS Country or Region
Generalized epidemic	HIV is firmly established in the general population. Proxy indicator: HIV prevalence consistently over 1% among tested pregnant women in sentinel sites	Cambodia, Myanmar, Thailand
Concentrated epidemic	HIV has spread within a defined subpopulation but not in the general population Proxy indicator: HIV prevalence consistently over 5% within at least one defined subpopulation (such as MSM, injecting drug users, commercial sex workers) and less than 1% among pregnant women attending urban antenatal clinics	PRC, Viet Nam
Low prevalence	Proxy indicator: HIV prevalence less than 5% in any defined subpopulation	Lao PDR

AIDS = acquired immunodeficiency syndrome, PRC = People's Republic of China, GMS = Greater Mekong Subregion, HIV = human immunodeficiency virus, Lao PDR = Lao People's Democratic Republic, MSM = men who have sex with men.

Sources: UNAIDS and WHO. 2000. *Guidelines for Second Generation HIV Surveillance*. Geneva; and UNAIDS. 2004. *2004 Report on the Global AIDS Epidemic. 4th Global Report*. Geneva.

to other population groups often starts with the spread to commercial sex workers, given cultural and economic pressures. Marginalized—and often with similar illegal status—injecting drug user men partner with women who are sex workers, or themselves become sex workers to support their drug needs. Without the use of condoms the spread from sex workers to clients is inevitable. The clients of sex workers are from all parts of a broader community, single and married, and include mobile workers and men who have sex with men (MSM) who lead ostensibly heterosexual lives. In most countries of the GMS, women and youth are an increasing proportion of the new infections each year.

Injecting Drug Use. Injecting drug use (IDU) is a major driver of the spread of HIV as a result of sharing contaminated needles and syringes. Opium growing, selling, and smoking are long-established cultural patterns in many communities in the GMS. Development schemes that have interrupted the local opium trade—reducing livelihoods (as in parts of northern Lao PDR), criminalizing old cultural practices, and inducing a move from smoking to injecting (as in the PRC, Myanmar, Thailand, and northern Viet Nam)—and caused unemployment and alienation among young urban dwellers have all led to an increase in IDU in the region. Poverty and

lack of opportunity underlie IDU, and the youth are particularly at risk.

Sex Work. The commercial sex industry is widely established in all GMS countries. Increased purchasing power, changing social structures, and rural–urban migration facilitate the development of the industry. It is generally estimated that 10% of the men purchase sex, often in association with drinking and entertainment and tourism. These men come from all socioeconomic strata and include laborers, businessmen, truckers, construction workers, the military, government officials, seamen, and students. Many or most have wives and girlfriends with whom they also have sex, generally without the use of a condom. In all GMS countries, the supply of sex workers is largely driven by rural poverty and a lack of economic opportunities, particularly for women, linked to increasing rural–urban migration. The trafficking of women and girls is closely associated with sex work.

Men Who Have Sex with Men (MSM). Studies show that 3–5% of men in Asia have sex regularly or preferentially with other men. Of these, 20–50% also have sex with women, including wives and girlfriends.⁷ A study of HIV prevalence among MSM in Cambodia found 14% of those surveyed to be infected.⁸ Legal

⁷ Brown, T. 2004. Overview: Epidemiological and Behavioral Research among MSM in Asia. *15th International AIDS Conference Proceedings*, Abstract No. WePC2068.

⁸ Girault, P., et al. 2004. HIV, STIs, and Sexual Behaviours among Men Who have Sex with Men in Phnom Penh, Cambodia. *AIDS Education and Prevention* 1 (1): 31–44.

codes against male-to-male sex and homosexuality in some countries, along with harassment and social stigma, hinder education programs that seek to target MSM, particularly in relation to HIV infection risk.

Sexually Transmitted Infections (STIs). Infection with any sexually transmitted disease greatly increases the risk of HIV infection. STI control is an important—and underfunded—cornerstone of HIV prevention in the region. While the prevalence of STIs is usually low in the general population, it is often high among sex workers. STI treatment is now cheap and effective but requires contact with the health-care system. Limited access to, and use of, health services heightens the risk of infection.

Safe Blood Supplies and Safe Injections. Many countries in the region have difficulty ensuring the safety of blood supplies.⁹ More difficult to address is the widespread use of contaminated needles for injections. Particularly in rural areas, people seek injections for a range of ailments from untrained persons. Single-use syringes are still relatively expensive, and initiatives to reduce the risk from injections and blood exposure are limited.

Gender. Apart from being physiologically more vulnerable to the virus, women in many parts of the region are at higher risk of infection because of sociocultural factors. As the epidemic progresses, increasing numbers of women will become infected with HIV because their husbands or boyfriends have unprotected, multi-partner sex or share needles when injecting drugs. A 1999 study in Thailand found that 75% of HIV-infected women had been infected by their husbands.¹⁰ Poverty and the lack of economic opportunities have also pushed women into the sex trade. The sex-entertainment industry is growing rapidly throughout the GMS, creating income options for women. The trafficking of women and girls for the sex trade increases the risk of HIV. Women—often also infected with HIV—are nearly always the caretakers of males who are sick, in addition to their other housekeeping and child and elderly care roles. The behaviors and the risks

that face young men and women are the driving forces of the epidemic.

Mother-to-Child Transmission. Without prevention measures, about 30--35% of babies of HIV-infected mothers will be born with the virus or will acquire it through breast milk. Inexpensive drug treatments that can reduce prenatal and birth-related transmission by about 50% are available, but they need to be administered within functioning health-care systems (including prenatal care, HIV testing, and counselors) and to mothers supported by prepared families and communities.

Orphans and Vulnerable Children. Estimates of the number of children below 18 years in the region who have lost one or both parents to HIV are difficult to obtain. However, recent country reports suggest there could be as many as 30,000.¹¹ Orphaned children are especially vulnerable because they are highly stigmatized, often without adequate adult care and unable to finish school (for lack of social and financial support), and usually psychologically affected. Trafficking and illegal migration create conditions that render them vulnerable.

Adolescents and Youth. Young people 15–24 years old, who make up about 20% of Asia's population, are already seriously affected by the HIV epidemic. Of those living with HIV in Asia, 22% are 15–25 years old. The cultural resistance to teaching youth about sex and drugs is an obstacle to prevention. Adolescent girls in particular are vulnerable and underserved by policy and targeted interventions. Growing textile industries in countries like Cambodia and Viet Nam are attracting increasing numbers of young women from rural areas, who come ill prepared to protect themselves from exploitation (economic and sexual) and infection. Young men are more likely to migrate and move across borders and to become engaged in drug taking and high-risk sexual behavior.

Ethnic Minorities. The ethnic minority populations of the GMS generally have low exposure to HIV in their traditional settings. However, economic disadvantage, illiteracy, poor education, and limited

⁹ The World Health Organization (WHO) advocates blood safety through voluntary, unremunerated regular donors, testing of all units of blood with appropriate technologies, and quality assurance and control systems covering each step of the transfusion chain.

¹⁰ Bennetts, A., et al. 1999. Differences in Sexual Behavior between HIV-Infected Pregnant Women and Their Husbands in Bangkok, Thailand. *AIDS Care* 11, no. 6 (December): 649–661.

¹¹ Country reports presented at the East Asia and Pacific Consultation on Children and HIV/AIDS, Ha Noi, Viet Nam, 22–24 March 2006.

access to health care will magnify risk in particular situations. The expansion of road networks and other physical infrastructure projects in remote or isolated areas, and the forced or voluntary relocation programs that may accompany such developments, lead to disproportionate risk among ethnic minority populations in such areas.

Mobility, Migration, and Transport. Mobility, migration, and connectivity are significant factors in the spread of HIV throughout the GMS. Men who travel for work or entertainment, locally, to urban centers, or internationally, including soldiers and policemen, tourists, truckers, fishermen, construction workers, traders, and civil servants, are more likely to have additional sex partners, besides those who remain at home, in traditional family and community structures. Local markets, ferries, road stops, construction sites, border crossings, ports, and other economic hubs become hot spots of sexual entertainment and services. Separation from families, boredom, and the lack of alternative entertainment opportunities, coupled with disposable income, encourage people on the move to engage in high-risk behaviors, such as unprotected sex, and alcohol and drug use.

According to a study by the United Nations Development Programme (UNDP), in collaboration with people living with HIV (PLHIV) groups in the Asia and Pacific region, nearly 67% of the PLHIV ascribed their infection to migration.¹² Rural–urban migration, especially among young women, is a rapidly increasing phenomenon in many GMS countries. The explosion of HIV in Thailand in the late 1980s was fueled largely by the migration of large numbers of young women from ethnic minority groups in northeast Thailand to the cities, and their subsequent recruitment into a sex industry serving a labor force of young men drawn into the cities and towns by the rapid economic and infrastructure development of the country. A similar pattern has been seen in Cambodia. Sex-focused tourism from within and outside the region has also been a factor. Among migrant and ethnic minority population groups, health and education services are often weak, while education and literacy are low,

contributing to poor access and use of the services important for building resilience and minimizing the risk of infection.

HIV infection risks and the land transport sector are closely connected. One year after the Mandalay–Muse Highway between Myanmar and Yunnan was completed, HIV prevalence increased in three provinces along the highway in Myanmar, namely, Mandalay (from 51% to 88%), Lashio (34% to 74%), and Muse (86% to 92%).¹³ Similarly, high levels of HIV risk have been found in the construction sector. A behavioral surveillance survey among construction workers in Ho Chi Minh City found that the typical construction worker was single, male, young, had had 6–9 years of schooling, and had lived in the city for less than a year. The workers reported behaviors that made them vulnerable to HIV, including sex with multiple partners and inconsistent condom use with sex workers and occasional partners. A significant number of the workers did not use a condom when they last had sex with a sex worker (more than 25% of the workers) or with an occasional partner (more than 50%).¹⁴ The convergence of the transport and construction sectors in infrastructure development investments creates environments that require targeted mitigation efforts.

Poverty and Illiteracy. The close link between poverty and HIV infection is increasingly recognized and understood. As the epidemic matures, HIV is becoming increasingly concentrated in poor populations.¹⁵ Wealthier groups learn to protect themselves, but the poor have less knowledge and opportunity. A 2001 study in Cambodia found that women 15–19 years old from the poorest quintile were 50% more likely to have had sex than women of the same age in the upper-income quintiles. Women from the wealthiest quintile were also twice as likely as the poorest women to know how to prevent HIV transmission, and to practice safe sex.

Stigma and Discrimination. The association of HIV with sex, drug use, and death stigmatizes those affected. In such environments, studies show that people's efforts to avoid infection lead to

¹² United Nations Development Programme (UNDP)–South East Asia HIV and Development Programme (SEAHIV). 2004. *Migration and HIV in South Asia*. New Delhi.

¹³ UNDP–South East Asia HIV and Development Programme (SEAHIV). 2001. *Building an Alliance with Transport Sector in HIV Vulnerability Reduction*. Thailand.

¹⁴ Bao, V. N., et al. 2003. *Expanding Workplace HIV/AIDS Prevention Activities for a Highly Mobile Population: Construction Workers in Ho Chi Minh City*. New York: Horizons/ Population Council.

¹⁵ Bloom, D. E., et al. 2002. *Health, Wealth, AIDS and Poverty*. Report for ADB. Manila.

unnecessary and cruel discrimination, isolation, and denial of employment, access to schooling, housing, and health care. Often, this discrimination extends beyond the infected persons to family, friends, and the communities in which they live. Such treatment is not only inhumane but also feeds the epidemic as infected and affected people become isolated from information, support, and economic opportunities (including schooling), and are thus more likely to engage in high-risk behavior (sex work, drug use, and unprotected sex).

C. Impact of HIV on Health, Poverty, and the Economy

Health and Health Systems. The impact of HIV and AIDS on health services is significant, particularly as extended programs of antiretroviral treatment (ART) are scaled up. Effective ART programs may reduce the number of hospital inpatients and change how hospitals manage chronic illness. The risk of contracting HIV is greater among people with other conditions, and the incidence and severity of illness associated with HIV occurs sooner and is greater when people are coinfecting: HIV is more likely to be transmitted when people are infected with other STIs. Tuberculosis (TB) is closely associated with poverty and has a serious interaction with HIV. Unlike other

opportunistic infections common among HIV-infected people, TB is easily spread to other people whether they have HIV or not. As a result, the number of TB cases worldwide and across the GMS has sharply increased. In Chiang Mai, Thailand, the proportion of HIV-positive TB patients rose from 1.5% in 1990 to 69% in 1998.¹⁶

While national prevalence in the GMS remains low, demographic statistics tend to mask the size of the epidemic at the subnational level. In Thailand's Chiang Mai province, at the peak of the national epidemic in 1993, HIV prevalence among adults reached 8–10%, three to four times greater than the national prevalence rate, and life expectancy at birth fell by nearly 5 years, against a 2-year reduction attributable to HIV nationwide.¹⁷ Similarly, in Cambodia's Siem Reap province, HIV prevalence has been as high as 6%, more than double the national average. A 2004 study estimated that life expectancy in the province in 2007 would be 7.3 years lower than it would otherwise have been, because of HIV, whereas national life expectancy would be 2.3 years lower (footnote 15).

Poverty and the Economy. The economic costs of HIV and AIDS in the GMS are high and rising. Costs arise from the loss of productivity because of illness and care-giving requirements, medical and funeral

Table 3: Economic Impact of HIV in the GMS

Country	2003			Forecast (2015)		
	HIV Cases	Deaths	Cost (\$m)	HIV Cases	Deaths	Cost (\$m)
Cambodia	170,000	15,000	150.0	187,491	17,552	140.4
PRC						
Yunnan ^a	200,000	23,000	460.0	1,579,406	96,399	1,446.0
Guangxi	—	—	—	—	—	—
Lao PDR	1,700	200	2.0	11,915	740	5.9
Myanmar	330,000	20,000	200.0	515,673	43,007	344.1
Thailand	570,000	58,000	2,030.0	677,414	32,881	986.4
Viet Nam	220,000	9,000	90.0	251,947	22,260	178.1
Total	121,491,700	125,200	2,932.0	3,223,846	212,839	3,100.9

AIDS = acquired immunodeficiency syndrome, PRC = People's Republic of China, GMS = Greater Mekong Subregion, HIV = human immunodeficiency virus, Lao PDR = Lao People's Democratic Republic, MSM = men who have sex with men.

Sources: UNAIDS and WHO. 2000. *Guidelines for Second Generation HIV Surveillance*. Geneva; and UNAIDS. 2004. *2004 Report on the Global AIDS Epidemic. 4th Global Report*. Geneva.

¹⁶ WHO. 2003. *Regional Strategic Plan on HIV/TB*. Regional Office for Southeast Asia. New Delhi.

¹⁷ ADB and the Joint United Nations Programme on HIV/AIDS (UNAIDS). 2004. *Asia-Pacific's Opportunity: Investing to Avert an HIV/AIDS Crisis*. Manila.

costs, and loss of household savings. The costs for the GMS were estimated at \$2.9 billion in 2003, and are expected to rise to \$3.1 billion by 2015 with rising death rates (Table 3). At the macro level, analyses of HIV data from 51 countries around the world concluded that the epidemic has had a negative but statistically insignificant effect on the rate of growth of real income per capita (footnote 15).

While all chronic diseases take their toll on human productivity, HIV is markedly worse because it affects people in their prime productive years (15–49 years of age), leading to significant losses in productivity and earnings. Poor families and communities are particularly vulnerable to the loss of income from both the infected persons and those who care for them, expenditures on health care and funerals, loss of future earnings and investment as children drop out of school to earn money or help the caretakers, decrease in agricultural production due to lack of labor, loss of savings, loss of homes, sale of land to cover health costs, and increase in indebtedness.

Studies by ADB and UNAIDS have looked at the household impact of HIV in four countries including Cambodia, Thailand, and Viet Nam.¹⁸ In Cambodia, catastrophic illness including HIV was found to be the most common cause of land loss among poor households. A recent death in a poor household was more likely to lead to lower school enrollment, lower household wealth, unemployment, and high indebtedness than a similar event in a nonpoor household. The study found that at current estimates of the growth of the epidemic, annual poverty reduction estimates and trends could be up to 60% lower in Cambodia.

D. Current Response

1. GMS HIV Policy

The GMS governments have generally shown a high level of commitment to addressing HIV and AIDS and to provide strong leadership and coordination of donors. All countries have adopted a national HIV strategy and plan as follows:

- (i) Cambodia: Strategic Plan for HIV/AIDS and STI Prevention and Care, 2004–2007;
- (ii) PRC: National HIV/AIDS Prevention and Control Action Plan, 2001–2006;
- (iii) Lao PDR: National Strategic Plan for HIV/AIDS/STD (sexually transmitted disease) for 2006–2010;
- (iv) Myanmar: National Strategic Plan for Expansion and Upgrading of HIV/AIDS Activities (2001–2005);
- (v) Thailand: National AIDS Programme; and
- (vi) Viet Nam: National Strategy on HIV/AIDS Prevention and Control in Viet Nam till 2010 with a Vision to 2020.

The national AIDS control programs of the GMS countries generally recognize the global evidence and principles for effective programs, support decentralized planning and implementation, and encourage the involvement of civil society and the private sector. However, several lack detailed implementation plans and are weak in some critical areas, particularly the more complex and sensitive issues related to targeting and providing services to vulnerable groups. Further information on the national strategies for HIV control in the GMS and the administrative bodies responsible for their implementation is in Appendix 2.

2. Development Partners

The national governments and international development partners have steadily increased their funding in the past 10 years. But the interests and contributions of international development partners are diverse and extend from policy dialogue to the financing of research, the provision of drugs, and comprehensive prevention programs, bringing together many United Nations (UN) agencies, bilateral and multilateral donors as well as private foundations, the private sector, and other international programs. Among these diverse interests and contributions,

¹⁸ ADB/UNAIDS. 2004. The Impact of HIV/AIDS on Poverty in Cambodia, India, Thailand, and Viet Nam. *ADB/UNAIDS Study Series Paper III*. Manila.

the critical role of the international community in galvanizing and financing the response to HIV, at both the national and the regional levels, is well recognized. For example, in a difficult setting such as Myanmar, it is widely believed that without the proactive dialogue and financial support of development partners, there would likely have been limited attention until now and the start of action would have been even further delayed.

International support for HIV prevention, treatment, and care in the GMS includes a diverse range of bilateral, multilateral, and private partners. While it is practically impossible to comprehensively map the programs and financial flows of all international partners at any one point in time, given the highly dynamic nature of inputs, some key donors and technical support agencies and programs in the region are:

- (i) UNAIDS, the joint UN program that aims to promote leadership and advocacy, strategic information, monitoring and evaluation, partnerships across sectors, civil society engagement, and the mobilization of resources within the UN family. UNAIDS facilitates coordination and advocacy in each country of the GMS and regionally.
- (ii) Other UN agencies including the World Health Organization (WHO), which provides technical support for policies and programs; the United Nations Children's Fund (UNICEF), with its focus on orphans and vulnerable children as well as adolescents; and the International Organization for Migration (IOM), which documents and advocates about the risks facing mobile and migrant populations in the region.
- (iii) The World Bank, which has made loans and special grant financing from the International Development Association (IDA) XIII replenishment available for large projects in Cambodia, PRC, Viet Nam, and Thailand. In Viet Nam, the World Bank has financed the Blood Supply Management Program (with a \$38.2 million loan) and the HIV/AIDS Prevention Project (with a \$35 million grant).
- (iv) The European Commission, which has supported HIV programs in the region largely through contributions to multilateral programs like the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and the UN Fund for Population (UNFPA) and directly supports a condom social marketing program in Myanmar.
- (v) The Government of the United States (US), which has contributed significant resources throughout the GMS subregion. The contributions have steadily grown in volume in recent years, particularly in Viet Nam, the only Asian country included in the US President's Emergency Plan for AIDS Relief (PEPFAR). PEPFAR funding in Viet Nam in 2007 alone is expected to exceed \$60 million—more than the amount contributed by any other major donors/partners for any multiyear project. International nongovernment organizations (NGOs) are predominantly used to deliver and implement US-funded programs, and some restrictions apply to the scope of services that can be financed.
- (vi) The Department for International Development (DFID) of the United Kingdom, which has supported large HIV programs in Cambodia, PRC, Myanmar, and Viet Nam. Funding is mostly channeled through government agencies but has also been directed through international NGOs where government capacity is insufficient. In Viet Nam, the DFID is also playing an important role in leading the development of coordination and harmonization structures among the major donors, including ADB.
- (vii) Bilateral donors like Australia, Canada, and Sweden have also supported important programs for regional leadership development and harm reduction (Australia), vulnerability reduction among mobile populations particularly in the GMS (Canada), and multisectoral leadership and response at the national level (Sweden), as well as other programs.
- (viii) The GFATM, which has financed HIV-focused country proposals in each of the

GMS countries/region. (The grant provided to Myanmar for HIV control was, however, canceled in 2005 because of governance concerns.) A significant portion of GFATM grants is usually set aside for the procurement of medicines for treatment, but programs also cover prevention and can be multisectoral.

Despite the significant growth in financial resources committed and in the number of development partners involved, the level of funding available in most countries, from national and international sources, is still not enough for a comprehensive response to the epidemic, incorporating the full range of actions for prevention, treatment, and care. In particular, as HIV treatments have become significantly more affordable in recent years, increased financial support has been drawn to the provision of treatment—and away from prevention programs, in the view of several concerned GMS countries/regions. Efforts are under way to redress the resource imbalances and gaps, but there must be continued attention to appropriate balancing, cost-effectiveness, and long-term sustainability.

E. ADB Experience in the GMS

ADB has had several technical assistance (TA) and grant-financed projects in HIV prevention in the GMS, some of them as part of infrastructure projects. ADB's work has centered on the risks specific to cross-border areas of the GMS. Studies and operational research done under intervention programs have greatly expanded knowledge of the risks associated with mobile populations and ethnic minority populations. ADB has also supported the development of methods for assessing the financing needs and poverty impact of the epidemic in the region, and these methods have been widely used in advocacy and national planning throughout the region. Appendix 3 lists ADB-supported projects in the GMS since 1999.

From 2001 to 2005, the Japan Fund for Poverty Reduction (JFPR) administered by ADB supported a three-country (Cambodia, Lao PDR, and Viet Nam) HIV project in the GMS.¹⁹ The project targeted key population groups at higher risk, including migrants and mobile groups like fishing communities, transport workers, sex and hospitality workers, police and military personnel, and construction workers, who were vulnerable to HIV infection because of their work, living environment, and lack of social support. This regional project, which covered Cambodia, Lao PDR, and Viet Nam, gave ADB experience in effective HIV programming in the GMS, at both regional and country levels. Among its achievements was strategic capacity building for the executing and implementing agencies, community initiatives, and grants for implementing prevention and care interventions in the communities.²⁰

In more recent years, ADB has supported several major prevention projects with grant financing from the Asian Development Fund (ADF).²¹ Under the GMS Communicable Disease Control project, ADB is supporting the development of a comprehensive systems response to communicable disease control, including HIV, in Cambodia, Lao PDR, and Viet Nam. ADB is also financing an HIV and AIDS prevention project among the youth in Viet Nam that will introduce the model of an integrated package of behavior change interventions based on a mass-media campaign targeted to youth and their families. Current ADB TA activities also include support for communication programs aimed directly at ethnic minority communities in the GMS.²² This project is especially innovative because it is the first to have radio programs developed by community members in their local languages. Technical advisers check the translated versions for accuracy and potential impact before they are aired. Rigorous monitoring and evaluation is showing significant gains in knowledge and behavior change through this approach.

In HIV risk mitigation in the infrastructure sector, ADB has supported, or is now supporting, several

¹⁹ ADB 2001. *Grant Assistance to the Kingdom of Cambodia, Lao People's Democratic Republic, and Socialist Republic of Viet Nam for Community Action for the Prevention of HIV/AIDS*. Manila (Japan Fund for Poverty Reduction 9006-REG).

²⁰ ADB. 2005. *Evaluation of Effectiveness of Community Action for Preventing HIV/AIDS Project*. Japan Fund for Poverty Reduction project draft report.

²¹ In 2004, the eighth replenishment of the Asian Development Fund (ADF IX) included \$140 million in grant funding earmarked for HIV/AIDS and other communicable diseases.

²² ADB. 2005. *Technical Assistance to the Greater Mekong Subregion for HIV/AIDS Vulnerability and Risk Reduction among Ethnic Minority Groups through Communication Strategies*. Manila (TA 6247-REG).

comprehensive prevention packages, particularly in association with road construction projects. These projects—in Cambodia, Yunnan province of the PRC, Lao PDR, Viet Nam, and other countries—target affected communities, construction workers and their supervisors, and ultimately road users. The interventions include condom social marketing, behavior change campaigns, harm reduction measures for drug users, and STI awareness and treatment services. Implementation mechanisms and design features vary. ADB recognizes the importance of careful review and documentation in further developing such interventions. A GMS TA project from 2006 to 2008 is carefully reviewing the experience so far with a view to developing recommendations and guidelines for improved programming. The project is also supporting the pilot-testing of new approaches, as well as policy development by government counterparts (the ministry of transport

or its equivalent), to institutionalize the integration of HIV responses in all infrastructure and transport development.²³

The lessons from ADB's experience so far include: (i) the response to HIV and AIDS needs to be dynamic and requires multisectoral approaches and interdisciplinary collaboration;²⁴ (ii) NGOs can be important facilitators of community involvement;²⁵ (iii) participatory processes take time to develop;²⁶ (iv) education can have an important role in changing attitudes and practices; and (v) multifaceted media programs improve dissemination.²⁷ These lessons have been incorporated into subsequent ADB project designs and strategy papers. For example, the Viet Nam HIV/AIDS Prevention among Youth Project (approved June 2006) is being implemented by NGOs and emphasizes education for behavior change.

²³ This particular TA is supported through the HIV/AIDS in Asia and the Pacific Trust Fund, which was established in 2005 with an initial grant of about \$15 million from the Government of Sweden.

²⁴ ADB. 2002. *Technical Assistance Completion Report on Capacity Building for HIV/AIDS Prevention and Control in Cambodia*. Manila (TA 3511-CAM).

²⁵ ADB. 2002. *Technical Assistance Completion Report on Preventing HIV/AIDS among Mobile Populations in the Greater Mekong Subregion*. Manila (TA 5881-REG).

²⁶ ADB. 2002. *Technical Assistance Completion Report on the Study of the Health and Educational Needs of Ethnic Minorities in the Greater Mekong Subregion*. Manila (TA 5794-REG).

²⁷ ADB. 2005. *Technical Assistance Completion Report on ICT and HIV/AIDS Preventive Education in the Cross-Border Areas of the Greater Mekong Subregion*. Manila (TA 6083-REG).

An ADB GMS Response: Addressing Needs Strategically

With its focus on connectivity, competitiveness and community, ADB's GMS Program and priorities clearly intersect with some of the key risk factors and features of the HIV epidemic in the subregion. The links between mobility and migration with the ongoing spread of HIV in connection with infrastructure development (roads, economic corridors, seaports, and railways, and the construction workers, truckers, etc., who work on them), cannot be overlooked. Deficiencies in specialized capacity and health systems in areas of critical importance to the HIV response heighten these risks. The goal of a more integrated, prosperous, and equitable Mekong subregion can be achieved only if this risk is comprehensively addressed.

Promoting and supporting increased connectivity and regional integration through significant infrastructure investments means that ADB must also recognize and understand the social and economic dimensions of mobility, migration, and HIV. ADB has both an obligation, to mitigate the HIV risks associated with transport and other large infrastructure projects, and an opportunity, to contribute strategically and effectively to the response to HIV and poverty in the region.

The areas in which this obligation and this opportunity exist are specialized and almost unique to ADB as a GMS development partner. ADB's initiatives, activities, and growing experience in HIV risk mitigation in relation to mobility, migration, transport corridors, and infrastructure development are widely recognized by both governments and development partners. Given ADB's comparative advantage, it can take the lead in filling gaps in knowledge and expertise regarding HIV and infrastructure development.

A. Defining Strategic Directions

HIV affects and is affected by each of the three pillars of ADB's GMS Regional Cooperation Strategy and Program (RCSP):

- (i) enhanced connectivity, which equals enhanced mobility and migration—key risk factors for the spread of HIV;
- (ii) improved competitiveness, which requires a strong economy, effective institutions, and capable human resources—all of which are undermined by the spread of HIV at the regional, national, and local levels; and
- (iii) a greater sense of community, although communities are only as strong as the human resources within them, and HIV can and will weaken these resources.

ADB will address these areas of risk and impact while filling areas of need and comparative advantage in the GMS. Through strategic responses that are either integrated with or complementary to the three GMS-RCSP program areas, ADB will contribute to a comprehensive response as follows:

- (i) **Physical infrastructure (GMS-RCSP program area 1): HIV risk mitigation** through prevention activities aimed at protecting workers and affected communities in the corridors of influence associated with all transport and other infrastructure projects and in the growth centers developed along the

economic corridors. Activities should be comprehensive and should include behavior change communications, condom distribution, and better access to health services for STI treatment and other health care.

- (ii) **Policy and institutional initiatives (GMS-RCSP program area 2): Multisectoral capacity building** for enhanced human resource skills in HIV surveillance, program design, and program implementation, to build the resources needed for program effectiveness and for the long-term success and sustainability of the specialized prevention programs under program area 1.
- (iii) **Common social development concerns (GMS-RCSP program area 3): Support for health and education systems** in areas of high risk of HIV transmission, such as those involved with and affected by infrastructure development. This support should particularly address the need for surveillance, risk mitigation, and health services among ethnic minority communities and migrant population groups in cross-border areas, and young

people and women in these communities or migrating into the area.

Besides these three areas for action, four operational priorities are deemed especially relevant to the action priorities for the GMS.²⁸ These are discussed further in section B below. Table 4 shows the direct links between the HIV actions and the three areas of ADB's GMS Program.

B. Defining the Actions

Key actions are needed for each strategic direction defined for ADB within and throughout the GMS Program. Risk mitigation will be the main agenda, given ADB's growing infrastructure portfolio in the GMS and its niche role in providing technical support and financing for risk mitigation actions in association with infrastructure development. Support for multisectoral capacity building will facilitate more effective programming and implementation for HIV prevention in the infrastructure-related sectors and assist GMS partners in their broader efforts to diversify their sectoral engagement in the national response to the epidemic. Support for targeted health and education system interventions will strengthen the responses related to infrastructure development and

Table 4: Linking Priorities and Program to HIV Actions

ADB's GMS Program Area	HIV Actions for the GMS
Physical Infrastructure	1. Mitigate the risk associated with increased connectivity and maximize the human resource development impact of the GMS Program.
Policy and Institutional Initiatives	2. Build multisectoral capacity for HIV prevention programs particularly for infrastructure-related risk mitigation activities.
Common Social Development Concerns	3. Support health and education systems in areas and situations of high HIV transmission risk.
Operational Priorities:	
A. Gender and Ethnic Minorities – where the risk is greater	
B. NGOs – for effective implementation	
C. Evidence Base – creation, documentation, and use	
D. Country ownership – as a basis for effective and sustainable action	

GMS = Greater Mekong Subregion, HIV = human immunodeficiency virus, NGO = nongovernment organization.

Source: ADB.

²⁸ The paper on ADB's strategic directions for HIV/AIDS (2005; see footnote 4 for full reference) outlined five operational priorities. The four defined here are based on those, with refinements to allow for the particular situation of the epidemic in the GMS.

also build resilience in individuals and community institutions, for sustainability and protection against a broader range of social challenges.

The strategy will be implemented through an evolving program of regional and country-specific actions that respond to emerging needs and opportunities. Some planned programs and future options consistent with the outlined strategic directions are described in Appendix 4.

1. Mitigate Risk

Risk mitigation must start with the infrastructure projects that dominate ADB's GMS Program. For ADB, risk mitigation is both an obligation and an area of comparative advantage. It is also an area in which DMCs and other development agencies look to ADB for leadership. Large physical infrastructure projects, particularly the development of road transport and economic corridors, are the single biggest area of sector activity in the GMS Program and present a unique confluence of risk factors for HIV transmission. These projects often have large worker populations—predominantly male migrants with regular earnings, who are thus more likely to engage in commercial sex. The projects often result, by design, in local communities becoming more mobile as economic opportunities grow, but also more exposed to HIV, both during and after construction. Hence, there is an increasing need and demand for HIV prevention initiatives to be incorporated into infrastructure operations at all stages—before, during, and after construction. Other GMS priority sectors such as tourism, energy, and trade can also create and be associated with greater HIV transmission risk.

The HIV risks that accompany the rapid economic development of areas such as industrial zones, special economic zones, and growth centers also require attention. These centers are magnets for rural migrants and become areas of concentrated risk, with young men and women who have left traditional community structures, are socially disconnected, and have money. The risk behaviors (IDU, unprotected sex) that promote the spread of HIV can quickly follow.

HIV prevention interventions that can be provided in association with road and other infrastructure development projects include educational and behavior change communications; social marketing of condoms; STI testing and case management; voluntary

counseling and testing for HIV; harm reduction options for injecting drug users; and capacity development of government agencies, implementing NGOs, and local organizations. Prevention interventions, especially awareness and behavior change campaigns that target not only construction workers but mobile populations and surrounding communities in the corridors of influence, are required. Specialized targeted initiatives for vulnerable groups, such as ethnic minority communities in remote areas and women, will also be required.

ADB already has experience with the design and implementation of HIV initiatives in large infrastructure projects in cross-border and remote areas. The challenge for ADB and other development partners is to improve the quality of these initiatives, refine their targeting, and mainstream their integration into the design of all activities that create these risk environments. With its experience in the GMS and other regions, ADB is well placed to assist DMCs in the subregion in addressing this challenge. Moreover, with its diversity of experience and trusted relationships, ADB can work with governments to develop the institutional mechanisms that will ensure support for these responses at the highest level.

The GMS priority actions for risk mitigation are as follows:

- (i) **Comprehensive risk mitigation packages.** HIV prevention measures should be systematically integrated into a number of multisectoral settings, particularly in infrastructure development projects including transport and economic corridors, energy development, growth centers, industrial zones, and tourism. Packages should include the full set of measures required for effective, targeted programs including education and behavior change programs, STI services, voluntary counseling and testing for HIV, condom programs, and harm reduction services for injecting drug users. These risk mitigation packages should be accompanied by detailed monitoring and evaluation and the subsequent careful documentation of all project experience to guide future design and implementation efforts.

The development of a comprehensive response should consider the need and opportunity for interventions that precede or follow the period of construction and development. While construction workers are a key target group, so are the communities in the vicinity of the road or other construction, and eventual users of the infrastructure (e.g., truck drivers and other road users).

In the case of affected (and potentially infected) local communities, there is potentially great benefit in early intervention to build resilience and capacity for risk mitigation. This will not only strengthen the response when construction starts but also deal with the changes and external risk factors introduced during planning, surveying, and other advance preparations. The risks are not confined to HIV and other STIs but can also include risks of human and illicit drug trafficking.

Comprehensive packages for the construction phase will consider and target mobile worker groups, including those that do not speak the dominant or local languages. Interventions must be mindful of potentially complex contracting arrangements: there could be several main contracts, for the construction itself and for supervision and supplies, and a cascade of multiple subcontractors under these. The contract terms and conditions for construction workers vary, with some workers being housed in centralized camps and having limited contact with local communities, and others, including migrants to the area, living in the local communities. All these factors should be considered in the design and implementation of a comprehensive package.

The post-construction phase represents the long term when those using the infrastructure establish patterns of use and patterns of interaction with local communities. From roadside stops to border posts and new tourist infrastructure, these patterns of use can present both risks and opportunities to local communities. Comprehensive packages can provide

ongoing support to local groups to enable them to adapt to these changes and develop ongoing, sustainable programs that arm young people and other community members to address these risks. Moreover, packages can also target skills development and other capacity building so that community members can benefit from the economic and social progress expected from the infrastructure development.

- (ii) **Sharing and advocacy of good practice in risk mitigation.** While recent infrastructure projects supported by ADB and other agencies have provided for HIV mitigation, this experience needs systematic documentation and review, and analysis of the lessons. ADB should take the lead in this activity, share the evidence and recommendations with others, and use these to improve its own practices.
- (iii) **Policy support mechanisms.** The effective, systematic mainstreaming of HIV risk mitigation packages in the transport and infrastructure sectors requires policy support structures and suitable funding mechanisms. These are not yet effectively developed in the GMS countries and in the subregion as a whole. ADB can work with its development partners, particularly in these sectors, to develop these mechanisms. An improved knowledge base, from actions (i) and (ii) above, will provide the tools for policy advocacy to facilitate the development of more HIV prevention measures with adequate funding and policy support.

2. Build Multisectoral Capacity

The skills, knowledge, and capacity to effectively implement policies and programs are still the key factors limiting most national and regional programs. Even if all the financial resources needed for a comprehensive response in the GMS countries were to become available, insufficient capacity would keep the funds from being well used. This view is shared by many agencies concerned with HIV in the GMS. ADB can help address this capacity, knowledge, and leadership constraint, particularly in the following specialized areas:

- (i) disease surveillance;
- (ii) economic and poverty impact analyses;
- (iii) risk analysis and mitigation planning in infrastructure development projects; and
- (iv) project design, implementation, and monitoring and evaluation.

As a regionally based development partner, ADB can support the countries' leaders, particularly in the economic sectors, with some of the knowledge and tools they need for HIV prevention. In its regular dialogue with government leaders in critical sectors like finance, public works, and treasury, ADB can strengthen awareness and knowledge of HIV, particularly the economic dimensions of the epidemic. The GMS Program affords ADB extra opportunities to do so in the context of national programs and regional forums that bring together leaders at various levels and with varying sectoral interests.

Leadership extends beyond the national government to all levels of government (provincial, district, city/urban areas) and to civil society leaders, such as religious and business groups, community-based organizations, and the entertainment and sports industries (particularly for the youth). ADB will work with UNAIDS and other regional partners to develop the knowledge and evidence to support this dialogue and advocacy, in the areas of economic and poverty impact and other areas, consistent with ADB's niche leadership role in the region. ADB can provide leadership support by producing the evidence for advocacy and decision making; conducting policy dialogue on HIV with its GMS partners; and supporting regional activities to raise awareness and commitment, particularly in the specialized areas of other GMS operations and projects.

ADB is already engaged in communicable disease surveillance at the regional level and at the national level in some GMS countries. Strategic enhancements of these efforts with an HIV focus will strengthen the benefits to the GMS. The GMS Program provides opportunities for building skills in the region, in some cases providing efficiencies and improving long-term effectiveness particularly in operations with a cross-border or other regional dimension.

The GMS priority actions for building multisectoral capacity are as follows:

- (i) a regional training program for capacity development among mid-level HIV and AIDS program managers, particularly in international financing, program design and implementation, monitoring and evaluation, and specialized technical areas where country-specific gaps are identified (including the implementation of prevention programs in road and other infrastructure development projects);
- (ii) a program of data collection, analysis, and skills transfer, for economic and poverty impact assessments to support policy and program targeting; and
- (iii) support for HIV surveillance programs and capacity building for surveillance, to develop the technical skills of epidemiologists, statisticians, social scientists, etc., in conducting surveillance and in analyzing and using the data obtained to improve program responsiveness.

3. Support Health and Education Systems in High-Risk Settings

Capacity and accessibility are central to the health-care response to HIV. Comprehensive health-care services must be delivered to vulnerable and at-risk populations, and accessibility of service, particularly for mobile or migrant populations, must also be assured. However, health services cannot be confined to HIV services. The risk of contracting HIV is greater among people with other conditions, particularly STIs. For the coinfecting, illness associated with HIV and AIDS, particularly TB, is more likely, occurs sooner, and is more severe. High-quality, comprehensive health-care systems can mitigate such risks.

Infrastructure projects are often in areas that have been relatively sheltered from infections like HIV and other STIs. These tend to be remote border areas that are home to ethnic minority communities. During construction, large numbers of outsiders can converge in these areas and overburden the limited health infrastructure. Language and cultural barriers to health-service access increase the risks of HIV infection. Ethnic minority communities are also at greater risk because of their generally lower education levels and poor knowledge of infection risk behaviors. ADB prevention actions should address these health and education challenges, particularly

in areas and communities affected by ADB-financed infrastructure development projects.

In its GMS operations, ADB should support health systems to mitigate these risks while building long-term capacity for improved health service delivery in poor, remote, or ethnic minority areas. Education systems also make young people more resilient even as their opportunities and risks change with economic development. Life skills programs for HIV prevention, reproductive health, and substance abuse prevention are important in all situations but particularly in those areas where ADB-supported infrastructure development projects bring rapid economic and social change.

The GMS priority actions for health and education services in high-risk settings are as follows:

- (i) the development of health system support models that strengthen HIV prevention, including systems for STIs in general and for disease surveillance and response in border and ethnic minority areas and other areas of risk, particularly those affected by infrastructure developments; and
- (ii) the development and implementation of education system interventions that build resilience and life skills among young men and women at risk, particularly in remote areas, among ethnic minority populations, and in cross-border areas where the risks of HIV exposure can be greater or can change rapidly. Young people themselves should be involved directly in developing HIV prevention programs.

C. Operational Considerations

Four key operational considerations should apply to all GMS HIV-related actions and activities. These are based on ADB's own policy requirements, international protocols, and the knowledge gained from years of experience with HIV programs in the context of development and poverty.

1. Gender

Women are more physically susceptible to HIV through sexual transmission than men: male-to-

female transmission is twice as likely as female-to-male transmission. But gender regimes, defined by social and cultural norms, are even more powerful in producing vulnerability in most societies. The pattern of infection in countries where heterosexual transmission predominates shows this clearly. Commonly, a defined group of female sex workers becomes infected, often after outbreaks among injecting drug users. These sex workers transmit the infection to their male partners, who then pass it on to their other female partners (often their wives). As the epidemic matures, increasing proportions of women for whom the only risk factor is being married become infected. Violence against women is also an important factor. Trafficking of women and girls for the sex trade is another arena of serious harm to women, increasing the risk of HIV. Women, often also infected with HIV, are nearly always the caretakers of males who are sick, in addition to their other housekeeping and child and elderly care roles.

Male gender roles also need attention. Common notions of masculinity that drive risk taking, including drug taking and indiscriminate sexual behavior, as well as violence toward women, have to be addressed at broad societal levels. Sexual privilege and capacity for risk taking in an era of AIDS have a significant downside. In many countries, a significant proportion of men form the bridge between MSM, female sex workers, and female spouses.

ADB's HIV operations in the GMS must consider gender factors in all activities for maximum effectiveness. The impact of HIV and risks for men and women vary widely along with the stigma and discrimination that surround HIV infection and the behaviors that lead to risk of infection. These variations must be understood and accounted for if programs are to be effective. Anonymity must be assured for many aspects of the intervention (e.g., condom access, HIV testing, needle exchange), as well as for the studies and information gathering needed for program design. While infrastructure projects tend to be viewed as a male-dominated domain, women—camp followers, food vendors, entertainment providers—will always be associated with such projects. ADB operations should therefore take this reality into account and provide for it. Thus, certain aspects of comprehensive packages must target women in these specific settings, as well as women in affected communities, particularly among ethnic minorities.

2. NGOs: A Resource for Effective Implementation

NGOs have a critical role in effective HIV program development and implementation, especially in the countries of the GMS where the behaviors associated with the greatest HIV risk remain illegal or highly stigmatized. Reaching those at greatest risk—injecting drug users, sex workers and their clients, and MSM—requires empathy, perception and understanding, and assurance of anonymity. More importantly, nontraditional approaches and refined targeting mechanisms must be developed for new migrants, the poorly educated, the youth, and others who do not readily identify themselves as being at risk. Government services are generally poorly equipped for this. Capacity building and sustained financing, particularly for domestic NGOs, are needed.

3. Evidence Base: Creating and Utilizing

While much is understood and known about HIV and the AIDS epidemic, the course of the disease and the behaviors that give rise to it are forever shifting and often surprising. Programs must be constantly monitored, data and trends and documentation analyzed, and the results shared so that the programs continue to evolve and adapt to changes in the epidemic. All programs and components should include well-resourced monitoring components, including technical support.

4. Country Ownership and Coordination

This strategy is about regional cooperation and common actions across the GMS, but most actions will ultimately be undertaken within a country and involve single-country institutions (e.g., the ministry of health or transport). ADB-supported actions must therefore be consistent with the country's national AIDS strategy (or similar document) and be approved by the appropriate national authorities. ADB subscribes to the "three ones" principles²⁹—one national strategy, one national coordination authority, and one monitoring and evaluation framework—and will support these mechanisms in every instance.

D. Resources, Coordination, and Partnerships

The resources for the planned activities will come from a range of sources within and outside ADB. In recent years, more resources have become available in ADB for HIV-related activities. The ADF IX replenishment included 2% (\$140 million) in grant financing for projects for HIV and other communicable diseases. In 2005, a trust fund was established with the support of the Government of Sweden (via the Swedish International Development Cooperation Agency, or Sida) to support the integration of HIV prevention measures across ADB program areas. HIV prevention activities in the infrastructure sector are specifically mentioned as a priority area for that fund. The JFPR has also supported regional HIV activities. In addition to these earmarked funding sources, ADB has mobilized cofinancing for its transport and other sector projects (e.g., support from the UK Department for International Development, or DFID, for the HIV prevention component of the Yunnan Roads project) and incorporated financing and implementation mechanisms in the projects that provide for prevention measures. One such measure is requiring the contractor to deliver HIV prevention services to construction workers as a project deliverable. Renewal of grant financing through the ADF mechanism is not certain, but options for financing HIV measures are likely as awareness and concern increase, particularly for connectivity and infrastructure projects.

Within the GMS network, the Working Group on Human Resource Development will advise on the implementation of this strategy. A review of actions will be part of its annual discussions and guidance to members regarding specific activities to be included in the project pipeline. From the broader perspective of partnerships, ADB's relationship with UNAIDS, formalized in a memorandum of understanding signed by the agencies in February 2005, will help ensure technical quality and coordination at the country and regional levels.

²⁹ A set of operating principles proposed by UNAIDS and espoused by bilateral and multilateral agencies supporting HIV/AIDS activities.

Conclusion

The GMS is a region of dynamic growth that should bring economic and social benefits to all and continue to reduce poverty. However, the full benefits of the economic and social achievements will be realized only if the threat of an escalating HIV epidemic is managed and addressed. As a key development partner in the region, ADB has a role to play in this effort, particularly in relation to the potentially high-risk HIV transmission environments associated with the development of transport corridors and large infrastructure projects.

ADB will mitigate this risk and impact through interventions consistent with its comparative advantage of working across sectors and outside the health sector while advocating similar responses and good practice among other development and government partners. ADB will also continue to support targeted prevention programs and capacity building, particularly in the health and education systems as they are the backbone of a comprehensive and sustainable response.

Through strategic responses that are either integrated with, or complementary to, the three RCSP program areas, ADB will contribute to a comprehensive response as follows:

- (i) **risk mitigation**, through comprehensive prevention programs to protect workers and affected communities in all infrastructure

projects, especially in transport and economic corridors;

- (ii) **multisectoral capacity building** for enhanced human resource skills in surveillance, program design and implementation, and HIV risk mitigation in large infrastructure projects; and
- (iii) **support for health and education systems in high-risk settings**, to enhance risk mitigation and prevention efforts, particularly among ethnic minority communities, women, and migrant population groups in cross-border areas.

An effective response will demand political commitment and leadership within ADB and across the GMS. Quality and impact will come from adhering to the operational priorities—attention to gender issues and ethnic minorities, the use of NGOs as a resource for effective programs, attention to the evidence base, and the primacy of country ownership—as an integral consideration in all activities. In pursuing these efforts, ADB recognizes the critical links between connectedness, mobility, and economic development, which offer both great potential and risk. As a regional development partner, ADB recognizes its obligation and opportunity to effectively address HIV and AIDS risks for the benefit of the GMS population.

Appendixes

Strategic Directions for ADB in Response to HIV and AIDS in Asia and the Pacific: The Framework

Goal	
<input type="checkbox"/>	To achieve Millennium Development Goal 6, Target 7 – to halt and begin to reverse the spread of HIV by 2015.
Purpose of ADB’s Intervention	
<input type="checkbox"/>	To respond effectively to HIV and AIDS at the country and regional levels in Asia and the Pacific.
ADB Activities and Priorities for Action	
Leadership Support – strengthen commitment of regional leaders to address HIV and AIDS.	
<input type="checkbox"/>	Conduct policy dialogue on HIV and AIDS with DMCs.
<input type="checkbox"/>	Produce evidence for advocacy and decision making.
<input type="checkbox"/>	Support regional activities to raise awareness and commitment.
Capacity Building – increase capacity at the country and regional levels to address HIV.	
<input type="checkbox"/>	Support formulation of HIV strategies at national and regional levels.
<input type="checkbox"/>	Support implementation of HIV strategies at national and regional levels.
<input type="checkbox"/>	Strengthen health systems to improve efficiency and effectiveness of HIV programs.
Targeted Programs – expand HIV interventions that mitigate risk among the poor and the vulnerable including population groups at higher risk. ^a	
<input type="checkbox"/>	Integrate HIV activities into ADB infrastructure projects that potentially interact with, create, or enhance high-risk environments or behaviors for HIV.
<input type="checkbox"/>	Integrate HIV activities into ADB projects in other sectors (non-health and non-infrastructure sectors).
<input type="checkbox"/>	Support NGOs and programs targeting groups with high-risk behavior.
<input type="checkbox"/>	Support HIV projects that specifically target women and girls in selected DMCs.
Operational Principles	
(i)	Support for country ownership and government leadership , and strict adherence to the “three ones” principles. ^b
(ii)	A commitment to partnership, consultation, and involvement of civil society and people living with and affected by HIV, and with other development agencies, to ensure coordination and maximum efficiency and effectiveness.
(iii)	A commitment to mainstreaming gender considerations in all activities.
(iv)	A commitment to evidence-based targeting and capacity building , based on sound technical knowledge, to ensure that all resources are used for maximum impact and efficiency.
(v)	A commitment to flexibility and innovation where possible, but linked with rigorous and timely monitoring and evaluation , in coordination with regional, national, and community-based partners, to ensure critical review and learning and to build capacity.

^a In the Asia and Pacific region, predominantly injecting drug users, sex workers and men who have sex with men.

^b A set of operating principles proposed by UNAIDS and endorsed by bilateral and multilateral agencies supporting HIV and AIDS activities. These principles are: one national AIDS coordinating authority, one national HIV strategy, and one national monitoring and evaluation system.

HIV Profiles of GMS Countries

A. Cambodia

The incidence of new infections in communities most vulnerable to infection (sex workers and their clients) has declined steadily in recent years as a result of intensive and sustained behavior change interventions, condom promotion programs, and improvements in access to treatment of sexually transmitted infections (STI) for female sex workers. These interventions have been implemented by both government and nongovernment organizations with strong political, policy, and program support and considerable amounts of external financing.

These highly targeted interventions led to a marked decline in annual HIV incidence among female commercial sex workers and urban police (a key group of sex workers' clients) from 1999 to 2002, from 13.9% to 6.5% among brothel-based sex workers, and from 1.7% to 0.3% among the police). Projections suggest that prevalence in the general adult population has now declined to 1.6%.

As a result of past high infection rates, Cambodia is estimated to have over 120,000 people now living with HIV. Each year, about 20,000 HIV-infected people become candidates for antiretroviral treatment (ART). A national treatment and care program has been developed, and has expanded remarkably and effectively. By December 2005, over 12,000 people were on ART and over 30,000 in programs to treat opportunistic infections.

In spite of these successes, however, the incidence of HIV among sex workers remains high (over 6%), sustaining a serious pool of infection. To further limit the spread of HIV in Cambodia, therefore, the national strategy of targeted interventions for HIV and STI prevention must be maintained. Fortunately, the extent of IDU in Cambodia is very small, and is not likely to be a factor in the immediate future of the HIV epidemic. The key focus and priority for the HIV program in Cambodia for the immediate future must be strengthening the weak health-care system to provide effective and sustained treatment and care for the increasing numbers of infected people needing care, especially ART.

Country Organization for HIV Control. The National Centre for HIV/AIDS, Dermatology and STD Control (NCHADS) was established in 1998 as the implementing agency of the Ministry of Health, upgrading the former National AIDS Programme. Working in partnership with government ministries, donor bodies, and provincial health departments, NCHADS facilitates the development and implementation of HIV and AIDS strategic plans. In 1999, the National Aids Authority (NAA) was established to replace the National AIDS Council, with an advisory board including the Cambodian Red Cross, the secretaries of state of 15 line ministries, and the governors of Cambodia's 24 provinces. The major role of the NAA is to coordinate a multisectoral response to HIV and AIDS in Cambodia. A major achievement was the enactment of the Law on the Prevention and Control of HIV/AIDS by the National Assembly in June 2002.

Financing. HIV funding doubled from some \$10 million in 2002 to \$20 million in 2004, and increased in 2005 to some \$40 million, available for HIV prevention and care across all sectors—health, education, the military, and civil society programs (which receive substantial funding from the United States Agency for International Development). Given the targets and standard unit costs, funding for Cambodia may be adequate but distribution is problematic. The strengthening of health services for comprehensive treatment and care (including ART) is estimated to be underfunded by about \$12 million, while public education and general program management costs appear to be high, with possible inefficiencies and overlap.

B. People's Republic of China: Yunnan and Guangxi Provinces

In 2003, an estimated 840,000 people live with HIV in all of the People's Republic of China (PRC); however, the latest estimates indicate that, as of the end of 2005, there were about 650,000 people living with HIV. The reduced number was attributed to an increase in sentinel sites, making more precise estimates possible. A key difference is the reduction in the estimated number of former commercial blood and plasma donors thought to be infected, from 144,000 in 2003 to only 55,000 in 2005.¹

¹ Ministry of Health, People's Republic of China. 2005. *Update on the HIV/AIDS Epidemic and Response in China*. Joint United Nations Programme for HIV/AIDS and World Health Organization.

By late 2005, Henan and Yunnan provinces had each reported over 30,000 HIV cases, while Guangxi, Xinjiang, and Guangdong had each reported over 10,000. IDU and sexual contact are the key routes of HIV transmission. Additionally, former commercial blood and plasma donors account for a significant proportion of people living with HIV and AIDS. Since Yunnan and Guangxi are included in the Asian Development Bank's Greater Mekong Subregion classification, the PRC accounts for around 60,000 HIV cases in the region, many of these from ethnic minorities in the border regions with Lao PDR and Myanmar.

Country Organization for HIV Control. The national China HIV/AIDS Prevention and Control Action Plan was formulated in 2001 for a 5-year period with the following priority areas: safety of blood supplies and blood products, development of health education, behavior change interventions for vulnerable groups, upgrading of care and support services, improvement of surveillance systems and human resources development, and operational research. A standing office was inaugurated to implement the plan.

China CARES (Comprehensive AIDS Response) was launched in 2002 to support the communities most affected by the epidemic. The response encompasses capacity building, care and treatment, prevention of mother-to-child transmission, information, education and communication campaigns, peer education, condom promotion, voluntary counseling and testing, sexually transmitted infection services, and support for people living with HIV. In 2005, every tier of government was requested to prepare action plans, placing HIV prevention, treatment, and care among the key public health areas of the 11th National Five-Year Plan.²

The National Center for AIDS Prevention and Control incorporated within PRC communicable disease control (CDC) develops protocols, guidelines, and training; promotes international cooperation; exerts technical leadership; and provides for capacity development. Central government financing of HIV prevention and care has increased to CNY800 million (\$100 million) per year.³

C. Lao People's Democratic Republic

The future of the HIV epidemic in the Lao People's Democratic Republic (Lao PDR) is difficult to predict. There are few accurate or comprehensive figures on the numbers of sex workers, client rates, and distribution, and none for drug users. While data are slowly emerging about the behaviors and attitudes of people with high-risk behaviors, they are still fragmented and difficult to interpret on a national scale. However, some of the factors that have produced serious HIV epidemics in other Asian countries are present—quite widespread commercial sex, increasing rural–urban migration, and vigorous social development changes. The potential for a more serious epidemic of HIV in the Lao PDR clearly exists; the extent to which significant investment would be a cost-effective way of keeping Lao PDR HIV-free is the subject of conflicting views.

There have been several surveillance surveys, covering both epidemiological and behavioral factors, over the last 5 years, though few have attempted more than limited coverage. The most recent, conducted in 2004, found that HIV seroprevalence among sex workers had increased from less than 1% in 2001 to 3–4% in some provinces, and STI prevalence among sex workers and their clients remained high. A particularly worrying finding was the increase in the number of sex workers and their clients, the high mobility and turnover of sex workers, and the consistently low use of condoms among sex workers and their clients.⁴

Country Organization for HIV Control. The Government established the multisectoral National Committee for the Control of AIDS in 1988, first with 7 members from different ministries and mass organizations, and now 14. Provincial committees for the control of AIDS have been established in all 17 provinces and one special zone, chaired by the provincial governor or vice-governor. The HIV/AIDS Trust was established in 1998 in collaboration with United Nations Development Programme (UNDP) and UNAIDS to mobilize resources.

The National HIV/AIDS/STD Policy was developed in 2001 and the National Strategic Plan for HIV/AIDS/

² *ibid.*

³ *ibid.*

⁴ From Lao PDR. 2005. National Strategic and Action Plan on HIV/AIDS/STI 2006–2010, 5th draft, July.

STD for 2002–2005 was formulated in 2002. The National Strategic Plan 2006–2010 is based primarily on reviews of the 2002–2005 plan, and the second round of behavioral and sero-surveillance (October 2004). The goal of the new plan is to maintain the present low level of HIV in the general population, with HIV sero-prevalence among vulnerable groups kept lower than 5%.

This strategy defines vulnerable groups as those whose lifestyles, social or professional context, and behavior make them most vulnerable to HIV. Although a number of groups and communities in the Lao PDR have to be considered vulnerable, the groups identified as a possible nucleus for a generalized epidemic (because of their size, HIV sero-prevalence, and frequency of contact with the general population) are sex workers and their clients, mobile populations, drug users, MSM, and vulnerable youth.⁵

Financing. According to 2004 data, Lao PDR's HIV program has a funding gap of about \$2 million out of a total program cost of \$4.1 million. In 2005, an estimated \$4.5 million was required for HIV/ADS control in the country. The Global Fund for AIDS, Tuberculosis and Malaria (GFATM) and ADB will be the major sources of assistance for the HIV program.

D. Myanmar

HIV was introduced in Myanmar in the mid- to late 1980s; by the end of 2003, 7,174 AIDS cases and 3,324 AIDS deaths had been reported. Among cases with known mode of transmission, 65% had acquired infection by the heterosexual route, 26% by IDU, and 5% by contaminated blood. HIV infection continues to spread in Myanmar. The national adult prevalence of HIV infection is between 1% and 2%. However, the spread of the HIV infection across the country is heterogeneous, varying widely by geographical location and by population subgroup.

Country Organization for HIV Control. The National AIDS Committee, founded in 1989, is an active multisectoral body for the formulation of the National Strategic Plan to Prevent and Control HIV/AIDS. It is headed by the Minister of Health.

The National AIDS Programme (NAP) is composed of headquarters and 40 AIDS/STD (sexually transmitted disease) prevention and control teams under the Disease Control Division of the Department of Health. Its general objective is to increase community awareness and perception of HIV by promoting access to information and education leading to behavioral change and adoption of a healthy lifestyle. The NAP developed the National Strategic Plan (2001–2005) for the expansion and upgrading of HIV activities in Myanmar. As part of the plan, the Myanmar government was to increase funding to the HIV and AIDS program by 3.5 times during the period for infrastructure development and community outreach. The current major HIV/AIDS/STI (sexually transmitted infection) programmatic interventions in Myanmar include:

- (i) HIV sentinel surveillance and second-generation surveillance;
- (ii) Blood Safety Program—all donated blood is screened for HIV at central and township hospitals (with Japan International Cooperation Agency and UNDP funding);
- (iii) HIV education and advocacy;
- (iv) STI diagnosis and treatment;
- (v) voluntary counseling, care, and treatment;
- (vi) 100% condom use program;
- (vii) prevention of mother-to-child transmission; and
- (viii) medical care, home-based care, and counseling.

Except for the blood safety program and sentinel surveillance, there are significant gaps in the geographic coverage of all other programmatic interventions because of limited resources. Comprehensive activities have been identified for five priority components of the UNAIDS Expanded Theme Group on HIV/AIDS in Myanmar (2003–2005).

⁵ *ibid.*

The funding requirement for the joint program was identified as \$51 million for the 3-year period. Surveillance for HIV began in Myanmar in 2005.

Financing. Strengthening the enabling environment and supporting capacity for the prevention and care of HIV and AIDS in Myanmar has been a key objective of the joint program of action. ADB estimates, from available information, that Myanmar's HIV budget is \$17 million per year (2004), with a funding gap of \$10 million per year. With the withdrawal of Global Funds, ART will be seriously underfunded. Myanmar has the lowest spending per HIV case. The harm reduction program for injecting drug users) is also seriously underfunded, and this group will continue to fuel the epidemic. Attention to other key population groups at higher risk and program management need some expansion. Absorptive capacity is considered good, although some human resource development would be required for both ARV treatment and harm reduction, which are technically more complex than most other interventions.

E. Thailand

The first case of HIV in Thailand was reported in September 1984. While the early HIV was predominantly among Thai homosexual males, the virus spread rapidly to injecting drug users, and to sex workers and their clients. As of January 2004, 231,712 HIV infections had been reported, nearly 80% of these in the 20–39 age group. The male-to-female ratio of reported AIDS cases is 2.8:1. Of the HIV infections reported to date with a known route of transmission, the heterosexual mode accounts for the highest proportion of cases (88%), followed by IDU (6%) and perinatal transmission (5%). Among sex workers, HIV prevalence peaked in the mid-1990s and has declined since then.

A recent review of the health sector response to HIV in Thailand noted that HIV continues to be a major threat among certain vulnerable populations such as specific communities of sex workers who are no longer reached with appropriate prevention strategies, MSM, injecting drug users, and young people. The review also noted that, while access to treatment urgently needs improvement, this

requirement should not overshadow the continuation of robust prevention programs. There was concern that the Thai response has moved away from the mobilization of forces within society for the prevention of the disease, which was a characteristic of Thailand's previous multisectoral strategies and plans.⁶

Country Organization for HIV Control. Thailand's national response to HIV has been one of the most comprehensive, and successful, in the region. The National AIDS Committee (NAC) under the Prime Minister directs the policy and plan of the National AIDS Plan. Under the NAC, 11 subcommittees, plus 76 provincial AIDS subcommittees, were established to look after the work on various strategies.. All the committees and subcommittees comprise representatives from multisectoral agencies.

The National AIDS Plan mobilizes staff from all governmental agencies concerned (public health, education, labor and public welfare, defense, interior, university affairs, foreign affairs, etc). These involve personnel from all levels, from the central departments to the regional, provincial, and district offices of all ministries concerned. The provincial AIDS subcommittee mobilizes personnel within the province to work on HIV and AIDS. Government funds approved by the Cabinet and by the Parliament are set aside for the work of government and nongovernment organizations (NGOs) in the response to AIDS. Funds are disbursed from the Bureau of the Budget to various ministries. Funds for NGOs are channeled through the Department of Communicable Disease Control.

Financing. Issues including nondiscrimination, access to care, a multisectoral approach, and international cooperation are reflected in the 2002–2006 National AIDS Plan. Thailand's preventive program is well funded but still shows some funding gaps for key population groups at higher risk. MSM prevalence has dramatically escalated and prevention activities focusing on this group need to be increased. Non-establishment-based sex workers also require more assistance. While Thailand has a 100% ART policy, given the current coverage of 80%, there is a major funding gap of about \$42 million per year. Program management and general public education appear

⁶ Ministry of Public Health, Thailand, and WHO Regional Office for South-East Asia. 2005. *External Review of the Health Sector Response to HIV/AIDS in Thailand*. Bangkok.

to be overfunded, although the National AIDS Plan indicates the need to increase mass campaigns. From this estimate and based on unit costs, Thailand's budget would need to double from \$64 million to \$124 million if it is to achieve its targets.

F. Socialist Republic of Viet Nam

There are three interrelated sub-epidemics of HIV in Viet Nam. The most advanced is in the southern and central cities, among older male injecting drug users, who had been injecting liquid opium extracts for many years before making the transition recently to heroin. HIV prevalence in this group exceeds 70% in some. A group of younger men in the southern cities is also increasingly injecting heroin after first smoking or snorting the drug, and HIV infections are also reaching very high levels among them. Some women in the south are beginning to inject heroin as well, and becoming sex workers. This phenomenon is most advanced among street-based sex workers in Ho Chi Minh City.

A second, more recent sub-epidemic is developing among young male injecting drug users who live along the main heroin trafficking routes of northern Viet Nam and in some areas in the northern Red River Delta. The rapid expansion of this epidemic coincided with the increased availability of heroin in the mid-1990s. These young men inject heroin in small groups and share needles, and their HIV prevalence is very high, averaging 30% in 2002, but with prevalence of more than 80% in some communities. Studies show that these young men also have unprotected sex with sex workers. There are estimated to be at least 140,000 injecting drug users in Viet Nam.

The third sub-epidemic is more difficult to characterize. Some women sex workers in the southern provinces west of Ho Chi Minh City have been infected through heterosexual intercourse in Cambodia or in Viet Nam. Other women who practice commercial sex in this area have been infected through IDU. Among female sex workers who do not inject drugs, HIV prevalence is rising rapidly, from about 7% in the south and less than 2% for the entire country in 2000, to over 25% in

the south and 10% in the whole country in 2003. In Ho Chi Minh City where many sex workers are also injecting drug users, the average prevalence rate in 2001 was 23.4%. No accurate figures are available on the numbers of women who sell sex. Commercial sex is illegal and not conducted openly. Women operate from bars, restaurants, beer halls, and hotels that are run more or less as brothels.

The future of the HIV epidemic in Viet Nam will be determined largely by the ability of the public sector to implement effective large-scale prevention programs that reflect official policy and encompass harm reduction for injecting drug users and risk reduction strategies for sex workers.

Country Organization for HIV Control. The Vietnam Administration of HIV/AIDS Control (VAAC) was established in May 2005 under the Ministry of Health by Decision No. 432 of the Prime Minister. The National Strategy on HIV/AIDS Prevention and Control was prepared in 2004 with the overall objective of keeping HIV prevalence in the general population to below 0.3% by 2010 and with no further increase after that year. Six specific objectives included in the strategy are: better intersectoral coordination, increased HIV awareness, control of HIV in high-risk groups, provision of care and treatment, improvement of the management system, and health-care services to prevent transmission.

Financing. Viet Nam's HIV program has grown rapidly but, as reflected in the national strategy, there is a major funding gap. Viet Nam has the lowest per (adult) capita spending on HIV and AIDS. Specific underfunded areas are harm reduction for injecting drug users, sexually transmitted infection treatment, general public education particularly for the youth, and program management. Viet Nam will need to increase its HIV and AIDS control budget from \$15 million to about \$69 million per year. This will need to be accompanied by a substantial increase in absorptive capacity, which remains limited. Some staff constraints at the central level could be partly resolved through greater decentralization. Administrative processes must be simplified and speeded up.

ADB-Supported HIV Projects in the GMS

Approval Number	Country	Project	Amount (\$'000)	Approval Date
A. Grant-Financed Projects				
0046	VIE	HIV/AIDS Prevention among Youth	20,000	30 Jun 06
0025	CAM	GMS: Regional Communicable Diseases Control ^a	9,000	21 Nov 05
0026	LAO	GMS: Regional Communicable Diseases Control ^a	6,000	21 Nov 05
0027	VIE	GMS: Regional Communicable Diseases Control ^a	15,000	21 Nov 05
9006	GMS	Community Action for Preventing HIV/AIDS	8,000	08 May 01
B. Technical Assistance Projects				
6247	GMS	HIV/AIDS Vulnerability and Risk Reduction among Ethnic Minority Groups through Communication Strategies	700	01 Jul 05
6194	GMS	Greater Mekong Subregion Regional Communicable Diseases Control (Supplementary)	250	15 Jun 05
4542	VIE	HIV/AIDS Prevention among Youth	400	23 Dec 04
6194	GMS	Greater Mekong Subregion Regional Communicable Diseases Control	600	20 Oct 04
4142	PRC	Preventing HIV/AIDS on Road Projects in Yunnan	800	14 Jul 03
6106	REG	Financing Needs for HIV/AIDS Prevention and Care in Asia and the Pacific	150	16 May 03
6083	REG	ICT and HIV/AIDS Education in the Cross-Border Preventive Areas of the Greater Mekong Subregion	1,000	19 Dec 02
5881	REG	Preventing HIV/AIDS among Mobile Populations in the Greater Mekong Subregion (Supplementary)	160	21 Dec 00
3511	CAM	Capacity Building for HIV/AIDS Prevention and Control	600	03 Oct 00
5881	REG	Preventing HIV/AIDS among Mobile Populations in the Greater Mekong Subregion	450	16 Dec 99
5751	REG	Cooperation in the Prevention and Control of HIV/AIDS in the Greater Mekong Subregion	150	17 Sep 97
C. Other				
2094	PRC	Guangxi Roads Development II (total project budget: \$200 million)	500	21 Oct 04
2085	LAO	Roads for Rural Development (total project budget: \$15 million)	1,200 ^b	28 Jun 04
1989	LAO	Northern Economic Corridor (total project budget: \$30 million)	340	20 Dec 02
1945	CAM	Cambodia Road Improvement Project (total project budget: \$50 million)	100	26 Nov 02
1728	REG	East–West Economic Corridor (Viet Nam) (total project budget: \$25 million)	20 ^c	20 Dec 99
1727	REG	East–West Economic Corridor (Lao PDR) (total project budget: \$32 million)		20 Dec 99

CAM = Cambodia, PRC = People's Republic of China, GMS = Greater Mekong Subregion, HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome, ICT = information and communication technology, LAO = Lao PDR, REG = regional, TA = technical assistance, VIE = Viet Nam.

^a Includes HIV/AIDS component.

^b HIV/AIDS is one subcomponent of the Social Action Plan. An exact budget allocation for this subcomponent is not available.

^c ADB financing did not provide any earmarked funds for this component. Funds were allocated by the Government in compliance with the loan covenant, which required some HIV prevention activities.

Source: ADB loan and TA database.

Program Proposals for Implementing the GMS HIV Strategy

Country	Project
A. Grant or Loan Financed Projects	
Viet Nam	HIV/AIDS Prevention among Youth II
Cambodia/Lao/Viet Nam	GMS: Regional Communicable Diseases Control I ^a
Viet Nam	GMS: Regional Communicable Diseases Control II ^b
Lao/Viet Nam	GMS: Capacity Building for HIV and AIDS Prevention ^b
B. Technical Assistance Projects	
GMS	Capacity Building for HIV/AIDS Prevention in the GMS
Lao/Viet Nam	HIV Prevention Strengthening on the East–West Corridor
Lao	Post-Construction Support for HIV Prevention for the Northern Economic Corridor
GMS	HIV Prevention in the Vicinity of Border Posts under the Cross Border Transport Agreement
GMS	Knowledge dissemination for mainstreaming HIV in the transport sector
C. HIV Prevention Components in Association with Infrastructure Projects	
Viet Nam	HIV Prevention on the Noi Bai–Lao Cai Highway Development.
Viet Nam	Song Bung 4 Hydro Power Project
Lao	GMS: Northern Transport Network Improvement (Route 4)
Cambodia	GMS: Southern Coastal Corridor Economic Corridor
Viet Nam	GMS: Southern Coastal Corridor
Lao	GMS: Northern Transport Network Improvement
Viet Nam	Hanoi Metro Rail System ^b
Viet Nam	O Mon 4 Thermal Power Project ^b
Viet Nam	Song Bung 2 & 5 Hydro Power Development
Viet Nam	REG: PRC to Viet Nam Power Connection
Viet Nam	Ca Mau II Power Generation Project ^c
Viet Nam	Rural/Provincial Transport Development
Viet Nam	Ho Chi Minh City Second Ring Road
Viet Nam	Public Private Partnership Expressway
Viet Nam	REG: Second Northern GMS Transport Network
Lao/Viet Nam	Power Interconnection
Lao	GMS: Northern Region Transmission

CAM = Cambodia, PRC = People's Republic of China, GMS = Greater Mekong Subregion, HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome, ICT = information and communication technology, REG = regional, TA = technical assistance, VIE = Viet Nam.

^a Includes HIV component.

^b Subject to availability of ADF grant funds and further discussion with Government.

^c Subject to further discussions with the Government regarding project readiness, viability and revenue generating capacity (as noted in the Country Strategy and Program for the respective country).

Source: ADB loan and TA database.

HIV and the Greater Mekong Subregion

The document sets out a strategy for ADB and the six countries of the Greater Mekong Subregion (GMS) for a unique and targeted response to the HIV epidemic in the context of the GMS economic cooperation program. ADB's GMS Program is aimed at promoting closer economic ties and cooperation and improving the quality of life in the subregion by emphasizing the "three Cs": connectivity, greater competitiveness, and a stronger sense of community. The HIV Strategy considers the key issues, risks and challenges of the HIV epidemic in the context of the "three Cs" and proposes a framework for ADB's strategic response to HIV and AIDS in the GMS in light of these factors. Risk mitigation, multisectoral capacity development and targeted support to health and education systems are the three key areas identified with proposed actions and priorities outlined.

About the Asian Development Bank

ADB aims to improve the welfare of the people in the Asia and Pacific region, particularly the nearly 1.9 billion who live on less than \$2 a day. Despite many success stories, the region remains home to two thirds of the world's poor. ADB is a multilateral development finance institution owned by 67 members, 48 from the region and 19 from other parts of the globe. ADB's vision is a region free of poverty. Its mission is to help its developing member countries reduce poverty and improve their quality of life.

ADB's main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance. ADB's annual lending volume is typically about \$6 billion, with technical assistance usually totaling about \$180 million a year.

ADB's headquarters is in Manila. It has 26 offices around the world and more than 2,000 employees from over 50 countries.

