Intersections: Gender, HIV, and Infrastructure Operations
Lessons From Selected ADB–Financed Transport Projects

ADB is committed to mainstream gender equality approaches in all sectors of its operations. This publication assesses the nexus between gender inequalities, HIV spread, and infrastructure development. A desk review and comparative analysis of existing infrastructure sector policies, legal and regulatory frameworks related to HIV prevention in Cambodia, the People’s Republic of China, India, Papua New Guinea, and Tajikistan identifies factors which may contribute to promote an effective response to the epidemic. The assessment of and field visits in selected ADB transport project sites identified promising practices for a more sustainable and gender-inclusive response to the epidemic.

About the Asian Development Bank

ADB’s vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region’s many successes, it remains home to two-thirds of the world’s poor: 1.8 billion people who live on less than $2 a day, with 903 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.
Intersections—Gender, HIV, and Infrastructure Operations

Lessons from Selected ADB–Financed Transport Projects

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Carol Jenkins was the original team leader for this project. After her tragic death in January 2008, she left behind very big boots that were difficult to fill. This report is dedicated to Carol in the hope that it does some justice to her vision and hard work.

Susan Paxton prepared this report, using desk reviews and field work she carried out in Cambodia, the People’s Republic of China, and Papua New Guinea, and similar work carried out by Melissa Ditmore in India and Tajikistan. The team extends its thanks to the Asian Development Bank and project staff for the support they provided in the field, and to all the informants who gave their time and thoughtful comments in response to questions that were sometimes deeply personal.

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Abbreviations

ADB – Asian Development Bank
AIDS – acquired immunodeficiency syndrome
ARV – antiretroviral drugs
BCT – Bhoruka Charitable Trust
CARDTS – Citizen’s Alliance for Rural Development and Training Society
CAREC – Central Asia Regional Economic Cooperation
CDC – Center for Disease Control and Prevention
FIDIC – International Federation of Consulting Engineers
GAP – gender action plan
GIPA – greater involvement of people living with HIV/AIDS
GMS – Greater Mekong Subregion
HIV – human immunodeficiency virus
IDU – injecting drug user
KSAPS – Karnataka State AIDS Prevention Society
MHC – Men’s Health Cambodia
NACO – National AIDS Control Organization
NACS – National AIDS Council Secretariat
NGO – nongovernment organization
PACS – provincial AIDS council secretariat
PNG – Papua New Guinea
PRC – People’s Republic of China
SACS – State AIDS Control Society
SANGRAM – Sanpada Grameen Mahila Sanstha
STI – sexually transmitted infection
TA – technical assistance
VCT – voluntary counseling and testing
UNFPA – United Nations Population Fund

NOTE

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

From October 2007 to April 2008, the Asian Development Bank (ADB) conducted a five-country assessment, from a gender perspective, of the impact of selected transport projects on the spread of HIV. The assessment consisted of a desk review of ADB and government policies and regulatory frameworks in relation to HIV and to gender. Field work was carried out in selected project sites in five countries—Cambodia, the People’s Republic of China (PRC), India, Papua New Guinea (PNG), and Tajikistan. Over 370 interviews and group discussions were conducted with representatives of ministries of health, public works, transport, infrastructure, and women’s affairs; nongovernment organizations (NGOs) and other civil society actors; and construction workers, sex workers, villagers, youth, and people living with HIV.

The people most vulnerable to HIV during infrastructure construction are skilled and semiskilled male workers—including machine operators, drivers, supervisors, managers, and engineers—and young, rural, poorly educated women who move to the construction sites to sell sex. Local laborers are less at risk because they are usually drawn from the local communities and go back to their partners and families each night.

Women who rent market stalls along transport corridors are also at risk of HIV if they lose their livelihood as a result of infrastructure development and consequently must migrate or look for other ways to gain an income such as paid sexual transactions.

Improved transportation infrastructure results in greater mobility, particularly for young people and men, and increased travel outside the local area to seek paid work. Outside their village, young women are more vulnerable to sexual exploitation and young men are more likely to become involved in risk-taking behavior. Spouses left behind without a secure livelihood may engage in unprotected sex for money or they may be exposed to infection due to their returning partner’s risky behavior.

New roads bring more truck drivers through an area—hard-to-reach men who are often missed by HIV interventions. New roads can also increase the trafficking of drugs through previously remote areas, as well as the risk of trafficking in people, both men and women, for their labor, and women and children for sexual exploitation.

In Asia, HIV particularly impacts on women because of gender differences. On the one hand, men are more likely to have multiple partners, to travel for work, and to have disposable income. They are the clients of sex workers, and many men also have sex with men. On the other hand, women are physiologically more vulnerable to infection, and their lack of social and economic power means most women are unable to negotiate safer sex. Women are generally expected to be monogamous and bear children; they have few inheritance rights in most countries; in some countries exceptionally high levels of violence toward women puts them at even greater risk of infection. Discriminatory laws and practices further disempower women. Women generally have lower levels of education and skills and are poorer than men, so they are less likely to access accurate information about HIV. Women are also more frequently and severely impoverished due to HIV; often the husband is the first in the family to get sick, assets are sold to pay for his health care, and after his death, his widow and children are left impoverished.
HIV interventions have not adequately addressed the impact of infrastructure development on local communities. The Greater Mekong Subregion (GMS) has been most responsive to the threat that HIV poses. Several governments have strong policy frameworks to integrate HIV into a multisector response, but monitoring of HIV interventions is weak throughout the region and gender considerations are not included in most HIV interventions.

All large ADB infrastructure projects now routinely include covenants that require contractors to address the risks of HIV. Loan documents increasingly address gender in various modalities, but to date very few infrastructure projects have mainstreamed HIV or gender, very few gender-specific targets or indicators have been set, very little sex-disaggregated data have been collected, and monitoring of compliance with agreements, including agreements to employ target numbers or quotas of female workers, is weak across the board.

Most projects covered in this report featured inadequate implementation of planned HIV interventions. Only in Cambodia and the PRC were attempts made to deliver comprehensive HIV interventions connected with the loans.

In Cambodia, Loan 1945-CAM, for the building of a 150-kilometer (km) highway in northwest Cambodia, HIV figured in the following positive outcomes, but with some missed opportunities:

(i) A technical assistance (TA) grant was provided to two separate NGOs to provide HIV interventions to construction workers and villagers along a 150 km stretch of highway.
(ii) The ministries of public works and transport took leadership in developing a strong policy environment.
(iii) Implementation of labor laws by foreign companies was not monitored.
(iv) The project had no gender considerations and there were no gender-related indicators.
(v) The HIV intervention for one village included awareness of vulnerabilities to trafficking in drugs and in people but training was not participatory and was not gender responsive.
(vi) The component of the program dealing with income generation was inadequate to provide income-generating or broader life skills to the participants.
(vii) A policy of requiring 100% condom use in brothels was successful.

In the PRC, TA 4142 on the Baolong Healthy and Safe Action Project was a component of the Western Yunnan Roads Development Project. It was a very successful intervention, building confidence with its interactive and participatory emphasis.

(i) The project had comprehensive, integrated HIV outreach to sex workers, construction workers, and villagers along the corridor of influence of a new 77 km expressway.
(ii) It incorporated an effective policy at the provincial and local levels, characterized by strong leadership and follow-through.
(iii) It was linked in with large-scale networks, such as the All-China Women’s Federation and the Youth League, operating at the local and district levels and able to mobilize communities; the result was increased awareness in all sectors,
(iv) The social marketing of condoms to local women and men proved successful.
(v) The project measured behavior change—among other findings, condom use by foremen doubled.
(vi) Anecdotally, education efforts were successful. As one brothel owner commented, “I didn’t know that condoms could stop disease.”
(vii) Unfortunately, HIV education was not gender specific.

ADB has played an important role in strengthening health systems, which are weak in many countries in the region, and in mitigating the impact of HIV on the poor. This work can be expanded and more effectively integrated into infrastructure operations. It is important for ADB to involve those most affected by HIV—including women, people living with HIV, and sex workers—in the design stages of projects and in implementation.

Gender has to be mainstreamed into all HIV interventions to ensure maximum impact of related activities. ADB must ensure that women are involved in all aspects of decision making in new developments. Greater collaboration between key players from government, NGOs, and civil society is necessary to ensure that projects are sustainable; people living with HIV have to be more meaningfully involved in the response. Public–private partnerships must be encouraged and the quality of interventions must be carefully monitored.

**Recommendations**

This report sets out three sets of recommendations directed toward the preconstruction, construction, and post-construction phases of ADB-sponsored infrastructure projects.

**Preconstruction**

(i) Include HIV interventions in project bidding documents.
(ii) Ensure that community consultation includes affected persons such as women, sex workers, and people living with HIV.
(iii) During the feasibility phase, assess the risks of sexually transmitted infections (STIs) and HIV, and assess vulnerability through the application of a gender analysis.
(iv) Establish a forum enabling strong collaboration between all relevant sectors, including health, transportation infrastructure, law enforcement, women, and NGOs.
(v) Strengthen the capacity of infrastructure sector stakeholders for gender-sensitive HIV interventions.
(vi) Review the deployment of international experts and encourage greater engagement of local experts.
(vii) Develop gender-sensitive targets and indicators to measure progress.
(viii) Engage NGOs with HIV and gender expertise to monitor and evaluate HIV interventions.

**Construction**

(i) Implement HIV interventions that change behavior and increase condom use among construction workers, sex workers, villagers, men who have sex with men, and drug users.
(ii) Engage people living with HIV in the implementation of interventions.
(iii) Encourage the use of male and female condoms, lubrication gel, and increase social marketing of these items.
(iv) Ensure that the employment of women is monitored.
(v) Encourage families to live together by improving the living conditions of workers.
(vi) Ensure that workers and villagers have access to STI and voluntary counseling and testing (VCT) services.
(vii) Train and engage HIV-positive people as counselors and encourage couples counseling.

Post construction
(i) Support the economic empowerment of women with sustainable vocational training, education in business management and entrepreneurial skills, and availability of microfinance schemes and livelihood projects for HIV-affected widows.
(ii) Support sustainable HIV-positive people’s networks.
Introduction

Infrastructure operations, particularly the construction of enhanced transportation facilities and routes, are welcomed by local communities because they offer improvements in people’s economic outlook and quality of life. These benefits include employment of local people in construction-phase labor, increased access to employment opportunities, markets, and growth centers for communities, facilitating a strengthening of the commercial environment, and improved access to government services such as health centers, schools, and social services. However, infrastructure development also brings an increased risk of transmission of sexually transmitted infections (STIs), including HIV, because it increases population mobility, one of the most significant factors in the rapid transmission of STIs. The risks associated with greater mobility cannot be adequately addressed without recognizing that men and women face different vulnerabilities and impacts from development investment.

This report aims to provide the Asian Development Bank (ADB) with a better understanding of the gender aspects of the HIV risks associated with infrastructure development (pages 10–16); to collect emerging good practices, based on a review of a representative sample of ADB transport infrastructure projects with features designed to reduce gender-based risks from HIV (pages 17–27); and to consolidate the findings from this assessment, developing recommendations for mitigating the risk and minimizing the impact of HIV associated with infrastructure operation projects on both women and men (pages 28–35). The appendixes include information on government and ADB policies concerning HIV and gender, along with trends in current regional HIV programs. Case studies from each country examined are also appended. The main audience for this report is ADB staff, particularly in the transport sector; governments and their executing and implementing agencies; and civil society organizations, nongovernment organizations, and the private sector. The findings can also contribute to policy dialogue with a broad range of partners involved in infrastructure investments.

ADB and Infrastructure Loans

ADB is a major funder of infrastructure sector development in Asia and the Pacific; three quarters of its lending since 1970 has been invested in transportation and communications. In 2007 alone ADB approved over 100 loans, totaling over $10 billion; 39%, or $3.925 billion, was for transport and communications programs.1

Since the late 1990s, ADB has recognized links between improved infrastructure and HIV transmission, and

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has been at the forefront of addressing vulnerability to HIV. ADB recognizes that infrastructure operations are important opportunities to conduct HIV prevention activities and to intervene to mitigate the impact of HIV. All large-scale ADB infrastructure projects now have built-in HIV clauses that require contractors to carry out HIV risk mitigation as a condition of obtaining loans, but there is no requirement to mainstream gender into these operations. This is partly because there are few epidemiological data about how HIV vulnerability related to infrastructure development intersects with gender-based differences.

Different subregions in Asia and the Pacific have different policy environments that affect the degree to which HIV and gender inequalities are addressed in infrastructure projects. For example, the Greater Mekong Subregion (GMS) has a very supportive policy environment that facilitates the implementation of ADB’s strategic directions paper. Nevertheless, there are still no assessments of different ways infrastructure development affects men and women.

Assessment Methodology

From October 2007 to May 2008, ADB carried out an assessment from a gender perspective of HIV risks associated with transport infrastructure development projects; the purpose was to identify lessons learned and good practices, so as to inform future project design and implementation. The countries included in the assessment—Cambodia, India, Papua New Guinea (PNG), the People’s Republic of China (PRC), and Tajikistan—were selected to ensure broad representation of ADB’s regional departments, including countries with latent, maturing, and declining HIV epidemics. Details of the loans selected for inclusion in this assessment are provided in Box 1.

Box 1: Asian Development Bank Loans and Technical Assistance Grants Selected for Inclusion in the Assessment

**Cambodia**


- Three-year project to build 150 kilometers (km) of highway and 45 bridges along National Routes 5 and 6, from Siem Reap west to the Thai border (completed 2008)
- Includes technical assistance (TA) for HIV prevention among construction workers and village communities along the highway. Interventions for each target group were carried out by two different nongovernment organizations.

**People’s Republic of China (PRC)**

ADB Loan 2014: Western Yunnan Roads Development Project, Yunnan Province (approved 28 October 2003—completed 2008).

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Introduction

Box 1: continued

- Three-year project to build a 77 km expressway from Baoshan to Longling, facilitating travel from Kunming, the capital of Yunnan Province, to the Myanmar border
- Includes TA for HIV prevention aimed at mitigating the risks of sexually transmitted infections and HIV.

ADB Loan PRC 2393: Regional Road Improvement Project, Xinjiang Province (approved 13 December 2007—not started at time of assessment)
- Site visit to project area not made due to delays in receiving travel approval.

India
- Construction or upgrading of low-traffic state roads, many in very rural areas
- Includes a TA project for conducting HIV awareness campaigns and linking with ongoing HIV prevention programs; the project had not been implemented at the time of the assessment.

ADB Loan 1839-IND: Western Transport Corridor Project, Karnataka State (approved 20 September 2001—closed 30 June 2008)
- Three contracts terminated early due to poor performance; remaining works to be completed by National Highway Authority of India through own funding.
- Reconstruction of 259 km of National Highway 4 between Tumkur and Haveri.
- National Highway Authority agreed to ensure that civil works contractors provide HIV prevention training to construction workers; this had not happened on sites visited.

Papua New Guinea (PNG)
ADB Supplementary Loan PNG 2242/43: Road Maintenance and Upgrading, Highlands (approved 29 June 2006—ongoing at time of assessment).
- Specific provisions included to ensure contractors carried out HIV awareness; they erected billboards and distributed condoms; no provisions made to educate construction workers or communities affected by road about HIV.

Tajikistan
ADB Loan 2196-TAJ: Dushanbe-Kyrgyz Border Road Rehabilitation Project Phase 2 (approved 17 November 2005—ongoing at time of assessment).
- Three-year project. Phase 1 included 140 km of road from Dushanbe east toward the Kyrgyz Republic and 77 km of rural roads; Phase 2 was rehabilitation of the remaining stretches from Nurobad to the Rasht Valley and onward to Nimich (km 140 to 217 of Highway A-372), 12 km closest to the Kyrgyz Republic border, and 60 km of rural roads, primarily in the Rasht Valley.
- Loan project design included a grant-financed component that stipulated HIV and gender programming, and included impact mitigation and involvement of women; contracts to implement interventions had not been awarded at the time of this assessment.
Two consultants carried out field work in the five countries included in this report. One consultant visited Cambodia, the PRC, and PNG; another visited India and Tajikistan. Each field trip lasted 3 to 5 weeks. Consultants conducted interviews in the national and state or provincial capitals with key informants; they also collected data at each loan site. In total, they conducted over 290 interviews and over 80 group discussions with key stakeholders from government, NGOs, construction sites, village communities, and among vulnerable populations, including sex workers and men who have sex with men. The interviews and discussions focused on understanding the national policy environment, progress in addressing HIV at the project sites, and the gender dimensions of the response. Unless otherwise stated, the findings presented in this report are drawn from these field data.

The assessment also included a desk review of ADB and government HIV policies, selected countries’ conditions, relevant infrastructure sector policies and regulatory frameworks, and the work of other development partners involved in the mitigation of HIV risks associated with infrastructure development. Detailed country briefs and an overview of regional and ADB responses to HIV are available in Appendixes 1–8.

Countries in this region are highly diverse, yet some generalizations can be made and the analysis presented in this report can guide ADB staff and partners to ensure that at-risk populations are consulted and gender-specific issues are taken into account across all countries with ADB-supported infrastructure investments. This report is intended to support the infrastructure sector’s ability to develop public or public–private partnerships for sustainable mitigation of the gender-related HIV risks associated with infrastructure development. The report will serve as an advocacy tool for internal ADB staff and ADB development partners, including NGOs and the private sector.

The recommendations drawn from the assessment focus on how ADB projects might reduce the vulnerability of both men and women to HIV as a result of infrastructure development, improve public health outcomes for all, and decrease the burden of HIV and AIDS on individuals, particularly on women and households headed by women.
Overview of HIV in Asia and the Pacific

This section highlights the gender aspects of the current HIV epidemic in the Asia and Pacific region. This vast region contains widely different cultural, social, and economic conditions that influence the spread of HIV, its effect on communities and individuals, and responses by government and civil society. Some generalizations regarding the links between infrastructure improvements and vulnerability to HIV across the region can be made. Appendixes 2–6 provide country briefs that explore the specifics in more detail.

According to the Joint United Nations Programme on AIDS (UNAIDS), the global epidemic is stabilizing but at an unacceptably high level, with an estimated 33 million people now living with HIV.³ The vast majority of infections are in Africa, but because Asia is so populous, small increases in HIV prevalence there translate into large numbers of new infections. Many factors have contributed to the stabilizing of the epidemic, including both medical and socioeconomic interventions. UNAIDS claims that where HIV infection rates have fallen sharply, community mobilization has been a critical element of success. Many people now have access to life-saving antiretroviral (ARV) drugs. These drugs improve people’s quality of life and rejuvenate households and communities; ARVs also lower people’s viral load and thus their potential to infect others. These are strong arguments for early testing and provision of free ARVs to those who test HIV positive. The UNAIDS 2008 report⁴ states that drug users have the poorest access to ARVs.

The epidemic in Asia is characterized by highly diverse features and disparate trends. In 2007, an estimated 5 million people in Asia were living with HIV, with 380,000 new infections during the year and an equal number of AIDS–related deaths.⁵ Increasingly, HIV disproportionately affects young women. In Cambodia, for example, the ratio of HIV infections among males to females aged 15 to 24 is 1:3.⁶

In Asia, HIV is driven by men who are clients of sex workers, inject drugs, or have sex with other men. In parts of Asia HIV infection rates among men who have sex with men are rising at an alarming rate. In Cambodia, Myanmar, and Thailand, HIV prevalence is declining, but there is a steady increase in populous countries such as Bangladesh and the

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⁴ Footnote 3.
In Indonesia, Pakistan, and Viet Nam, the epidemic is growing rapidly. In these countries as well as in parts of the PRC and India, the intersections of injecting drug use and transactional sex are of increasing concern. Nevertheless, HIV prevalence is generally low throughout the region and there is still an opportunity to ensure that it remains low by implementing effective HIV interventions.

The 2008 Report of the Commission on AIDS in Asia (the Commission) contends that Asia is unlikely to have an explosive HIV epidemic as many parts of Africa have, and that HIV is unlikely to spread other than through sharing needles or unsafe sex, whether between sex workers and their clients or men and men. However, these behaviors cannot be addressed in isolation. Many sex workers use drugs; men who have sex with men may sell sex, have sex with women, or use drugs. The report states that up to one in five Asian men purchase sex at some time, often before they are married, and that there are about 10 male clients for every sex worker. In the PRC, 37 million men regularly buy sex; in India, the number is 30 million. The Commission contends that men who buy sex are the single most powerful driving force in Asia’s HIV epidemics and that programs to increase condom use with sex workers and their clients will do more than any other intervention to control HIV in Asia.

In the Pacific subregion, STI rates are high but the HIV epidemic is small in all countries except PNG. In total, about 74,000 people are infected with HIV in the Pacific, the vast majority in PNG. In the Indonesian province of Papua and in PNG, the HIV epidemic is driven by unprotected heterosexual sex. Although there are low levels of injecting drug use in the Pacific (and very low levels outside of Micronesia), high levels of alcohol consumption exacerbate risky behavior.

About half of the young people interviewed in one study in PNG indicated that they exchanged sex for money or goods, and infection rates in many rural areas are increasing. Disturbing trends include the youth or women engaged in transactional sex, apparent high levels of concurrent sexual partners, high rates of STIs, high mobility, and high rates of sexual violence, including gang rape. PNG has among the highest rates of family and sexual violence—particularly rape—in the world for a country not at war. These conditions have enormous implications for the spread of HIV. In turn, HIV will have adverse effects on security and stability for PNG and Papua.

Severe and pervasive violence against women in the Pacific impedes economic development; increases costs for health care, social services, policing, and the justice system; retards

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7 Transactional sexual relationships are sexual relationships in which the giving of gifts or services is an important factor. They may be distinguished from prostitution in that they may provide only a portion of the income of the person providing the sex.


women’s participation in political, social, and economic life; and undermines the effectiveness of aid. AusAID’s Office of Development Effectiveness is currently examining new ways of working with partners, including other funding agencies, to address gender-based violence effectively. Lessons learned include the need to develop a multisector, collaborative response to violence against women and overcome “sectoral silos” in managing aid programs, to emphasize prevention efforts, and to minimize the potential for violent backlash associated with women’s empowerment activities.14

Gender Aspects of HIV

Epidemiological trends in HIV transmission spotlight sex workers, injecting drug users, and men who have sex with men, propelling policy makers and development partners to focus on these people, who are most vulnerable to HIV infection. This means that female partners of men who engage in high-risk behavior are often ignored and that the devastating physical, social, and economic impacts of HIV on girls and women are obscured. Although many more men than women are infected with HIV in the region, in most countries HIV infection appears to be steadily increasing among women. In Asia, the 19% of new HIV infections in 2000 were in women; in 2007 the number increased to 24%.15 In Cambodia, 53% of new infections in 2007 were in women, most of whom were infected by a regular partner who had previously engaged in unprotected paid sex. Throughout the region, an ever-growing proportion of HIV infections are in women.

Many women are now diagnosed with HIV via routine screening at prenatal clinics, and this may distort the recorded data. Increases in HIV diagnoses among females are seen particularly in countries where the health providers initiate testing. Because pregnant women’s partners are not routinely tested at the same time as their spouse, the proportion of women with HIV may be falsely inflated. This increased testing of pregnant women without also testing their partners raises serious ethical issues about a woman’s responsibility to disclose her HIV status to her partner and the possible consequences of such disclosure, including violence and abandonment.

Factors affecting HIV infection in men and women differ considerably, reflecting differences in physiology, sexual behavior, and social attitudes; power imbalances are also crucial. Perhaps the starkest difference results from attitudes to sexuality that condone men’s involvement in risky, sometimes violent sex with multiple partners while requiring women to be loyal and submissive, even to unfaithful partners. Most women are unable to control the conditions under which they have sex, and HIV prevention campaigns that promote abstinence are inadequate for women who have no power to protect themselves from their partners. Furthermore, sexual and physical violence against women and children increases the risk of HIV. Evidence from around the world indicates that between one-third and two-thirds of sexual assault victims are 15 or younger.

Inequality between the sexes also restricts women’s access to care and services. In many Asian countries, investment in boys’ health is given

14 Footnote 11.
priority over that of girls and women, limiting women’s opportunities to inform themselves about safer sexual practices and improve their ability to protect themselves from HIV. Women also generally command fewer resources in the household and thus may not be able to cover costs for health services or other associated costs, such as for transportation. Some gender issues regarding health services are specific to men. For example, most health workers, even in voluntary counseling and testing (VCT) sites, are female. Men can feel uncomfortable discussing their sexual concerns with women and may avoid seeking testing or care unless they can be assured of consulting a male health worker.

Roads bring many benefits, but they can increase vulnerability to STIs, including HIV, through greater mobility and increased connections. Men who have disposable incomes and who travel or migrate for work—“mobile men with money” such as construction workers, project managers, and truck drivers—provide most of the demand for commercial sex and are likely to engage in risky behavior, such as unprotected sex with casual partners and sex workers. A large influx of males for a construction project, especially if they are far from home, increases the demand for sex in an area. Migrant construction workers unable to pay for sex workers may engage young local women, whom they consider “safe” and free from STIs, in transactional sex. These young women are unprepared to negotiate condom use even when they are aware of the dangers from unprotected sex.

Local communities are affected if women and girls meet the demand for sex, either willingly for money or favors, or unwillingly through rape or abduction into sex work. Commercial sex and human trafficking, particularly of women and girls for sex work, tend to follow transport routes.

HIV has a different impact on women and men in several other ways. Above all, women are more susceptible to being infected with HIV, as detailed in Box 2. In addition, women have a disproportionate burden of HIV-related care, and women with AIDS are often abandoned by their family. The economic effects on women are also significant, whether or not they are the ones infected. Many women living with HIV lose their economic status because of entrenched discrimination and society’s belief that they can no longer be productive members of society, while households headed by women after the death of a spouse due to HIV-related illness are frequently impoverished. Education and training of women contributes to their economic empowerment, enhances economic development overall, and reduces families’ vulnerability to poverty, especially under conditions of HIV infection.

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Box 2: Factors that Contribute to Women’s Greater Vulnerability to HIV Infection

Physiological Factors
- Women are up to four times more likely to contract HIV from unprotected vaginal intercourse than men because of larger mucosal surface area of reproductive organs, higher concentration of the virus in semen than in women’s secretions, and abrasion of the mucosa (including damage through forced sex, particularly for young women and girls).
- Women’s symptoms are often not obvious, leading to higher rates of untreated sexually transmitted infections (STIs) and associated lesions facilitate HIV transmission.
- Women are usually 5–10 years younger than men when infected and consequently less exposed to public health messages.

Sociocultural Factors
- Norms of female sexual behavior encourage passivity, modesty, fidelity, and innocence or ignorance about sexual matters, and discourage women from controlling the conditions under which they have sex.
- Cultural norms require women to marry and have children, preventing condom use.
- Cultural norms push men who have sex with men to marry, putting their wife at risk of infection.
- Male physical and sexual violence against women and girls increases risk of infection.
- Women’s lower levels of literacy and education and limited involvement in public life result in less access to information about HIV prevention and treatment.
- Restrictions on women’s mobility mean less access to STI services and voluntary counseling and testing (VCT).
- In some cultures, women and girls must be accompanied by their husband or a female relative at a health clinic, reducing confidentiality of STI services or VCT.
- The stigma linking HIV with promiscuity makes it more shameful for women to use VCT.
- Discriminatory laws that penalize female sex workers but not their clients make women vulnerable to violence and exploitation.

Economic Factors
- Economic dependence on men means women cannot negotiate safe sex with husbands or in sex work.
- Women have few or no legal rights to own or inherit land or property, increasing female insecurity and making widows especially likely to take up high-risk behavior such as transactional sex.
- Women have limited opportunities for earning income other than through formal or informal sex work, especially migrant women, refugee women, and women left behind when men migrate.
- Drug use may lead women to sell sex.
- More women and girls are in absolute poverty compared to men and have to take on additional economic burden when family members are sick.
HIV Vulnerabilities Associated with Infrastructure Operations

The debate that pits a “public health” approach against a “development” approach is sterile and misleading. More useful is a pragmatic approach based on a solid understanding of the epidemics’ dynamics, and the factors that drive HIV transmission and affect the effectiveness of HIV programmes.

Report on the Commission on AIDS in Asia, 2008

This section describes the different factors driving HIV transmission associated with infrastructure projects including the behavior and circumstances of people directly and indirectly involved in these projects. Other processes such as trafficking of humans and drugs create an environment of heightened risk for HIV transmission. Gender perspectives are highlighted throughout this assessment of factors. Unless otherwise stated, the conditions and situations described are based on the findings from field work carried out in the project sites described in Box 1. Although conditions vary from country to country and even within countries, this assessment identified many common elements in risks and vulnerabilities within the region that manifest in various ways across different countries. Further details and findings from the assessment for each country-specific situation are available in the country briefs.

Stage and Type of Construction

HIV risks and vulnerabilities have to be assessed in terms of which individuals and communities will be affected before, during, and after infrastructure development. Different people are affected in different ways and at different times, and the infrastructure sector alone may not be able to respond to all the risks posed by infrastructure development. For example, the people most vulnerable to HIV infection during construction are the workers with money to spend and the poor women who offer them sexual services, but their spouses may be affected years later if appropriate HIV interventions are unavailable or inaccessible to certain groups. Spouses of construction workers may also become infected with HIV in their own villages because their partners are absent and they have sex with another partner for companionship, or in exchange for money or goods because they are not receiving financial support, or a combination of these factors. Truck drivers who pass through the region once road construction is finished, frequently entering into transactional or commercial sex, are particularly hard to reach.

Different types of infrastructure operations also present different levels of HIV risk. Large-scale projects bring in large numbers of construction workers for an extended time and require effective large-scale HIV interventions including health clinics on site. On smaller projects that use local unskilled labor, skilled workers living away from home are highly likely to buy sex services, necessitating measures to protect them from HIV and other STIs.
Populations Affected by Infrastructure Developments

Construction Workers

Large infrastructure projects such as most of the road development projects included in this assessment require construction workers to live at the site for extended periods, from several months up to 3 years. When large numbers of construction workers are brought into an area and set up camp, usually sex workers also set up business. The construction workers may be migrants from a neighboring country (such as the semi-skilled Thai workers on the Cambodian Road Improvement Project, Siem Reap–Poipet), or from within their own country (in the PRC many of these workers travel in teams hundreds or thousands of kilometers from home).

Most of the men working on infrastructure projects are from 20 and 40 years of age. Many are married, but very few live with their partners at the construction sites. In terms of education, they range from illiterate unskilled laborers to university-educated site engineers and program managers. Most of the workers interviewed who lived at the sites said they regularly bought sex. The exceptions were men at some sites in Tajikistan where it was not possible to buy sex, men whose wives or partners lived with them at the site, and young self-proclaimed virgins. Unless men who buy sex and the women who provide it receive adequate HIV education and good access to prophylactic supplies including male and female condoms and lubrication, they are at risk of contracting STIs, including HIV.

Unskilled laborers are the least likely to visit sex workers because they are on lower wages, work longer hours, and have less freedom of movement and access to transport during their leisure time. Furthermore, on some sites, unskilled laborers are drawn from the local community, so they return home each evening and are not estranged from their families for long periods. Sex workers operating near construction sites say their clients are more likely to be machine operators, truck drivers, surveyors, engineers, and managers than laborers. Of course, married men who are infected with HIV or other STIs are likely to transmit infections to their wives, who may be unaware that they are at risk.

Among construction workers in Asia, the most common paid sexual exchange is a commercial transaction with sex workers in brothels, massage parlors, or

Construction workers, Kerowagi, Highlands highway, Papua New Guinea
entertainment establishments. In PNG, sex work is most likely to take place in the bushes. The nature of paid sex changes as men’s incomes increase; men with more disposable income want more than the quick sexual encounter available in a traditional brothel. For example, in the PRC and Cambodia, sex workers increasingly operate in informal settings such as massage parlors, karaoke bars, and beer halls; unskilled workers visit local brothels, and better-paid workers visit sex venues with more entertainment options.

All construction workers in Cambodia and PNG said that they use condoms with casual sex partners, and many of them carried male condoms on their person. Nevertheless, one worker had wide agreement from his peers when he said: “I do not deny myself if condoms are unavailable.” In India and Tajikistan, construction workers did not carry condoms. It was not possible to speak to construction workers in the PRC because work was finished, however a quantitative evaluation of the HIV intervention indicated significant changes in behavior. A study of mobile construction laborers along the Ho Chi Minh Highway in Viet Nam indicated that young men are likely to use a condom with sex workers but not with local ethnic women.18

In most countries, condom dispensing machines are not installed at work sites, and only in PRC are male condom dispensers installed in all entertainment establishments. Few construction workers test for STIs, because the standard clinics connected to local government health centers or hospitals that provide them with sexual health services are usually not open after their working hours.

Throughout the region, men who have sex with men tend to conceal their sexual preference because of prevailing social attitudes and, in many countries, discriminatory laws. No workers admitted that male-to-male sexual activity occurs within construction campsites, but such behavior is likely in these predominantly male settings and has to be considered when designing HIV education projects for workers.

**Sex Workers**

Women who exchange sex for money in and around construction sites tend to be young, rural, poorly educated, and

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from outside the area. They are often introduced into the sex industry by peers and then invited to work with a business owner close to the construction site. In PNG, the women may be locals who are “marketed” by family members. Some are married but do not receive any income from their husbands who work far from home, so sex work is the only way they can feed themselves and their children and send their children to school. In the PRC, many other employment options are available, meaning that sex workers around construction sites are more likely to have chosen sex work affirmatively. This means that they are easier to target for behavior change. In Tajikistan, women from rural areas travel to the capital to sell sex and then return home, in some cases on the same day. In cities in India, sex workers concentrate in locations where it is known that sexual exchanges can take place, including bus stands and truck stops, but in small towns sex work is likely to occur in more secretive settings less accessible to outreach projects.

In interviews for this assessment, all sex workers said they experience some violence at some time, including gang rape; violence and fear of violence decrease women’s ability to negotiate safer sex. In Cambodia and PNG, there appears to be a culture of systematic violence by police who often steal women’s money, jewelry, and telephones and rape many of the women they arrest. Sex workers seldom report acts of violence.

Women who work in informal settings such as karaoke bars, massage parlors, and casinos are much harder to target than women who work in brothels, partly because not all women in these settings exchange sex for money or goods and not all who do so identify as sex workers. Furthermore, because sex transactions are not carried out overtly in many of these settings, business owners may be reluctant to engage in HIV education.

**Local Youth and Mobility**

If the infrastructure project is a road or railway, movement of the local population increases once it is completed. This is evident in the exodus of young people from most of the villages along a new highway under construction in northwest Cambodia. If the new transport route penetrates remote areas that were previously relatively inaccessible (as does the Western Yunnan Road Development Project in the PRC) or if infrastructure development promises
economic development (for example, the proposed development of a new port in Lae, PNG), young able-bodied people will migrate on a large scale from rural areas in search of paid employment. In a new environment without the usual social networks and norms operating, these people are vulnerable to contracting HIV and bringing it back to their village. They are also much harder to target once they become mobile.

Throughout Asia tens of millions of people are mobile, migrating both internally and across borders. Due to its economic expansion, the PRC alone is estimated to have over 120 million internal migrants. According to the United Nations Regional Task Force on Mobility and HIV Vulnerability Reduction, young migrant men are more likely to buy sex and young migrant women to sell it than young people who are not mobile. The Commission on AIDS in Asia states that in southwest PRC, temporary female migrants are 80 times more likely than other women to sell sex.

Local Women

During highway construction, some people lose their livelihood because they operate a small business on land expropriated by the government for highway development, or because the new road bypasses their business. In many countries, the majority of these small business operators are women. Owners are compensated for land, but many women lease property (or work their husband’s family property) and thus lose their ability to earn an income without being compensated. This can result in women moving from their village in search of work. Such mobile young women are vulnerable to sexual coercion and exploitation, and are therefore at greater risk of HIV infection; they have less bargaining power than men to negotiate condom use and they tend to have older male partners who are more likely to be infected with HIV.

In all construction sites visited during the assessment, some local women had married construction workers—and

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were later abandoned by them once the construction work was finished. However, it is more common for male construction workers to “buy” cooking, laundry, and sexual services from local women with whom they developed a temporary relationship. Some of these women were young and single, but more often they were widows or married women whose husbands were working elsewhere.

In Cambodia and the PRC, women along the transportation corridors affected by infrastructure projects repeatedly said that they knew how HIV is transmitted and they did not feel at risk of contracting HIV. Most women do not consider the behavior of their husbands, many of whom are away working for months at a time. In the PRC, for example, many internal migrants come home only once a year for Spring Festival. Several married construction workers in Cambodia said their wives trust them to be faithful but they do have sex when they are away from home for long periods. Women in India and Tajikistan said they did not know how HIV is transmitted. In Tajikistan, wives of migrants said their husbands were faithful, but the husbands admitted that they have relationships in other places when they travel. It may be that these women are unlikely to spread HIV further throughout Asia, but that does not mean that they should be ignored; so far there are no programs that reach them.

** Trafficking—Drugs and People **

In the infrastructure projects covered in this assessment, the risks of sharing needles are relatively low because the incidence of injecting drug use is low in those campsites. But once the road or railway is completed, local youth are more likely to travel and be more susceptible to drug use than at home. Also, new roads may bring drugs into or through previously remote regions. A year after construction of the Mandalay-Muse Highway connecting Myanmar to the PRC, HIV prevalence among injecting drug users (IDUs) in three provinces along the route of the highway in Myanmar rose from 51% to 88%, 34% to 74%, and 86% to 92%.21

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HIV education in a village near the highway, Cambodia
Throughout the Asia and Pacific region, human trafficking facilitated by improved transport routes. It is important to include human trafficking in community education projects connected with infrastructure development. This includes the trafficking of young women and children for sexual exploitation as well as the trafficking of men and women for their labor. Debt bondage is a form of human trafficking found in the construction industry in many countries.
This section draws on the assessment of the infrastructure projects set forth in Box 1 to describe ADB’s experience with addressing HIV risks. The analysis considers the policy environment to prevention, testing and treatment, and HIV impact mitigation. Good practices and lessons learned from the past 10 or more years of ADB HIV experience are set forth.

**Infrastructure Sector Policies**

While infrastructure projects cannot address all risk issues, construction sites have proved to be ideal settings to carry out effective education of construction workers, sex workers, and affected communities targeting behavior change. Over the past decade, ADB has increasingly included covenants to carry out HIV interventions in infrastructure projects in its TA grants or other financial allocations. Furthermore, since 2006, the International Federation of Consulting Engineers (FIDIC) Conditions of Contract for Construction specify that contractors for major infrastructure projects must offer HIV-awareness programming, including STI and HIV information, education, and communication, for all workers and for community members at least every 2 months. The FIDIC conditions also require that condoms, STI and HIV screening, diagnosis, counseling, and referrals be provided for all site staff and labor. These guidelines are in line with ADB’s strategic response to HIV, but policies, guidelines, and legal and regulatory frameworks do not always guarantee effective, pragmatic, or optimal measures.

For projects funded by multilateral development banks, companies are expected to adopt FIDIC guidelines, which provide an accountability mechanism, if national guidelines are substandard. However, the FIDIC guidelines are limited in that they are nonbinding and are not monitored by the multilateral development bank.

ADB can support the implementation of the FIDIC guidelines by requiring project designs to (i) carry out an assessment of gender aspects of infrastructure development and anticipated gendered risks and impacts during loan predesign, (ii) provide mechanisms in the project area and corridors of influence to ensure adequate mitigation of the risks of STIs, including HIV, and (iii) dedicate adequate human resources,

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24 A project road’s corridor of influence is defined as a 5-kilometer-wide area on both sides of the road plus half circle with a 15-kilometer radius on both ends of the road. ADB. 2007. *Socially Inclusive and Gender-Responsive Transport Projects: A Case Study of the Timor Leste Road Sector Improvement Project.* Manila.
financial management, and monitoring and evaluation mechanisms to ensure that local counterparts (such as governments, nongovernment organizations [NGOs], and contractors) can adopt and monitor compliance with national provisions, FIDIC general conditions, and other international standards.

Most construction workers lack information about their rights and entitlements in relation to their working conditions. One respondent to this assessment said it is useless to complain about unfair working conditions because one subsequently risks losing one’s job; people just accept the conditions offered if they want the work. Many construction contractors do not provide sick leave, holidays, or compensation for workers disabled due to workplace injury. When foreign companies are engaged, for example in Cambodia, there appears to be little or no monitoring of their compliance with local labor laws.

The Asia-Pacific Economic Cooperation (APEC) has developed guidelines for implementing workplace practices for HIV prevention. The guidelines specifically refer to gender dynamics, children, migrants, and mobile populations. A key principle of the guidelines is that the process of policy development and implementation is the result of consultation and collaboration between all concerned parties. The guidelines encourage countries to develop legal and policy frameworks for the workplace that protect the rights and dignity of persons living with and affected by HIV, in consultation with representatives of employers, workers, and people living with HIV.

### Challenges to Implementing HIV Interventions

In some countries and settings, there has been a great deal of resistance to integrating HIV education into general workplace safety messages in the construction sector. Challenges to the provision of HIV education include ADB executing agencies or contractors not believing that it is part of their core responsibility, not understanding why it is necessary, not knowing how to go about it, and not making it a priority because they are pressured to complete the work as soon as possible. In small projects, the risks posed to the most skilled and valuable workers are often overlooked. In certain countries, for example the PRC, early resistance was quickly overcome but the government sector lacked sufficient expertise or technical support to enable rapid scale-up of HIV education in all construction projects.

These challenges were evident in many project sites covered by this assessment, where only lip service was paid to FIDIC guidelines, little or no HIV education of workers or nearby communities took place, and follow-through and of monitoring of the implementation and quality of HIV measures were lacking. In some the sites little or no HIV activities were conducted in association with ADB-supported infrastructure operations. In PNG, for example, HIV awareness was part of the supplementary loan to improve the Highlands road network, but the quality of actions taken ranged enormously; some contractors simply erected billboards, while others provided

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26 Footnote 16.
thorough education and readily supplied condoms to workers. When commitment to carrying out HIV prevention was apparent, monitoring of the quality of performance (and of compliance with workplace policies) was lacking.

**Preventive Education in Infrastructure Settings**

ADB has a responsibility to encourage contractors to provide appropriate HIV education to all the construction workers and the villagers in the corridors of influence of ADB-funded infrastructure development projects. ADB is currently developing guidelines for HIV measures in the Greater Mekong Subregion (GMS); once developed, they need to be promoted in other subregions. In 2008, ADB produced a comprehensive resource book to assist key organizations and agencies working with mobile and migrant populations in the transport sector. The Preventing HIV/AIDS on Road Projects in Yunnan Province project (described in detail in Box 3) produced a comprehensive construction worker’s manual that gives guidelines on developing HIV workplace interventions.

Some countries have responded more successfully to HIV in the infrastructure sector than others. For example, in northwest Cambodia and in southwest PRC, TA grants were provided to carry out HIV education among construction workers and local villagers affected by the development of new transport corridors. In Cambodia, the Cambodia Road Improvement Project constructed 150 kilometers of highway from Siem Reap to Poipet on the Thai border (as part of National Roads 5 and 6). This area is particularly poor and was deeply afflicted by the war. In the PRC, the Baolong Highway, a 77-kilometer expressway, was built from Baoshan to Longling as part of the Western Yunnan Roads Development Project, facilitating travel from Kunming, the capital of Yunnan Province, to the Myanmar border. The expressway cuts through previously remote, mountainous territory populated by many ethnic minority groups. Each of these road improvement projects opened up border areas to the movement of people and drugs so HIV measures were integrated into the projects, but there were some missed opportunities to integrate gender perspectives fully.

In the first half of 2007, both projects were part of a case-study review of HIV prevention measures in ADB-supported road and highway projects in the GMS to assess the effectiveness of design and implementation features and the impact of the provisions made for HIV prevention. The review highlighted the importance of taking gender differences into consideration, including differences in men’s and women’s duties and work schedules. It proposed a set of recommendations, some of which also offer opportunities to address gender-based differences, for future projects. Some of the recommendations include:

(i) Develop program support and build capacity of infrastructure sector institutions, particularly concerning gender dimensions;

(ii) Adopt a holistic “settings” approach rather than focus

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on specific target groups, and ensure women at risk are able to participate fully; and
(iii) Ensure male and female condom availability during and after construction.

The assessment carried out for this report highlighted several other important aspects of the HIV prevention component to construction workers, particularly the interactive and participatory character of the training and its success in engaging the workers. However, the training had some shortfalls:

(i) Education did not specifically target men who were most at risk of HIV infection;
(ii) Information was not always provided in the language of the participants;
(iii) Workers were not offered the opportunity to test for STIs;
(iv) Anal sex (both between men and men, and men and women) was not addressed; and
(v) Women and men living with HIV were not engaged in the delivery of HIV education.

In both countries, village education was also carried out as part of the HIV TA. In Cambodia, this was the weakest component of the project: the training in villages was delivered as lectures, there was little or no engagement of the community, and the HIV content was irrelevant to the lives of most people in the audience, mainly married women who had little or no control over their only risk factor, their husbands’ behavior. Trafficking and drug use were addressed; although villagers understood the mechanisms whereby human trafficking occurs, they did not seem to be aware of what drugs looked like or how they were trafficked. There was no monitoring of the quality of the HIV interventions. In the PRC, the Baolong Healthy and Safe Action Project (see Box 3) was a very successful, comprehensive project that

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**Box 3: Asian Development Bank Good Practice: Preventing HIV/AIDS on Road Projects in Yunnan Province, People’s Republic of China**

The Baolong Highway is a new expressway built along the major thoroughfare from Ruili, on the Myanmar border, to Kunming, the provincial capital of Yunnan, People’s Republic of China (PRC). The Asian Development Bank (ADB) provided a grant for technical assistance to implement a three-year HIV prevention program—TA 4142—Preventing HIV/AIDS on Road Projects in Yunnan Province— in association with the highway construction. The cost of the prevention program was $1 million (0.17% of the total road project cost). The intervention was conducted in construction company offices and worksites, entertainment establishments, truck stops and transport corridors, 21 villages, and health services. Although the Baoshan government and managers of construction companies and sex work establishments resisted the project at first, they are now convinced that similar HIV projects should be part of all future infrastructure construction.

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30 A greater proportion of men engage in anal sex with women than they do with men; behavioral surveillance carried out along the Highlands Highway, PNG, in 2006, indicated that over half of all truck drivers have anal sex with women. Women are not told of the risks involved in anal sex. Lubricant is very important for condom use during anal sex but it is rarely available.
This HIV intervention is one of the most comprehensive associated with transport projects in Asia. It demonstrated the need to target different subgroups of the population around a construction site, not just the construction workers. The interactive, participatory nature of the education sessions was extremely important to move beyond awareness raising to behavior change. The project indicated that messages to mobile populations need to be intense and frequent to ensure that new populations receive them.

Construction companies said they were heavily pressured for time, but eventually most of them built the program successfully into safety measures, thereby mainstreaming HIV into workplace safety. Project staff encouraged owners of sex work establishments to buy into the issue; soon they were happy with the results because they saw that their workers had no unwanted pregnancies and no sexually transmitted infections (STIs). Now that business owners see the benefits, they insist on condom use and supply male condoms to clients. One “mummy” (a woman who runs a sex work business) said “I didn’t know that condoms could be used to stop disease. I thought they were only for stopping pregnancy.” Another said she tells the clients: “You do not want your wife to know you come here—if you do not use condoms you will catch a disease and then your wife will know.” She reports that clients now always agree to use a condom. After the training, women said they felt confident about insisting on condom use with clients. Condom marketing was a strong component of the project. On construction sites condom promotion posters juxtaposed hard helmets next to male condoms, with the slogan "On-site, put on your helmet—offsite, put on a condom," reinforcing the safety message.

Peer educators received regular training on participatory learning and action methods over the three years of the project. They carried out education on construction sites, in schools, in fields and open courtyards, at restaurants, and door to door. They held meetings with young migrants returning to the village; they distributed safety packages among truck drivers. One woman in the community said that the HIV education had made her feel comfortable purchasing condoms when she and her husband ran out of supplies, and that as a result of the training she had spoken to her daughter about the risks of HIV.

There was strong collaboration among project staff, local government, and various agencies. The process of working together and institutionalizing HIV education in the district created an environment for sustained HIV prevention and helped the community to build a resilient response to HIV.

The evaluation component of this project was robust, collecting baseline and 12-month follow-up data and using a control group. It was limited in that it was not integrated into project design early enough to collect preintervention data, and it did not collect data...
from women. The study found that the people at highest risk of HIV are not unskilled laborers, who have too little time and money for sex workers and who are mostly from the local community, but skilled and semiskilled workers—middle managers, evaluators, subcontractors, drivers—men with more disposable income who spend long periods away from home. Significant findings from the project evaluation include:

Condom use by foremen in last commercial sex encounter increased from 40% to 100%.
Consistent condom use with sex workers increased among foremen from 33% to 67%; among skilled workers from 46% to 76%; there was no increase among truck drivers.
Condom use by village male youth in first sexual encounter increased from 23% to 49%.
The incidence of commercial sex decreased among drivers from 27% to 11%; among foremen from 20% to 5%; among other skilled workers from 12% to 8%.
Sex with casual partners decreased among village male youth from 22% to 11%.
Health workers’ fear of people living with HIV declined from 20% to 1%.
The Construction Workers’ Manual, a major outcome of the project, can be promoted and used throughout the construction industry. It is comprehensive (although it lacks detailed and explicit guidelines for gender integration) and explains how to design training, carry out a rapid risk assessment, and monitor and evaluate a project. It includes policy documents and examples of work plans.
The only gender-sensitive indicator in the technical assistance framework was the reduction of the prevalence of syphilis in women in the target groups by 30%. In fact, no STI surveillance was conducted and this component of the project was not successful. However, a different model of health care developed ad hoc; four local doctors established small health clinics near the worksites, and this proved to be a successful way of getting workers to have STI tests.
The HIV education component of the project was criticized for failing to address young women’s vulnerability, failing to offer life skills to sex workers, and failing to address drug use. Future infrastructure projects can build on the success of the Baolong Healthy and Safe Action project, ensuring that there is a stronger focus on addressing gender differences in HIV vulnerability.

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had a significant impact on the sexual practices of construction workers and local youth and on women’s attitudes to condoms even though the HIV education was not gender-specific (further effects on women cannot be determined because data on their sexual practices were not collected). The project lost opportunities for tracking gender-related issues despite these strong results.

**Strengthening Health Systems**

In some countries, ADB has played an important role in HIV prevention beyond the infrastructure sector by strengthening health care systems. In several countries in Asia and the Pacific, health systems face challenges in reaching the whole population for many reasons, including understaffing, limited training, lack of supervision and support, inadequate equipment and supplies, and insufficient financial resources. The people most affected are the poor, the majority of whom are women, and who rely on public health systems. For people living with HIV, poor health systems also seriously jeopardize their health outcomes.

According to the Commission on AIDS in Asia, governments in Asia spend least per capita on public health in the world. Sometimes the public health sector competes with international NGOs to attract qualified staff but can only offer much lower salaries, contributing to a serious human resources shortfall. HIV service scale-up has revealed existing fragilities in health care, and in some cases has placed an increased burden on systems and workers.31 The UNAIDS 2008 report claims that weaknesses in health care are slowing down the scale-up of HIV treatment programs.

Whatever the quality and accessibility of health services in specific countries, women, children, and people living with HIV use the public health system most. In Cambodia, for example, people complained that they sometimes travel long distances to reach health clinics only to discover that staff do not have the necessary equipment.

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report for work because of their low wages. Many respondents in Cambodia, the PRC, and PNG, including health care workers, pharmacists, and people living with HIV, spoke about insufficient drug supplies. This is dangerous for people using public health care systems. It is imperative that people with HIV who are on antiretroviral drugs (ARVs) take them without interruption for life to avoid drug resistance. People on ARVs are also less infectious. These are strong arguments for strengthening health care systems.

Many people are reluctant to visit local STI or HIV clinics for fear of being stigmatized by the community if they are seen entering the clinic, so they either do not get tested for STIs or travel to distant clinics for testing. Bhoruka Charitable Trust in India offers diabetes screening at the same clinic as STI/HIV testing, specifically to avoid the stigma faced by visitors to dedicated HIV services. Many men are also reluctant to visit sexual health services because these places are geared to women and often staffed only by female nurses.

The ADB-funded HIV/AIDS Prevention and Control in Rural Development Enclaves Project (Grant 0042) in PNG is a good example of support for an integrated approach to HIV prevention through revitalization of the health care system. The project has four components: civil works and training, condom social marketing and behavior change, surveillance, and management. PNG’s economic sector includes many rural enclaves such as mines and plantations that generate local employment and a cash economy, but that also foster the exchange of sex for cash or goods among peripheral population. In many of these enclaves, the health facilities are closed or not fully functioning. The project works to harnesses the management skills of the private sector. It is anticipated that by expanding the private companies’ health services to the wider population, more women will receive primary health care including maternal and pediatric health care and STI/HIV treatment. The project involves strengthening civil society organizations and local communities in and around the enclaves so that they can undertake long-term strategies to change and monitor behavior, targeting women who sell or exchange sex and their male clients, high-risk youth, and the workforce in the enclaves. Social marketing of condoms includes targeted programs for men who have sex with men, sex workers, and youth, but does not address women’s inability to control decisions about sex. All economic operators involved in the project see the value of creating a healthy workforce, and have developed HIV workplace policies.

A recent review of the gender aspects of this project has led to the proposed development of gender-sensitive indicators, the collection of sex-disaggregated data, and the development of a strategy to involve men and women living with HIV in the intervention. The review identified limitations associated with the gender dimensions of HIV prevention and treatment, as follows:

(i) The preliminary assessment of women’s situation only referred to sex workers.
(ii) People living with HIV were not consulted in the design of interventions.
(iii) Gender-based violence was not addressed even though it is very high.
(iv) Counseling of couples was not promoted.
(v) No support was available to women for disclosure of their HIV status to partners.
(vi) No skills training was available to reduce women’s economic dependence on men.
The response to HIV and gender under the Lae Port development project (supported by ADB Loan 2399), also in PNG, promises to build on lessons learned in the Rural Development Enclaves project, particularly through expanding public–private partnerships, thereby increasing sustainability. It is anticipated that an increase in sea and road traffic will accompany the rehabilitation of Lae Port, presenting increased HIV risks from mobile populations. The project also incorporates gender-sensitive participatory processes involving civil society organizations at the community level and at-risk vulnerable women such as sex workers, widows, and female heads of households. The employment impact indicators will include information about unskilled, poor, and women laborers. The project aims to reduce HIV prevalence in Lae by 20%, but again specific gender-sensitive targets are not available to date. Project design activities include:

(i) development of HIV codes of conduct in industries operating in the port;
(ii) provision of safe working conditions for women;
(iii) separate and culturally appropriate facilities for male and female workers;
(iv) renovation of the seafarers support centre with segregated spaces for women;
(v) capacity development of local NGOs involved in HIV prevention, treatment, and care, including gender-sensitive technical skills;
(vi) providing easy access to male and female condoms and lubrication;
(vii) establishing women’s help desks at police stations around the port;
(viii) reintegrating and caring for people living with HIV, including income restoration and generation targeting of vulnerable groups such as sex workers, widows and orphans, destitute single mothers, and female heads of households; and
(ix) microcredit funding and creation of opportunities for women to start a business.

**HIV Impact Mitigation**

Impact mitigation means reducing the negative effects of HIV on individuals and households hit hardest by the epidemic, and can cover a wide range of actions to strengthen individual or community coping strategies. Many of these measures are beyond the scope of infrastructure projects, but it is useful to coordinate across sectors or to see a particular project as a platform to introduce new partners or types of interventions. One clear impact on families living with HIV is economic, pointing to the need to address livelihood issues to complement other HIV measures.

HIV places an enormous financial burden on the poorest households in many developing countries. Throughout the region, many people with HIV who

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Some women in remote rural areas walk for hours each month to reach their ARV provider because they cannot afford the cost of return transport. Even a 1-hour vehicle journey can be a deterrent to visiting a health care center—particularly when a person is starting ARV treatment, as it may be necessary to see the service provider every week to check on side effects and compliance. Only once a person’s regime is stable will doctors prescribe a month or two’s supply of ARVs at a time. Transport costs are a recurrent expense, and to sustain these costs over a lifetime people require an income. Often a man’s HIV-related illness consumes all of his family’s assets, and many widows have become impoverished caring for their sick husbands. Even though more men than women are infected with HIV in Asia, women bear a disproportionate impact of the epidemic because of their caring responsibilities for the whole family.

The Commission on AIDS in Asia report states that impact mitigation needs to be at the core of a response to HIV along with prevention and treatment, and at a minimum, mitigation programs should have four components: women-friendly income support programs, support for families caring for children orphaned by AIDS, care for AIDS-affected people incorporated into local social security systems, and laws to guarantee inheritance rights for both men and women.

No successful projects to build capacity for income generation were observed during the assessment. Livelihood skills programs that were part of the TA in the Cambodia road development project as were vastly insufficient. For example, many women who were offered skills training could not afford the cost of traveling to the training course. ADB funds a skills-building center for women in Siem Reap that provides training over an extended period. Several upcoming projects in PNG also address income generation.

Appropriate income-generation measures need to be scaled up throughout the region to reach HIV-affected households, but few organizations are willing to take on the responsibility to support such important projects. Women of Hope Club in Cambodia, which runs a small income-generating project for women living with HIV but struggles to find markets for its products, is typical but such projects are few and far between: much more is needed to support women living with HIV, particularly widows with dependent children.

On most construction sites few women were employed, despite requirements included by contractors to provide equal employment opportunities to men and women and sometimes stipulating proportions of female labor to be employed. In PNG, for example, 25%–30% of the workforce, including 50% of the unskilled workforce, was expected to consist of women, but very few women were actually employed as laborers; this also happened in several other countries. It was not clear why so few women were employed. Some respondents said roadwork was not appropriate for women. Others said that women chose not to do paid work because their husbands would steal their money. Women in the community should be consulted about measures

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to facilitate the recruitment of female workers and about forms of payment.

If women already have appropriate skills, microfinancing is another way to advance their economic empowerment. ADB acknowledges that women have a better microfinancing track record than men—they are more likely than men to repay loans and save more money, and loans to women are more likely to translate into benefits for the whole family, not just the individual. “However, learnings indicate that when gender is not a planned objective [of microfinance projects] it ‘evaporates’ from the agenda and when gender-equity considerations are integrated in project design, this leads to more effective implementation.”36

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The Way Forward

The presence of HIV in a community retards development gains, so it is in the interest of governments to ensure that infrastructure operations do not exacerbate its spread. To decrease the burden of HIV on the whole community, interventions need to address the vulnerabilities of both men and women. The UNAIDS 2008 report states that proven strategies exist to prevent every mode of HIV transmission, but long-term success in responding to HIV requires sustained progress in reducing human rights violations, including gender inequality, gender-based violence, stigma, and discrimination. This report encourages donors to complement prevention and risk reduction by emphasizing strategies to increase women’s economic independence. Several countries have sound policy commitments to address HIV and gender inequalities but struggle to “walk the walk”—there continues to be a wide gap between theory and practice.

Gender Mainstreaming in Project Design

ADB has demonstrated leadership in addressing HIV in infrastructure investments (Appendix 8) and is well placed to encourage gender-sensitive policy development and support interventions that make a real difference. ADB can play a strategic role in decreasing HIV vulnerability related to infrastructure operations, thus reducing the impact of HIV among both men and women.

The multisector approach adopted by ADB is essential for success in addressing HIV, but greater leadership is needed to integrate gender dimensions into the response and translate policy into improved project design and sound and sustainable practice. Despite ADB’s Policy on Gender and Development (1998), its Gender Action Plan (2000–2003) and Gender and Development Plan of Action (2008–2010),

37 to date it has mainstreamed gender considerations into its HIV interventions only in a fragmented manner. To create a successful response to HIV, ADB has to mainstream gender throughout all of its infrastructure projects by including women, people living with HIV, men who have sex with men, youth, and other people vulnerable to HIV in the design and project preparation phase. A comprehensive gender analysis may show that specific measures need to be incorporated into key project components to ensure gender dimensions are taken into account,
Experience at ADB has demonstrated that the inclusion of a project-specific Gender Action Plan (GAP) that outlines specific steps for the participation of women in all activities, together with adequate budget allocations, will ensure effective and sustainable gender mainstreaming. Unless explicit measures are taken, gender mainstreaming can be given a low priority or ignored, as was noted during implementation of some of the projects assessed for this report. A GAP also needs to identify specific gender-related results with corresponding indicators, to facilitate monitoring the effectiveness of related activities. ADB’s recent Rapid Gender Assessments have also highlighted the need to support structured gender capacity development among all partners for a GAP to be fully implemented. ADB can build sustainability by supporting governments and civil society organizations in their efforts to build national- and subnational-level HIV and gender expertise that can be used to design and implement appropriate and effective HIV prevention projects in the future.

Finally, it is critical for all project indicators to be gender sensitive; this require the collection and analysis of sex-disaggregated data, and includes elements associated with employment opportunities or economic benefits from the infrastructure investment that track women’s empowerment. ADB can encourage a culture that challenges gender inequality and reduces the poverty gap by promoting the economic advancement of women.

**Project Scope**

It is important for ADB to consider the scope of activities required to limit the transmission of HIV and to mitigate its impact in communities affected by infrastructure investments in systematic fashion. This may require reaching beyond prevention linked to behavior change to the improvement of associated health services, such as voluntary counseling and testing (VCT) and couples counseling. Addressing women’s inequality through economic empowerment and other livelihood supports can go a long way to reducing gender-based violence and improving women’s status. This in turn reduces women’s risk to HIV exposure. Such initiatives need to build in mechanisms, such as individual bank accounts, to ensure women can retain their earnings. In some countries this will require community education about women’s right to live free from violence as well as support for legal and social services to survivors of violence. ADB can strive to be innovative and challenge contractors to provide optimal protection to workers and their families. Design features could include measures to ensure that spouses of families are separated for long periods receive income support, so that they also benefit from the potential of infrastructure investment; for example, a project could incorporate different salary payment mechanisms such as paying 50% directly to the worker and 50% into a family bank account to facilitate access by the spouse. Through policy initiatives, ADB can play a role in promoting legal and policy frameworks that minimize sexual harassment and violence directed towards women and children, that support women’s ownership of land and property, and that protect the rights of people living with HIV. Clearly it may not be possible to incorporate all initiatives into one HIV-related TA, but using an infrastructure project as a platform for

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38 ADB. 2005. *Gender Equality Results in ADB Projects: Rapid Gender Assessments of 12 Projects Synthesis Report.* Manila. A second round of rapid gender assessments that includes an assessment of results from an HIV and Human Trafficking TA under the Regional Road Development Project in Mongolia (Loan No. 2087) will be completed in 2009.
a broad range of activities supported indirectly through partnerships with civil society organizations or other donors will demonstrate the need to consider social effects as well as technical elements in project preparation and design.

From the outset, all members of communities, including women, need to be adequately informed of and involved in decision making for future infrastructure plans. Disclosure will ensure that all issues of concern to those at risk are taken into account, including the design of safeguards regarding the environment, indigenous people, and resettlement, ensuring women’s safety within and around construction sites, and other issues that can seriously affect the quality of women’s lives.

**Partnerships and Collaboration**

Partnership with a broad range of players, including civil society, improves project outcomes and sustainability. ADB can build on its experience and encourage government executing agencies to deliver HIV programs that support a more effective multisector response and address the vulnerabilities of both men and women. For example, ADB can foster collaboration between contractors and appropriate agencies to implement HIV prevention and gender-mainstreaming programming. Other important partners include NGOs and faith-based and other civil society organizations. All partners’ roles and responsibilities can be set out in the project/TA GAP to ensure that gender aspects are incorporated, and provisions can be made for their gender capacity development.

ADB can use its unique position to continue to encourage the development, implementation, and dissemination of workplace HIV and gender policies that protect all employees and contractors, and to encourage and sustain HIV prevention efforts. These policies can be based on APEC workplace guidelines.39

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So that the whole community benefits, it is important that ADB encourage robust public–private partnership initiatives to provide a minimum package of health care and create sustainable health systems. ADB can encourage the strengthening of primary health care systems where health structures are weak; in remote areas, in rural economic enclaves, and particularly in sites close to infrastructure development. It is important that an integrated approach is adopted for infrastructure sector and other work supported by ADB and that parallel systems are not established. Health centers need to be welcoming to all members of the community—including young women, male and female drug users, sex workers, transgendered people, and men who have sex with men—and clinic rosters must include male and female health workers so clients can see same-gender providers.

Other partners, such as public security and policing agencies involved in enforcement of legislation concerning sex workers and drug users, can be brought into project planning. It is important to minimize police enforcement efforts that may interfere with HIV prevention activities. ADB has the potential to develop a framework for collaborative relationships with public security and police around HIV prevention activities. A policy forum that engages ministries of health, transport, women’s affairs, public security, and infrastructure as well as the NGO community is needed. Functional structures that allow for policy dialogue and communication between key ministerial and sectoral actors are also needed. Project preparation technical assistance should determine where to prioritize gender-related policy interventions in the context of HIV.

It is also vital to decrease the level of HIV-related fear, stigma, and discrimination that is still evident throughout the region and that prevents many HIV-positive people from coming out in their own community. Meeting healthy-looking people living with the virus has a significant impact on people’s attitudes to HIV and is the only known effective way to reduce discriminatory attitudes and practices. People living with HIV are an underused resource and need to be included in prevention projects. The greater involvement of people living with HIV and AIDS, known as the Greater Involvement of People Living with AIDS (GIPA) principle, was articulated at the United Nations General Assembly Special Session on HIV and AIDS in Paris in 1994 and reaffirmed in 2001. The principle states that people living with HIV must be involved in the design and implementation of HIV policies and programs to maximize success. Such measures are also in harmony with the Ottawa Charter for Public Health Promotion (1986). Many bodies now have GIPA requirements and many people see that there are great benefits in applying this principle, but its application is often tokenistic. HIV-positive people are still not routinely engaged in the response to HIV risks to the degree that is needed to eliminate discriminatory attitudes and “normalize” HIV, or to inform programs adequately from their unique perspective.

A guiding principle of the United

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Nations’ Regional Strategy on Mobility and HIV Vulnerability Reduction\textsuperscript{42} is that mobile people and people living with HIV are part of a successful solution to HIV; that they need to play a role as experts and to be involved at all levels of national response, from policy development to program planning, implementation, monitoring, and evaluation. The Lae Port PNG project is the first to include HIV-positive people in the project design—an example of GIPA in action.

ADB can help civil society actors, working with the HIV-positive community, to be meaningfully and effectively involved in the response to HIV by ensuring that they are involved in project preparation and implementation. The UNAIDS 2008 report indicates that there is a need to provide financial support to build capacity and create sustainable networks of people living with HIV if the GIPA principle is to be realized. Currently only 20\% of civil society organizations have access to finance for programs and capacity building.

Factors in Building Quality Interventions

To help governments to deliver on their commitments, ADB can encourage the allocation of a portion of the budget of each infrastructure loan to gender-sensitive HIV interventions among construction workers, sex workers, and young villagers in the vicinity of the infrastructure development. ADB has to invest in human resources and human resources management, financial management, and monitoring and evaluation to equip governments to respond adequately to HIV; among other things, it must help governments to strengthen their capacity to monitor compliance with international standards.

ADB can promote an expanded concept of workplace safety that integrates HIV into policy and practice. On construction sites, HIV prevention strategies can dovetail into sustainable safety messages. Integrating health into work safety messages makes workers feel more valued and this improves productivity. The concept of safety in the workplace can be expanded from prevention against accidents (for example, by issuing hard hats and ensuring that they are used of) and disease (for example, by providing clean drinking water), to preventing workers from contracting STIs in their leisure time (by providing male and female condoms and communicating the need for behavior change). It is especially important that programs target skilled and semiskilled workers, managers, foremen, drivers, engineers, and other employees with more disposable income, because they are often the clients of sex workers.

The most successful HIV education activities are pragmatic, flexible, and use participatory learning methods including role playing and games, so as to increase community resilience to HIV, and in particular to increase women’s ability to negotiate condom use. It is important to ensure that HIV education continues to be interactive and provided by peer educators. All HIV education must go beyond mere awareness raising; it must also aim to create behavior change and to mitigate the effect of HIV on all family members.

To protect all members of the community, including local women, HIV education needs to target the people most vulnerable to HIV infection: mobile young men with money (such as construction workers) and mobile young women (particularly sex workers who come into the area during construction). Additionally, it must address male and female villagers who may become mobile after the infrastructure development is complete. Focused prevention can pay big dividends; for example, it has been estimated that HIV prevention measures among sex workers and their clients can prevent 7,000 times more infections for the same amount of money as universal precautions.43

To have the greatest impact, HIV education for young villagers must include instruction in broader life skills, including an examination of gender norms and attitudes and issues of self-confidence and sexual negotiation. The core content of basic HIV training must integrate discussion of gender roles, women’s and children’s rights, sexual and domestic violence, and sexual coercion, assault, and trafficking. Information must be provided in a nonjudgmental manner about explicit sexual behavior, including negotiation on the use of male and female condoms and the risks of unprotected anal sex, whether male–male or male–female.

Because of the known risks, trafficking of men, women, and children should be addressed in programs, particularly those directed to young people, parents, and community leaders. People need clear information about the mechanisms whereby individuals are lured into trafficking and about what they can do to safeguard their community (such as only traveling in groups or with trusted contacts to new work locations).

Programs must include specific and explicit information about the realities of alcohol and drugs, including injecting drugs and amphetamines where appropriate; what drugs look like, how people become addicted, effects on the user’s physical and mental state, risks related to drug and alcohol use.

STI diagnosis and treatment measures and VCT also need to be included in HIV interventions associated with infrastructure operations. STI/HIV care can form part of a primary health care model with a holistic approach. ADB can strengthen access to STI and HIV services at and around infrastructure projects by encouraging private operators to set up clinics near work sites or providing mobile clinics. Counseling must accompany all HIV testing, particularly ongoing counseling to help with partner notification and support for women who may be at risk of violence or rejection from the family after their HIV disclosure.

Where health care systems are particularly weak, ADB can help to support the provision of equipment for local clinics such as rubber gloves, sterilization equipment, and, where injecting drug use is a concern, clean needles.

**Improved Monitoring and Evaluation**

Good practices are emerging in the design of ADB’s projects, but effective implementation arrangements are a persistent concern. If more sex-disaggregated data were available from project reporting, ADB could offer significantly improved evidence that

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government partners should make HIV risks associated with infrastructure investments a priority. ADB can proactively intervene to improve government capacity to monitor and evaluate HIV programs in a gender-sensitive manner, and to ensure compliance with national workplace standards and regulations, including monitoring construction companies’ responsibilities in meeting commitments to protect workers’ health, safe labor conditions, and implementation of gender-sensitive policies. This may be particularly important for foreign companies.

ADB has to be vigilant in ensuring that appropriate agents are engaged to monitor project implementation. If governments cannot carry out robust monitoring, ADB can develop the capacity of local NGOs to evaluate HIV programs, or it can engage independent evaluators with the requisite knowledge and background in HIV and gender to carry out evaluations based on each country’s unique set of circumstances.

Based on the assessment and findings from the field research it is clear that a multisector approach that specifically includes the infrastructure sector strengthens a government’s response to the HIV epidemic. Contractors and other private-sector partners need to be convinced they can play an active role in combating HIV without jeopardizing deadlines or profitability. A combination of viable policy initiatives and legal frameworks, taking ownership of the issue by the Ministry of Infrastructure (or its equivalent), and effective partnerships with private sector and civil society organizations will lead to a more cohesive and sustainable response.
Recommendations

These recommendations are based on evidence from the five-country assessment and aim to help ADB strengthen its ability to mitigate the STI/HIV risks and vulnerabilities associated with infrastructure operations. Mitigation includes not only strengthening HIV prevention and care programs but also developing measures that address poverty in the affected communities. The proposed activities should be packaged according to specific needs, contexts, and gaps identified in the project areas and outlined in the social and gender analysis conducted during the project design phase. ADB has a responsibility to prevent an increase in STI/HIV associated with infrastructure operations and a responsibility to refer people to treatment and care services.

Preconstruction

Bidding documents and contracts for civil works should include provisions to ensure implementation of STI/HIV measures directed to construction workers and, where needed, communities affected by infrastructure development. HIV interventions should be integrated into health and safety provisions.

ADB should ensure that community consultations include opportunities for all members of the community including women—particularly women heads of households, people living with HIV, youth, and other disadvantaged people—to discuss the benefits and the potential negative effects of infrastructure development on the whole community, and to have a role in decision making concerning STI/HIV programs. This will improve project outcomes and sustainability.

An assessment of STI/HIV risks and vulnerabilities and of capacity needs should be carried out as part of the social and gender analysis. The consultant employed to conduct the assessment of HIV vulnerability must have sufficient expertise to incorporate gender dimensions. Once a gender analysis has been carried out, a gender action plan should consolidate design features to promote the participation of women and mainstreaming of gender considerations throughout project implementation, with related indicators built into the main logical framework. Implementation should be enforced through a specific covenant negotiated in the project document.

If one does not exist, ADB should establish a forum for dialogue and collaboration with key government departments including health, infrastructure, women’s affairs, and law enforcement to ensure that the program does not conflict with law enforcement policies. The dialogue should also include civil society actors such as NGOs promoting gender issues and harm reduction, and owners of commercial sex work establishments.

These recommendations should be adopted according to the context, needs, and gaps identified in the design phase of the infrastructure loan.
To sustain HIV prevention, ADB can train government infrastructure personnel to incorporate gender-responsive and socially inclusive HIV policies into their work. Where gaps in organizational capacity are indicated, skills-transfer plans should be developed systematically. Opportunities for lateral learning and ongoing training of key players should be created.

ADB should review the use of local and international experts on gender-responsive HIV prevention projects. International experts may be employed at the start of projects to help design and plan work, mentor local experts, aid in skills transfer, and periodically monitor progress, but they should not micromanage projects. As far as possible, local experts should be engaged to conduct preliminary assessments and to implement projects, because they understand local conditions.

ADB should incorporate realistic, gender-sensitive targets and indicators into all projects. Such indicators include employment levels, health status, literacy levels, HIV knowledge, use of male and female condoms, participation in training, decision making, representation, percentage of female health care workers, employment of women living with HIV, and legal, social and health-related support for survivors of gender-based violence.

ADB should develop mechanisms to ensure that HIV measures are monitored and evaluated using sex-disaggregated data. It should engage independent monitoring and evaluation experts, including experts on gender and the GIPA principle from the outset if national surveillance is weak. And it should use the services of existing partners for the life of the project, including midterm, 1-year, and 2-year post-project evaluations.

**During Construction**

HIV prevention should target changes in sexual behavior and increased condom use, primarily among mobile workers, sex workers, and men who have sex with men, as well as harm minimization programs for injecting drug users (IDUs) where needed, to ensure that infrastructure operations do not have a net negative effect on women or men. They should ensure adequate access to required commodities (such as condoms, lubricant). HIV information should be available in the languages and at the literacy level of the construction workers, sex workers, and communities that live near the project.

ADB should encourage governments and NGOs to engage people living with HIV to carry out HIV interventions in order to reduce stigma and discrimination, dispel myths about HIV and assist people to realize their own vulnerability to HIV.

ADB should encourage universal provision and social marketing of condoms, including female condoms, and lubrication to construction workers, sex workers, men who have sex with men, and local villagers. Male and female condoms should be readily available, and both men and women should be given instruction in how to use them.

In consultation with local women, ADB should specify the minimum percentage of women workers and monitor whether this percentage is attained and whether women receive equal pay for work of equal value. Appropriate facilities and safe working conditions should be incorporated into the project design, as well as procedures for sexual harassment complaints.

ADB should encourage contractors to provide adequate, secure housing for workers so they can live with their families onsite, thereby reducing the likelihood that workers will engage in risky behavior with
Recommendations

multiple sex partners. Workers’ children will need access to education.

Anonymous, voluntary, confidential STI and HIV testing should be discreetly available to workers and villagers at or near all construction sites. ADB should support mobile clinics or encourage public–private partnerships to establish clinics close to the sites. In very-large-scale infrastructure operations, health care facilities should be available on-site. Local health care personnel should be trained to administer HIV post exposure prophylaxis for rape and local women should be informed that such treatment is available.

Couples should be actively encouraged to be counseled and tested together. Training of counselors should be given high priority to ensure that quality counseling is available, especially to people who need help with partner disclosure. Wherever possible, people living with HIV should be trained and engaged as counselors.

Postconstruction

ADB should provide support for programs targeting the economic empowerment of women, including comprehensive and sustainable vocational training and business management and entrepreneurial skills. Programs should be twinned with infrastructure loans to ensure maximum synergy between projects where there are gaps. If skills-building classes are offered away from the village, funds should be available to pay for transport. Programs should provide jobs to reduce poverty among women, invest in the resourcefulness and resilience of women living with HIV, strengthen and support income-generating opportunities for them, and offer microfinance schemes and livelihood projects for HIV-affected widows.

ADB should support sustainable development of HIV-positive networks and groups, including those that specifically address the needs of women and children, sex workers, men who have sex with men, and drug users.

ADB should identify and raise public awareness of gender-related laws and policies and develop collaborative partnerships on gender, law, and policy between government agencies, NGOs, women’s groups, and international partners.

Baolong Highway construction almost complete, Yunnan Province, PRC
Appendix 1: Government Responses to HIV

Policy Development

Several countries in the Asia and Pacific region have developed a range of sound HIV policies across several sectors. Although policy does not always translate into sustainable practice, good regulations provide an enabling environment to encourage an effective response. Some governments have HIV workplace policies and regulatory frameworks relating to the labor force. However, in most countries, the government’s infrastructure sector is not part of the mechanisms that coordinate national HIV and gender-responsive policies, and there are no regulatory frameworks to address HIV vulnerability associated with infrastructure development. Only in some countries in the Greater Mekong Subregion (GMS) are infrastructure ministries such as the ministry of transport involved in the national coordinating mechanisms that coordinate national HIV and gender-responsive policies, and there are no regulatory frameworks to address HIV vulnerability associated with infrastructure development. Only in some countries in the Greater Mekong Subregion (GMS) are infrastructure ministries such as the ministry of transport involved in the national coordinating mechanisms, and only as the result of considerable advocacy and training over the past decade or so to build links between the national HIV authority, the health sector, and the infrastructure sector.

With a range of outstanding HIV policies, Cambodia has adopted a multisector approach that has reduced HIV rates considerably. The Ministry of Public Works and Transport is a leader in the region having adopted an HIV policy in 2006. Although that policy does not incorporate gender-related considerations the ministry is committed to reducing the impact of HIV associated with infrastructure development. Unfortunately, at times, countries fail to consider all the implications of their actions and take steps that reverse the gains made in previous successes. This is the case with Cambodia’s recent legislation, passed in January 2008, which outlaws both trafficking and commercial sex. According to local sex workers, this law has resulted in large-scale police abuse and has been used to turn back the clock on outreach to sex workers.

The People’s Republic of China (PRC) has strong leadership and also a strong policy framework that includes a multisector approach. It has developed an HIV policy for migrant workers and introduced an extensive national HIV education and communication campaign among them. Parts of the PRC are seeing downturns in HIV rates thanks to a combination of good practice followed up with appropriate targeted interventions; certain provinces such as Yunnan have had an outstanding response to HIV recently and have developed sector-specific policies.

Government Commitment

The governments of the countries covered in this assessment show great disparities in their commitment of to

address HIV and make it a priority. For example, in India, HIV is given very low priority in low-prevalence states; in the PRC, the Ministry of Communications in Xinjiang Province had not considered mainstreaming HIV into its infrastructure development when interviewed (although it was receptive to the idea), whereas in Yunnan Province, there is already considerable appreciation of the need to do so. Most governments have been unable to mount a truly effective response to HIV to date due to lack of leadership (as in Papua New Guinea), or more often, lack of technical or financial expertise (as in the PRC and Tajikistan).

Many countries have well-developed national strategic plans but implementation problems mean that very few have translated them into costed operational plans. Many countries do not have enough qualified people who can provide sound technical inputs on HIV, and no government has mobilized sufficient resources for an adequate and sustained response. Local government is seriously underfunded in many countries and mid-level government is often accused of gate keeping both information and funding. Sometimes there is little or no collaboration between various ministries, and potential synergies to address critical community health concerns such as HIV are often missed.

Most countries have spent vast resources on “awareness” campaigns designed for the general public, but according to the Commission on AIDS in Asia, these do little to change the behavior of people at high risk of contracting HIV; only targeted interventions have high impact. However, sex work and drug use are criminal activities in most countries in Asia and the Pacific, and sex between men is illegal in most countries that inherited British-style laws; for these reasons, policies in support of targeted action are often “neutralized” by law enforcement agencies.

Overall, only one in five sex workers in Asia was reached by HIV preventive education programs in 2005; among the countries that reach out to sex workers, only five have large-scale peer education programs and only two of these have nationwide campaigns that target clients of sex workers.\textsuperscript{47} No country provides sufficient resources to address HIV infections among men who have sex with men, which are rising rapidly in Asia. These men do not have sex in a vacuum: many also have sex with women, many are married, some have high partner turnover, some buy sex, some sell sex, and some also inject drugs. Ignoring this group opens the door for the broad spread of HIV within communities.

Successful Interventions

Despite government constraints, many countries have demonstrated that it is possible to develop successful interventions, particularly where sex work is concerned. Countries such as Cambodia and Thailand have mounted highly successful 100% condom use programs among sex workers and their clients. These programs are intense and broad in their coverage; they work with the sex workers, business owners, and enforcement agencies to ensure that the police do not harass women. Although it is difficult at first to obtain entry into sex work establishments, these projects focus on gaining the trust of owners and then making them responsible for enforcing a “No Condoms – No Sex” policy. These programs have led to remarkable reductions in HIV infection rates because

they produce major behavioral change, proving that it is possible to achieve high levels of condom use among sex workers and their clients in a short time. For example, in the Baolong Healthy and Safe Action Project that accompanied the Western Yunnan Road Development, among foremen consistent condom use with sex workers increased from 33% to 67% and among skilled workers from 46% to 76%. Similar success can be achieved among men who have sex with men, but such programs have been slow to start up.

Several countries in the region are now taking harm reduction among injecting drug users seriously and needle exchange and methadone maintenance therapy programs are increasing throughout Asia with positive results. A major problem is that there is insufficient coverage and scaling up of the most effective responses.

Public–private partnerships can help where government support is lacking. It has been difficult for governments and development partners to get the private sector to take responsibility to address HIV, but the climate is changing. In some countries, such as Papua New Guinea, businesses are starting to develop a long-term sustainable response. Many corporations that become involved in such initiatives see how health for their workforce translates into improved productivity and are interested in continuing to support them.

Appendixes 2–6 provide more details of the country-specific context of each of the projects covered in this assessment, including HIV policies and practices and the sexual behavior of the workers and people in the surrounding communities. Findings are based on the field work and desk reviews conducted in each country.
Appendix 2: Country Brief—Cambodia

Background
According to UNAIDS, Cambodia’s population is estimated at over 14,000,000 people, half of whom are under 20 years of age; 77.7% of the population live on less than $2 per day and 34% live on less than $1 per day. Cambodia has one of the highest rates of HIV infection in Asia. The National Centre for HIV/AIDS, Dermatology and STDs estimates that HIV prevalence decreased from 2.5% in 2000 to 0.9% by the end of 2006. Of the 130,000 people estimated to be HIV-positive in 2006, 45%, or 59,000, are women. HIV disproportionately affects young women: the ratio of HIV infections among young males to young females (aged 15-24) is 1:3. The government has continually added voluntary counseling and testing (VCT) sites throughout the country, to 176 by June 2007. HIV awareness among the general public is quite high, at over 90% of the population.

Cambodia has 180,000 migrants registered in Thailand (one in three of whom are women), and an estimated equal number of unregistered migrant workers. The Greater Mekong Subregion-Cambodia Road Improvement Project, Siem Reap–Poipet (Asian Development Bank [ADB] Loan 1945-CAM) includes rehabilitation of 150 kilometers of highway and 45 bridges on National Routes 5 and 6 in the northwest of the country, from Poipet in Banteay Meanchey Province, the primary border crossing from Cambodia to Thailand, east to Siem Reap. This 3-year project started in 2005 and was completed at the end of 2008. The overall objectives of the project are to promote economic activities and facilitate trade among Cambodia, Thailand, and Viet Nam and to improve the prospects for poverty reduction along the Southern Economic Corridor.

Special features of the ADB loan included strengthening the planning processes, road maintenance strategy, and funding mechanisms of the Ministry of Public Works and Transport, streamlining cross-border facilities, and mainstreaming poverty reduction approaches. The loan also included an HIV component. Two different nongovernment organizations (NGOs) were engaged to implement HIV education programs; one program for road workers and the other for members of the village communities along the corridor of influence. This country brief reflects findings from field work carried out along the highway for this assessment.

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49 Footnote 48.
Policy Environment

HIV Policies
Cambodia has strong legal and regulatory frameworks for HIV and AIDS. Early in the new millennium the government created a policy environment that stimulated a multisector approach, and it has developed a very wide range of HIV policies and guidelines.52 The National AIDS Authority (NAA) is responsible for coordinating the national response, including policy development, advocating for legislative support, research on the socioeconomic impact of HIV and AIDS, implementing HIV education, mobilizing resources, monitoring, and evaluation. The Law on the Prevention and Control of HIV/AIDS, in force since July 2002, promotes respect for human rights, nondiscrimination, confidentiality, voluntary counseling, and testing. The provisions of the law set clear standards and require a multisector approach to HIV. These legal provisions have been a catalyst in the development of a range of sector-specific policies throughout many government ministries. In November 2005, the National AIDS Authority issued the “National Strategic Plan for a Comprehensive and Multi-sectoral Response to HIV/AIDS 2006–2010,”53 which has the goals of reducing new infections, providing care and support to people living with or affected by HIV and AIDS, and alleviating the impact of AIDS on individuals, family, communities, and society.

Many government ministries have developed internal policies and guidelines to address HIV prevention and care. The Ministry of Health has developed a wide range of specific policies, guidelines, and strategies. No ministerial HIV policies are gender-responsive, except that of the Ministry of Women’s Affairs. Its policy objectives are to reduce the impact of sexually transmitted infections (STIs) and HIV on women and girls, and to ensure their equal access to prevention, treatment, and care.

The Ministry of Public Works and Transport recognizes its responsibility to contribute to economic and social development and is committed to reducing the spread of HIV. It is exemplary in its commitment to conducting HIV interventions in tandem with all infrastructure operations. The Ministry became a member of NAA in 2003 and formed part of the Ministerial AIDS Committee.54 In 2006, it developed “Policies on HIV/AIDS Prevention in Response to Activities of Public Works and Transport Sectors in Cambodia.” The Ministry is attempting to mainstream HIV into every aspect of its work, including driving school curricula; it estimates that its HIV awareness programs have now reached at least 40% of all ministry staff. The Memorandum of Understanding of the Greater Mekong Sub-region Countries for Joint Action to Reduce HIV Vulnerability Related to Mobile Populations indicates that 1% of the construction budget of each loan should be provided for HIV prevention.

According to the Ministry of Labor, all business enterprises with eight or more workers must have an HIV working

group and those with more than 50 workers must have an HIV committee. In December 2007 the Business Coalition on HIV/AIDS was established to conduct advocacy, HIV education, and train-the-trainer programs in the private sector, and to provide support to develop and implement mandated HIV policies.

**Gender Policies**

In 2004, the Prime Minister issued the *Cambodian Millennium Development Goals Report*. In this document, gender is a crosscutting theme throughout government ministries. The Ministry of Women’s Affairs later included a focus on significant reductions of violence against women. The violence-reduction indicators deal with laws to combat violence, national statistics to monitor cases, developing a prevention plan, creating awareness in the community that violence against women is a criminal act, and improving services for women who experience violence. The National Assembly passed a new Law on Prevention of Domestic Violence and Protection of Victims in 2005. There have been numerous prosecutions under the law and several respondents said it has acted as a deterrent to extreme violence.

In 2007, the Government of Cambodia established a National Task Force on Combating Trafficking and Sexual Exploitation. Later, the Ministry of the Interior introduced legislation enabling authorities to prosecute sex workers and owners of entertainment establishments such as karaoke bars where sex is sold. The Law on Suppression of Human Trafficking and Sexual Exploitation was passed by Cambodia’s National Assembly on 20 December 2007 and approved by the Senate on 18 January 2008 well as outlawing trafficking in women and children, this law prohibits selling sex or running an establishment from which sex is sold. The Women’s Network for Unity, an NGO that advocates for sex workers’ rights, states that brothels across the country have been closed and thousands of sex workers have been arrested as a consequence of the new law. It claims that police have routinely stolen women’s money, prevented HIV-positive sex workers access to their antiretrovirals (ARVs), and allegedly raped sex workers after arresting them.

**Workplace Policies**

According to the Ministry of Public Works and Transport, foreign companies operating in Cambodia must comply with national policies, although their compliance does not appear to be monitored or regulated. The construction company that was building highways NR5 and NR6 is a Thai company, and has no HIV or gender policies. Employees interviewed for this assessment said that nobody is paid if they are sick, workers are not paid for public holidays, and compensation for work-related accidents is very poor, despite national workplace policies.

**Sexual Practices and HIV Awareness in the Community**

The median age of first intercourse in Cambodia is high (20.4 for women, 21.5 for men), but the use of contraceptives is quite low (16.4%). The most commonly used form of contraception is oral hormones (used by 6.6% of women); second commonest is injectable hormones (4.7%), followed by male condoms. Although the Khmer people are traditionally conservative, and women say they are unable to talk to their

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husbands about sex, NGOs throughout Cambodia have provided a great deal of HIV education in recent years and it is now integrated into lower secondary school curricula.

Women were the majority in all villages visited during the assessment; most able-bodied young men had migrated for work. The ADB technical assistance for the HIV intervention directed to villagers that accompanied the highway construction in the north-west were presented as lectures with no participatory learning other than asking a woman from the audience to assist with a male condom use demonstration, and did not address the vulnerability of monogamous married women. Some women said they want to trust their husbands but they suspect they have sex when they are away.

**Violence Against Women**

Domestic violence is a serious concern in Cambodia; one in every four married women has faced it and most experience multiple acts of violence, frequently accompanied by verbal abuse. Violence is usually triggered by alcohol or drugs, and until recently was considered a private, family matter. According to the Cambodian Women’s Crisis Center (CWCC), the law has been very successful in deterring violence against women, reducing it by about 50%. CWCC provides advocacy, legal support mediation and counseling, and scholarships and training courses for women at risk of violence; in addition, it runs two safe houses. The majority of rape cases involve young women, many between 10 and 15 years old.

Violence against sex workers by brothel owners, clients, police, and military police is a huge barrier to prevention efforts. Women found carrying condoms are often harassed by police, and sex workers are frequently gang-raped by young men or police. Because sex work is illegal in Cambodia, these women are at the mercy of police who frequently rape them and steal their money, jewellery, and mobile phones. Women said most NGOs are unwilling to speak out against violence against sex workers and treat them in a patronizing way. Regardless of the law, most sex workers perceive no recourse if they experience violence, including rape.

**Populations at Risk**

**Construction Workers**

Some construction workers on the north-west highway live at the campsite; others live in their home villages or rent rooms with local villagers. In rare cases, male and female laborers live together at the campsite. The construction company is Thai and two-thirds of the labor force is from Thailand, including the skilled mechanics, truck drivers, and machine operators. Most of these men live at the site and a few stay in the villages; most Khmer laborers return to their villages at night. A few of the workers pay local women a “salary” to stay with them. In one village, all women who had taken Thai partners in exchange for money were widows, and men spent a few nights each week with these “temporary” partners.

The majority of male workers who live at the site—managers, consultants, drivers, and laborers—say they buy sex regularly, once per fortnight, when they get paid. No workers admitted to male-to-male sexual activity at the campsite. High-salaried staff buy sex in karaoke halls or massage parlors and lower-paid laborers go to the local brothel.

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The male Khmer workers who live at the construction company campsites have received ongoing HIV education from the project; once per month 20 to 30 workers, mostly men, attend a 2–3 hour training session. Coverage of workers who do not live at the site is very patchy. In addition to the onsite sessions short sessions are delivered to workers in small groups along the highway. Many construction workers, including several workers living in local villages, said they had received no HIV education; neither had the majority of the women. A big obstacle to HIV education is language. Most workers are Thai and there are a small number of workers from the People’s Republic of China. These workers are away from home for extended periods—over 2 years—and are the group most likely to buy sex, but there is no education that targets them in their language.

Despite education efforts, most men admit that they would have unprotected sex if condoms were unavailable. Sex workers said that when drunk, many men try to have sex without condoms and some women may allow it for a negotiated higher price, but most do not.

Sex Workers
In 1999, the government introduced a 100% condom use program, which has been effective among brothel-based sex workers. Eighty percent of direct sex worker clients now consistently use condoms, but only 25% of “sweethearts” (sexual partners with whom one has a romantic involvement or ongoing sexual relationship and who is not one’s spouse) and 34% of casual partners. Despite the high level of condom use among direct sex workers, the prevalence of STIs among sex workers has not changed significantly over the past few years. From 2002 to 2006, the estimated number of direct sex workers has steadily decreased (from 4,403 to 2,977), while

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the number of indirect sex workers in karaoke bars, massage parlors, beer halls, and casinos has steadily increased (from 4,154 to 12,762). According to Population Services International, 86% of karaoke singers surveyed have received money for sex.58

Several NGOs work directly with sex workers in the northwest region. The Women’s Health Network is active in Sisophon and Poipet, with seven volunteer peer educators in each town and group leaders in 46 of 58 locations in Poipet, excluding casinos. Most of the approximately 750 women who sell sex in Poipet are Khmer and about 45 are Vietnamese. In Sisophon approximately 500 women work in massage parlors and 800 in entertainment establishments such as karaoke bars. Most are Khmer; an estimated 6% are Vietnamese, as is one of the seven peer educators. When HIV education in brothels first started, women were suspicious and reluctant to participate and owners (who are usually a male-female couple) were very resistant. Many sex workers were illiterate and easily exploited by the owners, who did not allow them to go to health centers. Brothel owners’ sons and policemen would take advantage of the women and have sex with any of them they wished. Women were forced to work even if they were sick or had their period. They were also frequently violated, gang-raped, or physically attacked by clients. Over the past 5 years, thanks to a great deal of advocacy, brothel owners’ attitudes have improved. Provincial governors issued letters stating that NGO workers have the right to enter premises and deliver HIV education. Women are now allowed to attend meetings and special events. Many women have received training in negotiation and counseling about their rights. However, most women still prefer to report problems with clients to an NGO rather than to the police—especially if the client is a policeman.

Indirect sex workers are much more challenging to target than brothel-based workers. Some respondents said that educating people who work in casinos, karaoke bars, and massage parlors owned by high-ranking officials is particularly difficult. Some NGOs are now trying to reach women at their homes rather than their workplaces.

**Men Who Have Sex with Men**

According to Men’s Health Cambodia (MHC), men who have sex with men are more mobile than female sex workers and targeting them is very difficult. MHC employs 8 peer educators in Poipet and 36 in Siem Reap (20 men who have sex with men and 16 female sex workers). About 50% of MHC members have STIs, and many are reluctant to use condoms. The Siem Reap branch has almost 2,000 members, including 600 female sex workers. Over 50% of MHC’s male members are sex workers. The network provides a drop-in center and shelter to homeless men. They also provide income-generation training skills. MHC in Poipet said that most of its members are very poor. Many work along the Thai border. About 1 member in 10 in Poipet is a drug addict. Over half of the group members are transgendered. MHC claims that its members do not face harassment from police because they have done a lot of outreach to police, commune and district chiefs, operational district authorities, and local health centers to raise awareness.

**Truck Drivers**

Truck drivers and the “helpers” who travel with them are the most mobile people along the highway, but they are not targeted by HIV education programs.

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for the most part. NAA has established a Mobility and Migrant Population Working Group, which includes many stakeholders including the Ministry of Public Works and Transport and the Ministry of Labor and Vocational Training, to develop a national policy on truck drivers and mobile populations. At the provincial level, the Ministry of Public Works and Transport has a pilot project on the Vietnamese border for long-distance truck drivers. The working group has produced a cassette that truckers can listen to as they drive. The proposal is to extend this project to National Routes 4 and 5.

**Other Mobile People**

Internal migrant workers in the country include police, motorbike taxi drivers, and mine clearance workers; outside the country, thousands migrate legally or illegally. The director of the Social, Environment, and Agricultural Development Organization said that each day about 200–500 unskilled laborers cross the border into Thailand seeking work, and each day five or six trucks return well over 300 people are as illegal immigrants. People pay small bribes to border guards to enter Thailand without permits; however, if they are returned as illegal the Cambodian border police usually rob them of their cash before they reenter Cambodia and leave them penniless, unable to return home.

Mobile people are more likely to engage in risky behavior because they have less knowledge of the services available to them, despite the fact that the Mobility Working Group provides predeparture training and information about safe migration for legal migrants in communities where potential migrants are likely to live. Migrants on ARVs must return to Cambodia each month because there is no reciprocal agreement between Thailand and Cambodia for migrant health care. Some people who go to Thailand for work stop using ARVs. Several people who have been arrested as illegal immigrants have been denied access to medication while in custody. The director of the Social, Environment, and Agricultural Development Organization said that most new HIV cases are people who are already very sick.

**Condom Availability**

Male condoms are provided free by a range of NGOs and government health
clinics, and the one that does HIV intervention among construction workers distributes packs of four male condoms to workers every 2 weeks. Sex workers and clients say condoms are always used in all brothels, but they are not available in karaoke bars, beer halls, and similar venues for indirect sex work.

The only commercial outlets for condoms in Poipet and Siem Reap are pharmacies and supermarkets. All men interviewed said that it is difficult to buy condoms; some even said that they do not know where to buy them. If construction workers want extra condoms, they must request them from their supervisor, which some workers said can be awkward. No condom dispensing machines are installed at the workers’ accommodation. Lubricant is available from pharmacies but only one worker said he had ever purchased it.

**STI and HIV Treatment and Care**

Sexual health services are available at standard clinics connected to local government health centers or hospitals; currently there are 30 specialized STI clinics in 22 of Cambodia’s 24 provinces. STI screening is free for registered sex workers; most other clients pay a small fee. Results are usually available within an hour of testing. The majority of people who screen for STIs are pregnant women or sex workers. VCT is increasingly accepted for couples planning to marry. VCT centers and STI clinics are not integrated.

The problem for construction workers is that the opening hours of clinics coincide with their working hours and after-hours screening is only available in Siem Reap and Sisophon, which is far from their worksites. Few men said they had ever gone for STI screening. When asked if they would undergo screening for STIs if the service came to them, for example as a mobile clinic, all the men interviewed said they would be eager to do so.

In the Banteay Meanchey STI clinic, along the route of the new highway, STI prevalence among indirect sex workers is about 70%, among housewives about 50%, and among direct sex workers about 20%. In Kob Health Center about 10% of pregnant women have STIs, reflective of the rate among the general population. In Mundol 1 Health Center, almost 50% of men who have sex with men have STIs. The most common STI is gonorrhea; many people are infected with more than one STI.

By the end of June 2007, 23,587 people living with HIV in Cambodia were receiving ARVs, including 2,155 children; this is an estimated 75% of all the people who have been diagnosed with HIV and who currently need ARVs. ARVs are available in 45 health facilities, 19 of which provide pediatric care, in 20 provinces. By 2005, Cambodia exceeded the targets of numbers of people on ARVs that it had set. Seventy-four facilities offer services to prevent transmission of HIV from mother to unborn infant, but only a small proportion of pregnant women—6.4% in 2006—attend prenatal clinics. Pediatric HIV services are still limited and many women incur costs traveling long distances with their children, even as far as Phnom Penh.

ARVs are free, but reportedly clients in many clinics pay a doctor’s consultation fee. In addition, for many people travel costs to clinics are prohibitive. Occasionally NGOs provide

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help for these costs, but there is little consistency from area to area as to who receives what help. People who use NGO health services all reported satisfaction with the providers but said that services in government hospitals were generally poor.

Many clinics are marked with signs such as “Contagious Disease Clinic” that discourage people from entering. Several respondents said that many government employees lack commitment because of low salaries and do not even turn up for work. Sometimes people travel several hours to reach the health center and wait for several more hours but no doctor turns up and they are forced to return to the clinic the next day. Some people simply stop taking medication. Low salaries and inadequate training have contributed to a serious human resources shortfall. Drug stocks are inconsistent and some people on ARVs have had their supplies interrupted, increasing the risk of drug resistance. The provincial networks of people living with HIV in Banteay Meanchey and Siem Reap expressed fears about the future of HIV care as NGOs hand over HIV services to government facilities. The deputy director of Siem Reap District Hospital said there is a constant increase in caseload without an increase in staffing.

By June 2007, Cambodia had 647 peer support groups in 14 provinces, with 31,460 members and 310 home-based care teams. Each province has an HIV-positive people’s network, and most districts have peer support groups.

Poverty and Income Generation

Poverty is the greatest challenge for many villagers, and doctors reported that malnutrition is a real issue for many people. Women living with HIV tend to be among the poorest villagers. Many sold their assets, including whatever land they had, to pay for health care for a husband who died and left them widowed and with children. HIV-positive widows face particular difficulty in earning enough money to feed themselves and their children; most available unskilled work is in construction and men get these jobs more easily. All NGOs working in the region around the Poipet-Siem Reap highway said they constantly have to make difficult choices about who to support.

Along the highway, many landowners were compensated for land taken for the road, but several said the compensation was unevenly distributed and not done in a fair and equitable manner. All but one said the money they got was insufficient to pay for the rebuilding of their shops or houses. Some landowners complained that others had been compensated twice without any explanation. Others said that people with close ties to the commune chief received better deals. Nobody said they had made an official complaint. Though several said they did not even know how to, many people were afraid to be seen as troublemakers. Many other respondents spoke of unscrupulous speculators who duped villagers into selling their land below market value.

Vendors who rent stalls from landowners appear to be in the most precarious position. They have no alternative location from which to sell their produce. Most of these vendors are women. Involving women in community consultations may help to minimize problems with land compensation in future projects.

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62 Drug resistance can occur easily if people on ARVs do not take their drugs regularly; a person who has developed resistance to the most frequently administered drugs must use a different class of ARVs—protease inhibitors, usually referred to as “second-line” ARVs.
People need to be able to generate their own income. Loan 1945-CAM incorporates a training scheme to ensure that the project increases, or at least does not decrease, the social and economic well-being of the villagers it affects, and that people who were relocated have salable skills that they can use to create their own jobs. However, there was evidence of only four small vocational skills training programs along the route. Two of the programs had only 11 participants, well below the 20 that the trainers were led to expect. Trainees received no travel allowance; one trainer said some women selected could not attend because they could not afford the travel. Furthermore, there were no start-up funds after training. Each course lasted only three months, which was not enough time to learn the skills needed to run a business; none of the trainees used the skills they did learn to earn an income.

ADB grant TA 3947, “Sustainable Employment Promotion for Poor Women,” is executed by the Ministry of Women’s Affairs and is intended to fund the Women’s Center for Development, a vocational skills training center in Siem Reap. This project does not target women living with HIV, but will focus in the first instance on women who are already running small-scale businesses. It could become a model for others.

Human Trafficking Concerns

The Ministry of Women’s Affairs is particularly concerned that the improved highway and easier access to the border will increase trafficking of young women. The Cambodian Women’s Crisis Center estimates that 800 women and children are trafficked into Thailand every month, half of whom are deported back by Thai authorities. Many women are trafficked internally, from rural to urban areas. Men are also trafficked for their labor.

All villagers interviewed were aware of the danger of trafficking; most said they only let their young relatives go over the border with trusted contacts or in groups.

Other Health Concerns

Health Impact of the Poipet–Siem Reap Highway

Although all respondents welcomed the construction of the highway, most were greatly concerned about its immediate health effects. The road has been under construction for over two years, and with its large volume of traffic people close to it have lived with exceedingly high levels of dust. Buildings, goods in shops, and all vegetation close to the road are coated with thick layers of dust, which also damages workshop machinery, hospital laboratory equipment, and computer. People are experiencing extraordinary levels of eye, nose, throat, and respiratory infections. Staff at one hospital said acute respiratory infections have doubled since the road construction began. Diarrhea has also increased significantly, especially among children, because of dust contaminating water and food.

Health care workers said that the difficulty of seeing oncoming traffic through the dust had led to a doubling of traffic accidents since road construction began. Drivers are not taught about the dangers of speeding and of drinking and driving.

Use of Amphetamines

Amphetamine use is steadily increasing, especially along the Thai and Laos borders. An unofficial survey by the Social, Environment, Agricultural Development Organization found that 550 men in three villages with a total population of over 50,000 people were using amphetamines. The World Health Organization (WHO) estimates that a high percentage of female sex workers use...
amphetamines; this emerged clearly during fieldwork. Women’s Health Network peer educators reported that many clients give women a drug called “K-glass” or “ice.” When women use the drug they “lose reason” and are more likely to have unsafe sex. In some brothels, the owners make women use K-glass so they are able to have sex with many clients and charge them the cost of the drug to keep them in debt. Eventually, when they are “wasted,” the brothel owner dismisses them.

**Current Challenges**

As the road improves and the cost of transport decreases, people’s mobility will increase. The demand for labor at the border will grow as more goods are transported across the country and imports increase. The result will be increased vulnerability to HIV.

Although Cambodia has an outstanding policy environment and a remarkably successful multisector response to HIV, there is no mechanism to monitor what the numerous local NGOs working on HIV education throughout the country are actually doing. Although HIV education for construction workers on the highway project was successful for those it reached, the education provided in communities was inadequate because it did not deal explicitly with women’s risk of HIV infection or the dangers of drugs such as amphetamines. It is also important to address anal sex within HIV education programs to both men and women. HIV education needs to reach a wider, more diverse population including men who have sex with men, drug users, out-of-school youth, indirect sex workers, truckers, people in senior management positions, internally displaced people, and other mobile, hidden, or hard-to-reach populations.

Several respondents said that it can be difficult to work through various layers of government, and that progress is often blocked by middle-level bureaucrats who offer very little encouragement to local governments to implement programs. Important information is not conveyed because nobody wants to be blamed for failing to meet nationally imposed targets. Under its policy of decentralization, the government delegates its power to
the commune council. The commune is expected to do everything: education, health, development, investment, planning. Some communes work effectively, but many commune chiefs from the villages are overwhelmed by the demands placed on them. The capacity of commune councils needs to be strengthened to overcome their lack of skills, which remains a serious constraint.

Most of the vendors along the construction route are women, who constitute a much greater proportion of the nation’s poor and who appear to have experienced the most negative financial effects from the development of the highway. Efforts to provide skills training to people whose incomes were destroyed by the building of the highway are largely tokenistic. They do not provide the real, sustainable skills, including marketing skills, women need to run their own businesses. Women also need and small grants to start those businesses and stay in their villages in a safe environment, rather than migrating to seek work in urban centers and in Thailand.
Appendix 3:  
Country Brief—People’s Republic of China

Background

The People’s Republic of China (PRC) has a population of 1.3 billion people; 100 million of those people live on less than $1 a day and 15 million live on less than $.50 a day. Over the past decade, the PRC’s economy has grown by almost 10% each year. Between 120 million and 180 million men and women are internal migrants and one in four of those are employed in construction work. Over 80% of the PRC’s HIV infections are concentrated in six provinces, including the border provinces of Guangxi, Guandong, Yunnan and Xinjiang. Yunnan, the poorest province, has a population of 44 million and is ethnically diverse, with over 14 million people belonging to 51 minority tribes. Xinjiang, in the northwest, is the largest province by area; the major ethnic group within the population of almost 20 million people is Uighur—Muslims who use Arabic script and have more rigidly defined gender roles than the Han. Migrant construction workers in Xinjiang only work 6 months of the year because of extreme weather.

By the end of 2007, 223,501 people in the PRC had been diagnosed with HIV and 700,000 were estimated to be living with HIV. In 2007, an estimated 50,000 people were infected with HIV and 20,000 died of AIDS-related illness. Thirty-eight percent of new infections were due to heterosexual transmission, 29% to drug use, 11% to homosexual transmission, 10% to blood selling and unsafe blood supplies, 1% to mother-to-child transmission, and the remainder to unknown causes. The age group with the most infections is 20–39. Approximately 70% of infections are among males and 30% among females, though the proportion of women is increasing as HIV is increasingly transmitted via unprotected sex.

HIV has been detected in all 31 provinces. The country as a whole has a low HIV prevalence of 0.05% with pockets of high infection in some areas; the rate of increase of infections is slowing. Yunnan has the highest HIV prevalence, with highest rates (more than 1% of women) in Ruili on the Myanmar border. The response to HIV has been more vigorous here than in other parts of the PRC, and Yunnan is leading the nation in developing effective HIV interventions.

Behavioral surveillance data indicate that 40% of injecting drug users share needles; 60% of sex workers and 70% of men who have sex with men do not consistently use condoms. Overall, 24% of drug users are HIV-positive. There are no good baseline data on HIV rates among men who have sex with men.

The projects selected for inclusion in this assessment were: Western Yunnan Roads Development Project, Yunnan

Province (Loan 2014, project completed); Dali-Lijiang Railway Project, Yunnan Province (Loan 2116, project completed); and Regional Road Improvement Project, Xinjiang Province (Loan 39655-01, in progress). The Western Yunnan Roads Development project encompassed the construction of the Baolong Highway and included a technical assistance project (TA) for HIV prevention, TA 4142—Preventing HIV/AIDS on Road Projects in Yunnan Province. Most of the findings reported in this country brief, unless otherwise stated, are based on fieldwork along the Baolong Highway, the only project in the PRC where such work was possible.

Policy Environment

HIV Policies

There is strong top-level support for the PRC’s response to HIV. The National Medium to Long-Term Strategic Plan for HIV/AIDS Prevention and Control (1998–2010) gives priority to young people, women, and people who are vulnerable to HIV, and as the government introduces measures to strengthen the national response, HIV initiatives increasingly focus on behavior change among populations most at risk, including drug users and sex workers.64 In 2006, the State Council AIDS Working Committee issued the PRC’s Action Plan for Reducing and Preventing the Spread of HIV/AIDS (2006–2010), which specified that all local governments should “integrate HIV prevention and treatment into their local economic-social development program.” In the same year, the State Council issued Decree 457, “HIV/AIDS Prevention and Care Regulation,” which provides a legal framework for HIV and AIDS initiatives, emphasizes the accountability of governments and ministries at various levels, outlines the rights and responsibilities of people living with HIV, ensures the funding of HIV measures, and provides the legal foundation for policy formulation and implementation. The regulation states broadly that all heads of government departments must ensure that staff are taught about HIV. The action plan also calls on privately owned enterprises to develop HIV prevention activities, although this is difficult to implement because companies do not see HIV as their business.

Ministries that have developed HIV action plans include agriculture, civil affairs, commerce, construction, justice, labor and social security, public security, and railways. Each province has developed a 5-year HIV action plan. However, the Ministry of Communications, which is responsible for transport, highway, and building construction, has no specific HIV policy in its section plan.

The PRC has an extensive program of HIV education among rural migrant workers that involves 11 ministries in its implementation. By 2010, sexually transmitted infection (STI)/HIV transmission is to be included in the health curricula in all schools in capital cities, and in more than 70% of town and village schools. The United Nations Educational, Scientific and Cultural Organization (UNESCO) is currently assisting the Ministry of Education to implement HIV education in schools.

Article 3 of the “Regulations on AIDS Prevention” adopted in January 2006, states: “All organizations and individuals are prohibited from discriminating against people with HIV/AIDS and their family members.

They have legal rights to marriage, employment, medical care and education.” Despite these laws, HIV-related discrimination continues to be a serious concern; many people are rejected by families and communities because of their HIV status. Discrimination greatly impedes HIV prevention efforts and limits people’s access to appropriate care and treatment services.

The Joint Assessment of HIV/AIDS Prevention, Treatment and Care in China (2007) describes the PRC’s current core challenges as program management and accountability, awareness and antidiscrimination, comprehensive interventions, treatment, care, and support, involvement by the whole of society, capacity building of response teams, and monitoring and evaluation systems. The PRC has a very strong national policy environment that it is now beginning to translate into sound policy and practice at provincial, district, and local levels in many parts of the country.

The Center for Disease Control and Prevention (CDC) is supposed to take the lead on HIV prevention, but it has to garner funds from outside the government, which restricts its ability to respond to HIV effectively, and its response is rooted in a medical model rather than a broader developmental model. A broad range of organizations has been involved in HIV education. The Communist Youth League has focused education among out-of-school youth; the Trade Unions have started promoting HIV workplace education; the All-China Women’s Federation and the Family Planning Association are involved in HIV education at the community level. All of these organizations have very well-developed networks throughout the country, from provincial to village level.

Individual provinces have considerable autonomy in developing policies and respond in widely differing ways to HIV. Effective programs acknowledge the prevalence of HIV and grapple with the problem; less effective responses reflect weak leadership. Yunnan Province is at the forefront of HIV policies and programs. In 2004, the Yunnan provincial government issued an order to implement measures to prevent the spread of HIV, to safeguard the health of the people, and to ensure the province’s sustainable, rapid, and sound social and economic development. The order included directions to heighten understanding through knowing the present situation, strengthen the leadership for coordination, cement measures through defined responsibilities, and pursue actual achievements through strengthened supervision.

The notice ordered all prefectures, cities, counties, regional administration bureaus, committees, offices, and departments under direct administration of the people’s government to carry out six programs concerning HIV: “purification of the social environment for HIV prevention”, promotion of condom use, mass education on HIV prevention, implementation of programs for safe needle exchange and methadone maintenance, construction of care centers for people with AIDS, and scientific research on HIV prevention.

In 2006, the Yunnan provincial government issued regulations to prevent and treat HIV. Excerpts from these regulations appear in Box 4. Although much of the document is very supportive of people living with HIV, clause 15 indicates the conflict between harm minimization and law enforcement against drug users and sex workers.

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Although Yunnan has a generally conducive policy environment, grassroots organizations for HIV behavior change have difficulty raising funds because they cannot easily register as nongovernment organizations (NGOs). The director of the Yunnan Women’s Migrant Education Research Association said that both government and local residents distrust community-based organizations. The association does door-to-door education among residents in an urban “migrant village” of about 10,000 people in Kunming, using songs to get their message across to street sex workers because of this group’s low literacy.

Several international NGOs support a range of HIV programs throughout the PRC, particularly in high-prevalence provinces such as Yunnan. Some of these programs are not yet as effective as government-supported programs because the government has strong networks to mobilize people at community level and it is not comfortable working with NGOs. International NGOs can fill in gaps or sensitive areas that government cannot address, and they can develop cross-border relationships. For example, in Ruili Save the Children trains migrant women and sex workers who move over the border, working closely with

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**Box 4: Extracts from Yunnan Province HIV/AIDS Prevention and Treatment Regulations, 2006**

(i) 15. Public Security bureaus, justice system administrative departments, and public health administrative departments will undertake HIV screening of prostitutes, drug users, and men arrested or imprisoned for engaging in prostitution, and will provide treatment in a timely manner for those who are found HIV positive and who meet the treatment criteria. Upon the release of an HIV-positive person, arresting and supervisory bureaus will notify the county-level CDC in the person’s place of residence in a timely manner.

(ii) 42. Labor and Social Security departments should add HIV/AIDS drugs to the list of pharmaceuticals covered by basic medical insurance, so that those PLWHA with medical insurance can have their examination and drug costs reimbursed; those PLWHA both able and willing to work should be offered employment-seeking assistance. Labor and Social Security departments should help the HIV/AIDS specialty hospitals to become involved in the hospital management system, and should work with the basic medical insurance companies to allow PLWHA to become involved in the management of the special fund for HIV/AIDS prevention and care.a

(iii) 44. The Health Department should offer free ART to PLWHA who meet national and provincial conditions in villages and to urban poor who participate in the basic medical insurance program; in high-prevalence areas free or reduced-cost treatment should be offered to economically depressed PLWHA for the most commonly encountered opportunistic infections. Medical organizations should offer pregnant PLWHA free PMTCT drugs, infant testing reagents, and infant formula, with all costs paid by the Finance Department.b

(iv) 46. Labor unions, youth federations, women’s federations, the Red Cross, and other social and charitable organizations at every level can establish relief funds and accept social contributions in order to provide assistance to PLWHA.

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a PLWHA is an old acronym for people living with HIV or AIDS. Since the wide availability of antiretroviral drugs, the acronym has been dropped by UNAIDS in favor of PLHIV.

b PMTCT is an acronym for “prevention of mother-to-child transmission of HIV”.
its counterpart in Myanmar. It supports projects with sex workers and people living with HIV, and is developing projects to improve antiretroviral drugs (ARVs) compliance. The Red Cross promotes ARV treatment preparedness, livelihood, and income generation. It produces peer educational material in local languages and carries out education aimed at intravenous drug users. The Clinton Foundation is developing sustainable models for dispensing ARVs that can be replicated throughout the country.

The United Nations Joint Programme on HIV/AIDS provides policy advice and technical support to enhance the national response to HIV and strategic support in key provinces to strengthen planning, coordination, monitoring, and evaluation.67

Gender Policies
The “Law for Protecting Women’s Rights and Interests of the PRC” and the “Family Planning Law” mention equal rights for women and men, but no sector or agency is specifically responsible for ensuring the implementation of these laws. Whenever gender was raised during interviews for this assessment, respondents usually stated that it was “not an issue” in the PRC.

Workplace Policies
In January 2008, the PRC issued a new labor law that outlines fair working conditions and wages for workers. The new law also protects the rights of workers with HIV and other infectious diseases and outlaws discrimination based on health status. No construction companies have HIV policies, but in Yunnan, the Ministry of Communications ensures that HIV interventions are part of infrastructure operations.

Sexual Practices and HIV Awareness in the Community
Most people interviewed for the assessment indicate that sexual practices are conservative in the PRC and that most young women are not sexually active until they are married. However, the incidence of syphilis increased in all age groups from 2005 to 2006, including among 10–14-year-olds by 19% and among 15–24-year-olds by 8%, indicating an increase in sexual activity among young people, particularly in urban areas.68 Young people do not receive sex education from their family and rarely get any in school; what is provided focuses on physiology. Levels of awareness of HIV vary greatly throughout the country, and most women do not perceive themselves to be vulnerable to infection. Abortion is legal and can be obtained easily by any woman, whether she is married or not, except for the purpose of sex selection.

Women’s Decision-Making Power
Although equality of women and men is enshrined in the law, and women in urban areas feel that they have economic independence, there is considerable gender imbalance in some rural areas throughout the PRC and many women have little economic or social power, particularly if they have little education. The education gap between men and women decreased substantially between 1990 and 2000, but still, twice as many males as females had higher education.

Many women have difficulty exercising their rights, including their rights to land use. According to the Asian Development Bank’s (ADB) Country Gender Assessment, men have benefited

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more from the PRC’s economic progress than have women. In comparison to men, women are disadvantaged; from 1990 to 2000, the income gap between men and women increased by 7.4%. Employers are reluctant to hire a woman over a man. Women generally have smaller pensions than men do because they work fewer years in lower-paid sectors. Privatization of the PRC’s health system has compromised women’s health because they are least likely to be able to afford health care.

Among the predominantly Muslim population of Xinjiang Province, most girls who leave school at 16 or 17 because their parents cannot afford the fees are married by 18 in an effort to “ensure” that they are virgins. The only female respondents who were comfortable talking about sexual practices during the assessment were the local women and sex workers who had been involved in the HIV intervention along the Baolong Highway.

**Populations at Risk**

**Construction Workers**

Construction workers, most of whom are men, are very mobile. Contracted teams are drawn from various provinces throughout the PRC. On any major project, scores of specialist companies are engaged over many sectors of the project. Most of these companies stay at one site for more than a year.

When large construction projects start, new sex “hot spots” emerge to cater to them, including karaoke bars and massage parlors. Some men have relationships with local women. Along the Baolong Highway in Yunnan, almost every village has seen at least one marriage between a construction worker and a local woman. More commonly, relationships occur between workers and married women whose husbands are working away from home. This phenomenon raises issues that are not addressed in most HIV prevention programs; HIV prevention on infrastructure projects must be directed at both construction workers and villagers whose lives are touched by the work.

In the PRC, according to unpublished studies by Dr. Pan Suiming, about one in six urban males aged from 25 to 29 visits sex workers. This compares with the national average of 1 man in 10 who buys sex. Wealthier men such as self-employed businessmen are the most likely to buy

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sex; migrant workers are least likely. Sex venues include entertainment places such as nightclubs and karaoke bars, hair salons and massage parlors, hotels and streets. Sex workers in establishments set up in the Baolong Highway construction zone said that most of their clients are truck drivers and construction company managers rather than laborers or villagers.

**Sex Workers**

Sex work is illegal in the PRC and people engaged in it can be arrested and sent to labor camps. However, sex work is widely tolerated; police keep one eye closed to it. Most sex workers from the PRC are from 15 to 24. One *mamasun* (business owner) said that some girls are promised other work then cheated into doing sex work, but then find that it is very profitable and encourage their friends to join them. All female respondents for this assessment said they made active choices to become sex workers because it gave them much greater earning capacity than other work they could do.

Many sex workers come from rural areas and are poorly educated, but university students are also choosing to work in the sex industry. Outreach to sex workers has to be ongoing because they are highly mobile and most work for only about 6 months to 3 years. STI rates, particularly of chlamydia and gonorrhea, are estimated to be high among sex workers, but surveillance data are weak and inaccurate; most health officials interviewed were unwilling to provide data on STI prevalence. The deputy director of Yunnan CDC said that about 70% of sex workers have at least one STI, usually more than one. The United Nations Population Fund (UNFPA) works through owners of entertainment establishments to provide HIV education to their workers.

There appears to be less violence towards sex workers in the PRC than in other countries covered in this assessment, but women did complain about treatment from the police. Some police steal sex workers’ earnings; some men dress as police so that they can steal from them. No sex worker reported specific acts of violence by a client. One *mamasun* said she bribes police from time to time, but usually she allows them to have their pick of her girls; in return, they warn her when they are going to conduct a raid. More work is needed with local law enforcement agencies to eradicate harassment of sex workers.

**Men Who Have Sex with Men**

No legislation prohibits sex between men in the PRC, but it is highly stigmatized. Men who have sex with men and who identify as gay often marry, making them a particularly hard population to reach. The incidence of HIV among men who have sex with men is 2%–5% at most sites and over 10% at some sites. Because of lack of education, many men do not know the risk of contracting HIV during unprotected anal sex. Several programs now address same-sex relationships; Kunming in Yunnan Province has a telephone hotline for men who have sex with men. Unfortunately, outreach to gay men in Yunnan stopped recently after police started arresting men in parks on “loitering” charges. Many gay men stigmatize themselves, or suffer from low self-esteem, due to family pressures. Some men who have sex with men experience violent robbery. Married gay men easily become targets of blackmailers who threaten to tell family members about their sexuality.

**Other Mobile People**

During more than a decade of economic boom, the PRC has seen large-scale migration throughout the country and a parallel expansion of infrastructure development. As more transport routes are built and access to remote areas of the PRC becomes easier, people become more mobile. Some ministries have integrated HIV education into technical
and vocational training schools, but the programs are not implemented throughout the country.

Migration makes young women very vulnerable to sexual coercion and the real risk of unwanted pregnancy and abortion. Some single women have no sex education and are afraid to visit a family planning clinic, assuming it is only for married couples. Respondents from government and NGOs indicated that migrant workers do not have the right to free health care or to education for their children outside their home village, where they are registered: when people move, it is extremely difficult to transfer registration. The Yunnan provincial government recognizes the difficulties this brings for people living with HIV in need of treatment, and they are currently attempting to relax these regulations.

Truck drivers are highly mobile and independent—many truck drivers own their own vehicles and do not belong to a company—making them particularly hard to target. At a national level, little work has been done to reach them.

**Drug Users**

The PRC has more than 2 million drug users, 80% of whom are men and 20%–60% of whom share needles. In some regions, up to 80% of intravenous drug users are HIV-positive. In most parts of the PRC, a person arrested for drug use must undergo 6 months’ rehabilitation in a detoxification center; if they relapse after release, they undergo rehabilitation in a labor camp. However, new laws now enable a newly convicted drug user to detoxify at home under family or community supervision. The PRC has over 500 methadone treatment centers throughout the country, including 42 centers in Yunnan. But in some provinces methadone is only available to people who fail the forced rehabilitation process. Furthermore, where methadone is available, the Ministry of Public Security periodically conducts sweeps on methadone clinics to bring clients in for random urine tests; those found positive for heroin are sent to detoxification centers, or labor camps if it is their second relapse.

Many female drug users in Yunnan cities and border towns sell sex to pay for their drugs, as do a much smaller number of males. Methamphetamine (“ice”) and ketamine are now produced locally in the PRC, making their price likely to drop and their use increase considerably in the future.
Condom Availability

Before 1997, possession of condoms was enough to warrant arrest as a sex worker, but an HIV prevention statute was introduced in 2006 that broadly encouraged male condom use in entertainment services. Male condom dispensers have to be installed in all entertainment establishments, and all employers must educate their workers about HIV (entertainment is the only industry subject to the requirement of HIV education to date). A wide variety of good quality male condoms can be purchased in pharmacies and from vending machines in public toilets, on university campuses, and in entertainment venues. They are available free in family planning clinics and some health clinics but not in hospitals. Most hotels sell male condoms.

From 2001, the Ministry of Health, in collaboration with the World Health Organization, launched a 100% condom use program in four locations; UNFPA has since supported the efforts of the Family Planning Association, which has a very extensive network throughout the PRC, to introduce the program in several more locations throughout the country. Where condom use has been promoted, the PRC has seen some remarkable results. In Hainan Province, male condom use increased from 14.2% in 2002 to 90.3% in 2004 and the incidence of STIs decreased dramatically; the rate of chlamydia infection dropped from 11.0% to 1.3% and that of syphilis from 7.6% to zero. In 2003 in Hubei Province, among a population consisting predominantly of migrant workers, a UNFPA project found the rate of condom use during recent commercial sex increased from 42.5% in 2004 to 93.7% in 2006, and chlamydia rates reduced from 31.7% to 6.3%. The project, which included comprehensive STI diagnosis and treatment and HIV education carried out in local entertainment establishments, is now self-sustainable because brothel owners and law enforcement officers in the area came on board. Population Services International (PSI) also had great success with condom promotion and social marketing among sex workers; among 360 women in Yunnan Province, over an 18-month period condom use with regular partners doubled from 22% to 44%. Population Services International says that participatory learning is an essential element of its programs and that it uses mobile teams to normalize and encourage condom use with all partners. It also works closely with public security to ensure success. The challenge is for the PRC to implement 100% condom use nationwide and mainstream these programs into public health programs.

STI/HIV Treatment and Care

Voluntary HIV testing, rare in most provinces, is poorly promoted throughout the PRC. There are 4,000 HIV testing sites in the country but testing is free only at CDC clinics. Many people who are tested for HIV do not return for their results because they fear discrimination. Some respondents said that many people who are mandatorily tested for HIV in hospitals are refused treatment afterward by health care workers. Often, people who are diagnosed as positive do not know where to go for treatment. Most infectious disease hospitals do not have HIV specialists to dispense ARVs. Sometimes the CDC does not have an HIV clinic or personnel with medical training, so people receive their

72 Footnote 71.
ARVs from public-health employees. In some cases, hospitals and CDC staff collaborate well, particularly in areas with high HIV prevalence, but according to several respondents this is far from the norm. HIV care is not standardized throughout the PRC and its quality varies greatly from province to province.

The PRC has a rural health scheme under which 80% of health-care costs are government funded, but most migrants have no health-care cover in the town or city where they work. Without free health care, people avoid going for help unless their situation is serious. This means many HIV-positive people are only diagnosed at a late stage of their infection.

By the end of October 2007, 31,849 people in the PRC were receiving ARVs. By March 2007, 4,395 children were reported to be double-orphaned due to AIDS; 3,167 of these children were receiving free education. Reportedly, 20,879 people living with HIV receive financial assistance from the government.

ARVs are free if a person registers with the government, but many people do not want to do so because it means applying to a residents’ committee and disclosing one’s HIV status to local authorities. People are afraid that this information will be leaked to the community. All people with HIV pay for all treatment costs other than ARVs.

Drug resistance is an increasing problem in the PRC because of a lack of information about the need for compliance; there is no counseling on how to take medication. It is estimated that 6,000 to 7,000 people have drug resistance. Occasionally, ARV drugs go out of stock. CDC usually only provides clients with drugs for 1 or 2 weeks at a time, with a maximum prescription of 1 month; in extreme situations people can get 3 months’ worth at a time. Thus, people must return frequently to get supplies, which causes problems if they live far from the service or the roads are washed out. Most migrants only get free ARVs from the place where they are registered, so they must regularly travel back home for their medication. Efforts are now being made in some provinces to address this problem. Drugs offered to HIV-positive women to prevent mother-to-child HIV transmission vary from province to province despite national guidelines; for example, doctors in Xianjiang prescribe only one-off dose Nevirapine but in Yunnan they are more likely to follow national guidelines.

Many peer support groups have sprung up throughout the PRC, offering their members varying forms of support—psychosocial, economic, family, treatment. One group in Yunnan runs a regular radio program in which people with HIV share personal stories in an effort to break down HIV-related stigma. However, the capacity of grassroots organizations to provide education and care is limited because of their lack of technical and financial support.

**Poverty and Income Generation**

The PRC’s economic boom has resulted in large-scale migration of people seeking paid employment. The majority of migrants are male, meaning that increasing numbers of households are headed by women.74 Women in rural areas constitute the majority of people living in poverty in the PRC.

Respondents indicated that relatively few women were employed at construction sites because of the limited job opportunities available to them. It is important to ensure that women are offered equal opportunities to gain employment in infrastructure operations.

**Human Trafficking Concerns**

Some respondents in Yunnan Province spoke of concerns about the trafficking of women for sex work. According to ADB,

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trafficking of women is increasing in the PRC. In the PRC, some women are lured into marriage. The government has ratified relevant UN conventions on trafficking, but needs to strengthen law enforcement and improve its research on trafficking.

**Current Challenges**

The PRC has strong top-level support for HIV programs, strong policies, active implementation of policies and guidelines, and has begun to see the epidemic plateau among some groups in some regions. Programs among sex workers, for example, have seen very high levels of success. The PRC is making a concerted effort to address HIV, but it faces many challenges.

In addition to providing financial resources, the PRC needs to develop its human resources and expand the collaboration between government and NGOs. The PRC needs a consortium of competent people who can be called on to implement large-scale HIV prevention projects—HIV program planners, managers, behavior change specialists, STI and voluntary counseling and testing (VCT) specialists, advocates, and peer education trainers.

People living with HIV are a vastly underused resource. No respondents said that HIV-positive people are engaged in HIV prevention programs in a significant way. Key stakeholders recognize the need to involve people with HIV in policy decisions, but have been slow to do so.

The major challenge for the PRC is to develop the human resources and provide the funding needed to expand its HIV programs throughout such a vast country and to ensure the programs are sustainable. ADB can help the PRC create a successful response by building on the groundbreaking work in Yunnan. Cross-cutting solutions such as the Preventing HIV/AIDS on Road Projects in Yunnan Province project (described in Box 3) indicate what is possible in a province with an increasingly strong policy environment and a commitment to developing a multisector approach to HIV. With adequate support over the next decade, the PRC has the opportunity to avert the devastation that can be wrought by HIV and AIDS.

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74 Footnote 74.
Appendix 4:  
Country Brief—India

Background

India’s population is approximately 1.2 billion and national HIV prevalence is approximately 0.36%, making it the country with the world’s third highest number of HIV infections: approximately 2.5 million people in India are currently living with HIV.\(^\text{76}\) In 2006, HIV prevalence among female sex workers was 4.9%, among intravenous drug users 6.9%, and among men who have sex with men 6.4%.\(^\text{77}\) However, HIV rates vary widely within India. Karnataka is one of India’s six high-prevalence states, with sentinel surveillance from prenatal clinics, sexually transmitted infection (STI) clinics, and HIV testing centers indicating an infection rate of 1.1% in 2006.\(^\text{78}\) Chhattisgarh is a low-prevalence state and sentinel surveillance from prenatal clinics, clinics treating STIs, and from sex workers indicates HIV prevalence at 0.3%; to date approximately 420 cases have been reported, however surveillance is weak and therefore HIV may be underreported.

The Indian projects selected for inclusion in this assessment were Rural Roads Sector (I) Project, Chhattisgarh State (Asian Development Bank [ADB] Loan 2018-IND), and Western Transport Corridor Project, Karnataka State (ADB Loan 1839-IND).

Rural Roads Sector (I) Project, Chhattisgarh State provided for the construction or upgrading of the road system, which comprised a network of dirt roads in rural areas, village roads, and some district roads. Loan 2018-IND provided $400 million for the project to rehabilitate over 10,000 kilometers of rural roads in Madhya Pradesh and Chhatisgarh. Most of these roads are in poor condition and many are impassable during the rainy season. Most are no more than a few kilometers in length. These low-traffic roads carry fewer than 50 motorized vehicles per day.\(^\text{79}\) Project design features include employment targets for women in road rehabilitation and construction work and requirements that civil works contractors provide appropriate amenities for women construction workers and carry out health programs for workers to reduce the risk of HIV transmission.

According to the gender assessment conducted as part of the socioeconomic and poverty analysis for this project, financing rural infrastructure has beneficial effects on the lives of women. It was found that

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\(^\text{79}\) ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan And Technical Assistance Grant to India for the Rural Roads Sector 1 Project (India).* Manila.
Transport connectivity can contribute in establishing the conditions for raising the social, educational, and health status of women. Better transport services open up opportunities for more girls to attend post primary schools outside the village. They also contribute to safe motherhood by providing access to better health services outside the village and reducing the obstacles to improved health services within the village. Women interviewed referred to the psychological benefit of being able to maintain more frequent contact with their families in distant locations. The extent that potential gender benefits are realized will be affected by social and cultural factors, such as cultural constraints that may restrict female mobility beyond the village, and poor people’s perceptions of the opportunity cost of educating girls compared with boys.80

In Karnataka, Loan 1839-IND provided $240 million for the Western Transport Corridor Project to upgrade 259 kilometers of National Highway 4, which runs from Mumbai to Bangalore. This is one of the busiest roads in the country thousands of vehicles travel the road daily, including an estimated 20,000 to 30,000 trucks.

Neither of the projects assessed here contained any HIV prevention, education, or other components, but they may not be representative. In India, there is an evolving trend towards more comprehensive and inclusive design of HIV activities. Many recent ADB-supported road projects have specific loan covenants to address the risks of HIV transmission and trafficking in women and children in the project influence area. The human trafficking components of these covenants have supported awareness raising and safe-migration campaigns for truck drivers, sex workers, tribal women and children, and women migrants, along with capacity building of service providers, decision makers, and communities. Loan covenants under these projects require the implementing agencies to set up focus groups on HIV and trafficking, and to collaborate with women’s ministries and nongovernment organizations (NGOs).

The covenants support dissemination of information on STIs and HIV to construction workers, public awareness and behavior-change campaigns for high-risk groups, and strengthening of referral systems for early diagnosis of STIs and HIV along highway corridors. They have also supported equal employment opportunities, equal pay, and employment targets for women, appropriate childcare facilities around construction sites, and women’s participation in gender-sensitive project components. In Karnataka, a separate project cofunded by ADB addressed these issues, but it was not active in the corridor of influence of the projects in this assessment.

Policy Environment

HIV Policies

India has a number of policies and guidelines on HIV. The National AIDS Control Organization (NACO) has developed a national strategic plan, NACP-III (2008), and operation guidelines for targeted interventions among sex workers, migrants, and truckers.81 NACO spells out three basic rights afforded to all—the right to informed consent, the right to confidentiality, and the right to live free...
from discrimination—that are particularly important in the context of HIV. Testing and research among HIV-positive people require informed consent of the person being tested. Discrimination against HIV-positive people in employment is prohibited. NACO has developed guidelines for blood safety but they have not been implemented consistently throughout the country; in particular, representatives of Karnataka State AIDS Prevention Society (KSAPS) said they had not been implemented in Karnataka at the time of this assessment.

In 2003, NACO requested the Lawyers Collective HIV/AIDS Unit to draft legislation on HIV. A legal review was undertaken and a consultative process was held with vulnerable stakeholders, including men who have sex with men, people living with HIV, healthcare workers, women, sex workers, intravenous drug users, and State AIDS Councils (SACS). The draft legislation submitted to NACO in 2005 addresses discrimination, disclosure, workplace safety, informed consent, access to treatment, programming, state obligations, redressing grievances, and implementation by national, state, and local HIV/AIDS authorities. This process is ongoing and the law is still pending.

NACO and the related SACS are the national and state organizations with a mandate to address HIV and AIDS. NACO implements the national HIV and AIDS plan and is responsible for national coordination and monitoring. SACS are decentralized and include representatives from government, civil society, people living with HIV, the trade sector, and health workers. There is no formal relationship with the infrastructure sector, but willing and interested representatives are involved in council activities in different states. Public works personnel on the sites in Chhattisgarh seemed uninterested in HIV, and the National Highway Authority of India seemed very unsure how to address its responsibility to provide HIV interventions. SACS addresses medical services, communication, and all facets of administration.

**Gender Policies**

The principle of equal wages for equal work without discrimination according to gender is enshrined in Article 14 of the Indian constitution, which bars discrimination on grounds of sex. However, education and skills differentials typically force women into lower-paying occupations than men. Sexual harassment is not addressed in labor law, but there is case law addressing instances of workplace sexual harassment. Recently, states have been ordered by the Supreme Court to set up mechanisms to address sexual harassment that could act as models for other countries. Marital rape is not a crime in India. Legislation specifically addressing “dowry deaths” was enacted in 1986, to impose higher penalties when women die of unnatural circumstances including injuries and burns, under circumstances indicating that the husband’s family demanded a larger dowry than the wife’s.

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84 The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Bill, 2006. ncw.nic.in/sexualharassmentatworkplacebill2005.pdf
family is able to pay. Indian inheritance and property laws are not consistent throughout the country but generally favor sons over daughters; land reform initiatives in rural areas lack attention to gender issues. The preference for sons has led to a demand for sex-selective abortion. The “Preconcept and Prenatal Diagnostic Techniques Act,” enacted in 1994, forbids sex selection but the practice is still widely carried out.

**Workplace Policies**

People living with HIV have the right to work but they frequently lose their livelihood if their HIV status becomes known. India has no national policies to provide HIV workplace activities. In Karnataka, workplace activities are conducted by Population Services International, but not for the projects covered in this assessment.

Workers employed by the construction companies contracted under the two projects covered by this assessment say that they are not on contracts, do not receive sick leave or holiday pay, and do not receive compensation if they are injured on the job. Managers reported that workers are encouraged to wear helmets when working; however, in Karnataka, no one on the site wore helmets and road workers uniformly reported that they received no safety training.

According to respondents, no gender mainstreaming or HIV prevention work had been undertaken at either of the two sites visited at the time of this assessment. According to ADB staff responsible for the loan, at least two HIV seminars were hosted 3 years before this assessment and HIV interventions have been conducted at other sites; however, workers and villagers interviewed for this assessment said they had not received any HIV training.

A variety of factors contributed to contractors’ failure to meet their

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85 Criminal Amendment Acts. 1986. Dowry deaths are penalized under section 304B.
obligation to deliver HIV prevention education: some contractors had no previous experience in HIV prevention or gender mainstreaming, some did not know where to begin, some felt that it was not their job, some were pressured for time, and some were subject to a combination of these factors. One engineer stated that HIV prevention or gender mainstreaming activities were not undertaken because they would take time and money away from the roadwork, even though the contractor was contractually obliged to provide them.

India’s unprecedented economic growth has contributed to increased migration from rural to urban areas, which is a factor in HIV vulnerability. HIV awareness programs, implemented by NACO, SACS, and NGOs, are common in high-prevalence states, including Karnataka. NGO programming is the most specifically targeted, and is often said to be of higher quality and to offer a wider range of services than the government’s. NGOs offer more locations than SACS in urban areas with high HIV prevalence. Women in particular have low literacy and are fluent only in the local language, not Hindi, so language presents an obstacle to education programming when it is not delivered in the local vernacular.

**Violence Against Women**

South Asia is recognized as a region with high rates of violence against women. Gender-based violence increases women’s risk of exposure to HIV. Women have lower status than men throughout India and, almost universally, cannot negotiate sex with their husband. Working with men is critical to efforts to combat violence against women and HIV. One doctor said that when men understand women’s situations they can challenge cultural traditions and change their mindset of men to value women.

**People at Risk**

**Construction Workers**

Awareness of HIV among construction workers in Karnataka was extremely low. No condom use was reported at any of the sites visited in Karnataka. In Chitradurga, at the Program Implementation Unit for the NH4 refurbishment, information about HIV was posted in English and Kannada (the main local language spoken in Karnataka), but the laborers rarely came to the office and most of them were illiterate. Information about HIV would be more useful in their languages and offered directly, with condoms, by someone who could answer their questions. Some construction workers are migrants who travel from site to site for work with their families, including spouses and children. The children in these transient communities were not attending school.

In Chhattisgarh, nobody knew when work to carry out HIV education programming might begin. Engineers at the highway authority said they had low levels of knowledge about HIV; they were full of questions about transmission such as “Why can’t mosquitoes transmit HIV if they transmit other diseases?” Although the Chhattisgarh project is much smaller than the one in Karnataka, this is no reason not to have an HIV intervention in place, as these highly skilled professionals are nevertheless vulnerable to HIV infection if they do not receive appropriate information.

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Sex Workers

Sex work is not itself illegal in India but living off its earnings is, and so is any involvement of minors in the sex trade. Sex workers face very high levels of social stigma. Abuse of sex workers happens frequently, sometimes by the police, which is why abuse is most frequently reported to NGOs rather than the police. Sometimes sex workers are approached by a group of men seeking to negotiate a lower rate for multiple clients. These situations can escalate into physical abuse. Robbery is sometimes a motive for abuse. Respondents report that extant statutes against human trafficking are typically used not to prosecute trafficking cases but rather to harass sex workers. Police harassment interferes with access to condoms, as possession of condoms is seen as proof of intent to have sex. This presents obstacles to effective HIV initiatives. Better efforts are needed to address human trafficking and the sex industry.87

Sex work is in high demand along transport corridors such as NH4. In Karnataka, many excellent programs are implemented by NGOs. However, in Chhattisgarh, outreach efforts fail to contact many sex workers because they perceive the risk as low. Programs in Karnataka are run by the Citizen’s Alliance for Rural Development and Training Society (CARDTS), Sangama, and Sanpada Grameen Mahila Sanstha (SANGRAM). SANGRAM is renowned for its work with sex workers. One aspect of its HIV programming is outreach to sex workers and truckers at truck stops. CARDTS has peer educator programs that offer HIV education and condoms to sex workers in Tumkur, Karnataka, in the corridor of influence of the project. Sex workers in Tumkur are scattered; there is no obvious red-light district. Instead there are 15 to 20 small brothels, which are family residences with three to five women employed in each. A sex workers’ collective in Tumkur has been established with 400 members. A small number of street-based sex workers who typically take their clients to lodges are also scattered through the town at

a few hot spots. Sangama works with transgenders and men who have sex with men, many of whom sell sex. It is most active in Bangalore but has representation throughout the state. There is great demand among sex workers and sexual minorities for HIV information and services. KSAPS has identified the key populations for HIV prevention as sex workers, men who have sex with men, truckers, and injecting drug users (IDUs). KSAPS implements interventions in 10 districts, covering 15,575 sex workers via 17 NGOs.

The stigma associated with sex work is also faced by people who work with target groups, including health workers, outreach workers, and their families. This is most difficult for peer educators, who typically come from the populations they service. Bhoruka Charitable Trust (BCT) offers diabetes screening specifically to avoid the stigma attached to dedicated HIV services.

**Transgenders, Hijras, and Men Who Have Sex with Men**

In July 2009, the colonial law against homosexuality has been repealed by the Supreme Court of India, lifting criminal punishment on homosexual relationships. Transgenders, hijras, and men who have sex with men all face significant stigmatization and discrimination within Indian society, so many are hidden and difficult to reach with HIV measures. Many men who have sex with men are sex workers who have high STI rates and low rates of condom use. Many truck drivers have sex with men but do not identify as homosexual; these men require specific types of programs. Two organizations work with men who have sex with men and transgenders in Karnataka state.

These projects reach the hijras who operate many of the baths available for truckers at truck stops. Sangama offers legal and human rights assistance for sexual minorities and undertakes HIV programming, including counseling and testing, at the request of its membership. CARDTS has peer educator programs that offer HIV information and condoms to transgenders, hijras, and men who have sex with men. This is a small but effective project.

**Truck Drivers**

Karnataka has the State AIDS Prevention Society and many strong NGOs addressing HIV. Most are in urban centers. Two that work with truckers in less populated areas are SANGRAM and BCT. SANGRAM reaches out to truck drivers on roadways in Maharashtra and northern Karnataka. It has a mobile clinic in Nippani on Sundays, and a drop-in center at a truck stop where sex workers and local men are employed as safe sex educators. SANGRAM’s success has been widely praised, and ADB has commended its work. BCT is a long-standing NGO that implements programming for truck drivers. Its Khushi Clinic offers HIV counseling and testing and syndromic management for STIs at a truck stop. The clinic receives about 25 clients per day. BCT also operates a mobile clinic that visits other truck stops. This clinic sees from 30 to 40 patients per day and offers impressive, confidential medical care. BCT promotes male condoms to truckers via social marketing. Its sites feature male condom vending machines so that no one needs to ask for condoms. Truckers also require information explaining that sex, especially anal sex, is very risky.

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**Drug Users**

Intravenous drug use is present across India but is typically hidden, particularly among women. CARDTS operates a needle exchange and clinic for injecting drug users in Tumkur, Karnataka; it employs two peer educators. Needle sharing is decreasing in Tumkur as the needle exchange program becomes more popular.

**Condom Availability**

The government distributes male condoms, but there have been problems with government supplies of condoms in some cases. Free male condoms are available at some clinics and from NGOs, and they are widely available for sale at truck stops. It is unusual for women to buy condoms, especially if they must ask for them. Lubricants are not easily available either.

**STI and HIV Treatment and Care**

STI screening is available at prenatal clinics and many government and NGO-run clinics across India. STIs are managed via syndromic treatment. KSAPS offers HIV testing at over 770 sites in the state. Its efforts are supplemented by NGOs and for-profit health facilities. Sangama offers HIV pre- and post-test counseling at eight confidential, voluntary counseling and testing centers. A counselor refers HIV-positive people to centers for health monitoring and treatment, and to one of many support groups in Karnataka. Karnataka has a relatively strong infrastructure for health care compared with other states. KSAPS activities include 565 VCT centers, 206 STI clinics, 17 antiretroviral drug (ARV) therapy centers, 240 blood banks, and ongoing targeted measures, including drop-in centers and HIV prevention campaigns. The overall approach is mass media with some folk theatre; KSAPS places least emphasis on the most effective method; face-to-face outreach.

There are 52 VCT sites in Chhatisgarh, with 52 more planned. In India, much work with vulnerable populations is undertaken by NGOs. However, in Chhatisgarh most NGOs work in the largest city, Raipur, rather than in rural areas. Some NGOs address maternal and child health and some undertake to promote the sexual health of sex workers in Raipur, but these programs do not reach the majority of people. The risks posed by HIV and vulnerabilities to the virus are largely unaddressed in Chhatisgarh, a low-prevalence state where HIV is less of a concern than in other states. The absence of programs in rural areas contributes to the lack of reliable data on HIV rates.

ARVs are available from government centers free of charge in the six high-prevalence states, including Karnataka. However, transportation to the centers is difficult for those who live in remote areas, particularly for poor people from rural areas who cannot afford it. ARVs are less available in other states, including Chhatisgarh. Treatment centers have not been set up at the local level. Supplies of medicine, including drugs to treat tuberculosis, run out at times even though India produces ARVs. Mobile people such as truck drivers and their assistants have particular difficulties accessing ARVs. Access to second-line ARVs remains a challenge, as it does in many countries.

**Poverty and Income Generation**

Poverty is endemic throughout India. Women are particularly vulnerable
to poverty, because they face hiring discrimination and earn less than men. The gender gap in education achievements means that girls are poorly equipped with employable skills. Divorce and widowhood render women extremely vulnerable to poverty, resulting in high levels of poverty among households headed by women.

Chhattisgarh was created as an Indian state in 2000. It is composed of Tribal people who suffer high levels of discrimination outside their communities and who are typically underserved by infrastructure constitute a significant portion of the population. Eighty percent of the population lives in rural areas, and with a disproportionate number of households headed by women, the feminization of poverty is an issue. In Karnataka, the caste system, now outlawed, has greater social consequences than in largely tribal Chhattisgarh. Migration, marginalization, and weak health infrastructure are particular concerns in the corridors of influence of this project.

Human Trafficking Concerns

India has signed the United Nations Optional Protocol to Suppress, Prevent and Punish Trafficking in Persons, Especially Women and Children, but trafficking in persons remains a concern. As transportation from rural areas to urban centers becomes easier, migration will increase. Young people travelling away from home for the first time are vulnerable to being trafficked into a wide variety of occupations; one of the most common forms is domestic servitude. Girls and their families may be deceived about the working conditions and educational opportunities offered.

Debt bondage is a form of trafficking that is found in many industries, including construction. Trafficking into the sex industry also occurs, although it was not reported in site visits in Karnataka and Chhattisgarh. Sex workers are motivated to combat trafficking to limit police antitrafficking activity inside their workplace that adversely affects...
their income potential and encourages harassment.

**Current Challenges**

As roads improve and transportation costs decrease, people’s mobility will increase. More goods can be easily and quickly transported across the country on NH4, increasing the demand for labor around the highway’s corridor of influence. People will travel more, especially to cities, which offer greater economic opportunities. Greater mobility and economic activity bring increased vulnerability to HIV.

National AIDS Control Organization (NACO) and SACS realize that to combat HIV they must be continually vigilant. Their current challenges include outreach to at-risk groups such as men who have sex with men, drug users, youth, sex workers, truckers, married women, people in senior management positions, internally displaced people, and other mobile, hidden, or hard-to-reach people.

HIV education programs for men who have sex with men, in particular, have been expanded however, many heterosexual women also have anal sex, often as a form of contraception, but this is rarely if ever discussed in HIV programs.
Appendix 5: Country Brief—Papua New Guinea

Background

Papua New Guinea (PNG) has an estimated population of 6 million, with over 4 million people under 30. The majority (85%) live in rural areas, many parts of which are inaccessible by road because of steep mountainous terrain in the center, vast swamp lands in the west, or because they are located on the country’s many outlying islands.

PNG has approximately 800 language groups and is the most culturally and linguistically diverse nation in the world. It has high levels of poverty and illiteracy, and high levels of migration to urban areas. Despite poor infrastructure, people in PNG are generally very mobile, with high levels of circular migration, particularly where there are roads.

HIV and other STIs spread via unprotected sex in PNG. The country has the highest rates of chlamydia and gonorrhea in the Asia and Pacific region and the second-highest rate of syphilis. Studies by the Institute of Medical Research indicate that approximately 40% of adults are infected with at least one sexually transmitted infection (STI), including chlamydia (present in 13% of adults), gonorrhea (12%), syphilis (15%), and trichomoniasis (20%).

PNG also has the highest adult HIV prevalence in the Pacific (1.6%). By the end of 2006, 18,484 people had been diagnosed as HIV-positive and 59,537 people were estimated to be infected with HIV. The introduction of rapid testing has made testing in rural areas far more feasible, although delays result from the need for confirmatory blood tests create in confirming diagnosis. Infection rates in rural areas now drive the national rate, while the epidemic appears to have reached a plateau in urban centers: urban prevalence is estimated at 1.4%, rural prevalence at 1.7%. Close to equal numbers of males and females are infected, but recently more women than men have been diagnosed with HIV, often through provider-initiated testing at prenatal clinics. The largest number of infections among men was reckoned in the 30–34 age group and among women in the 20–24 age group.

In 2007, 5,038 people were confirmed as HIV-positive; 40% were reported in the National Capital District, and almost 50% from only 3 of the other 19 PNG provinces—28% in Western Highlands, 13% in Eastern Highlands, and 5% in Morobe. Sex-disaggregated data were unavailable. HIV prevalence among mothers was 1.0% in urban

91 PNG Institute for Medical Research. 2007. It’s in Every Corner Now: A Nationwide Study of HIV, AIDS and STIs.
prenatal clinics and 1.1% in rural clinics. In 2007, there were over 3,000 new orphans due to AIDS deaths.

Because of the great diversity of languages and cultures in PNG, it is difficult to produce educational messages that reach everybody, and people have many misconceptions about HIV. HIV-related discrimination is still strong throughout PNG. Many adults and children have reportedly died of AIDS-related illness because their family or community neglected them. Many people with HIV in rural areas hide away or travel to urban centers for care because of discrimination in their local communities.

Most women attending prenatal clinics are tested for HIV, but general information about the HIV test is often provided in group sessions; women may not always understand the purpose of the test, and many do not return to the clinic for the results, limiting the prevention of mother-to-child transmission. In very few cases is the male partner also tested. Many women who test positive do not tell their husbands for fear of being blamed as the one to bring HIV into the family.

The PNG projects included in this assessment were Road Maintenance and Upgrading, Highlands (Asian Development Bank [ADB] Supplementary Loan PNG 2242/43) and, Lae Port Development (ADB Loan 2399). The second project was never started; the first is described in Box 1.

Policy Environment

HIV Policies

The HIV/AIDS Management and Prevention Act came into effect in PNG in 2003; its purpose is to ensure that PNG citizens receive adequate information to protect themselves from HIV infection, that people with HIV are protected from discrimination, and that they receive adequate treatment, care, and support.

The National Policy and Plan on HIV and AIDS was launched in 2007 and is now being rolled out throughout the country, along with a companion volume to guide its implementation.

The PNG Government has a National Strategic Plan 2006–2010, and many ministries, government departments, and agencies have adopted and approved HIV policies (including the departments of health, education, finance, defense, transport, and civil aviation). HIV education is mandated in schools and the Department of Education has an HIV framework. School programs now recognize the need to integrate education about HIV into their curricula. The Department of Works has developed an HIV policy that is not yet formally approved. Many private companies are developing workplace policies. The National AIDS Council Secretariat (NACS) is the national coordinating mechanism for the response to HIV; at provincial level the response is implemented by the 20 provincial AIDS council secretariats (PACS).

ADB’s country strategy and program describes PNG’s response to HIV as weak:

With many of the conditions for a rapid spread of the virus in place, but most of the conditions required to prevent it not in place, HIV/AIDS poses as an enormous threat to PNG’s development. The PNG Government has shown limited and belated leadership on the issue. The national HIV/AIDS strategy lacks priority and is not being implemented in full. Donor funding, especially from Australia and potentially from the Global Fund, is significant, but inadequate PNG leadership and capacity to manage programs, rather than money, is the key constraint to better addressing this serious problem.94

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PNG has strong legal and regulatory frameworks for HIV but implementation of effective programs is limited, partly because of the government’s inability to tackle gender relationships and high levels of violence towards women and children, major factors driving the HIV epidemic in PNG.95 No national policy framework or plan of action has yet been put in place to effectively address gender-based violence. Many people are scathing about the government’s inaction and inability to translate rhetoric at the national level into action on the ground. Many respondents spoke of the lack of leadership, disarray, and poor financial management within NACS that have caused delays in project implementation and in funds reaching the local level.

Several respondents said that PNG has vast financial resources but cannot use them because it lacks human resources; the country does not have enough skilled, capable people to expand and develop HIV programs at the rate needed to address the epidemic. The secretary of health called for greater coordination and harmonization of development partner funding.

For several years, the PNG Government focused on large-scale awareness-raising programs taking the “ABC” approach—abstain, be faithful, use condoms. Recently, the government has shifted to sustained behavioral change and to developing a sound body of research on which to base its programs. In 2005, the National HIV and AIDS Support Project carried out social mapping at 24 high-risk-setting sites.96 The National AIDS Council has produced a National Research Agenda for HIV and AIDS in Papua New Guinea 2008–2013, which gives priority to three broad research areas: increasing knowledge of the drivers of the epidemic and understanding the lives of those directly affected by HIV and AIDS evaluating the national response, and measuring the impact of the epidemic.

Many of the PACS say they receive inadequate support and struggle to keep up to date with all that is happening within their sector. Funds are not enough to pay for operational costs, and because staff cannot afford to buy the fuel needed to move around, many areas are neglected.

**Gender Policies**

Several government departments have gender policies. The National AIDS Council Gender Policy and Plan on HIV and AIDS for 2006–2010 attempts to address the different needs of males and females, including youth and children.97 It identifies people at special risk of HIV infection: men in all-male or mobile occupations or who have access to large amounts of cash, men who have sex with men, women who have transactional sex, victims of violence, young people with poor life prospects and a sense of hopelessness, and sex partners of any of the above. It describes the differing vulnerability of men and women:

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Entrenched male dominance backed up by physical and sexual violence, women’s lack of power and rights in marriage and sexual relations, their lesser access to information, education and income, and discriminatory attitudes affect the vulnerability to HIV and AIDS of women and girls.

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Men’s vulnerability relates to gender norms condoning multiple sex partners and violent sexuality, risk-taking behaviors such as alcohol and drug use, work which takes them away from home and puts cash in their pockets, the cultural and modern practice of male-to-male sex, and the sexual abuse of boys.98

ADB’s PNG country strategy and program includes an assessment of gender issues.99 The strategy found that whereas gender was included in the design of projects, it was not captured in project reviews, completion reports, or assessments of lessons learned in ADB interventions in PNG.

**Workplace Policies**

Few construction companies have workplace HIV policies, but this is changing rapidly through the efforts of the Business Coalition Against HIV and AIDS (BAHA). Shorncliff, one of the major contractors in PNG, has been very active in promoting HIV education and integrating HIV measures into the work of its safety officer, who talks to workers about HIV and freely distributes condoms; Shorncliff’s attitude contrasts with that of other companies that have simply constructed billboards and that have condoms available on request.

**Sexual Practices and HIV Awareness in the Community**

Behavioral surveillance studies indicate that over 65% of 15–24-year-olds are sexually active. Studies of private industry sites show that a high percentage of men in certain occupational groups paid for sex: 70% of truck drivers interviewed, 61% of military, 33% of port workers and 7% of sugar workers.100 At two sites in Port Moresby, approximately half of all young people in a robust sample exchanged sex for money, goods, services, or favors. Seventy percent of unmarried males under 25 years old, in these sample populations used condoms during transactional sex, the highest reporting percentage for any group, versus 49% among their married peers. The lowest reporting percentage was 20% for married female youth, compared to 40% for their unmarried peers; among these youth, 61% of married males and 49% of unmarried males report forcing a woman to have sex; among workers, almost 50% of military personnel, 40% of truck drivers, 27% of port workers, and 18% of sugar workers report forcing a woman to have sex against her wishes. In some cases, unmarried girls may agree to anal sex because of fears of pregnancy and lowered bride price.101

The risk of HIV transmission via anal sex, particularly with women, is an issue that is not addressed in most HIV prevention programs, yet in 2006 59% of truck drivers surveyed along the Highlands highway reported having heterosexual anal sex and 13% of Lae port workers reported having anal sex with men. An unpublished study of people living with HIV in PNG indicates that although the majority uses condoms during vaginal sex, 75% had not used a condom the last time they had anal sex.

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98 Footnote 97.
sex—a practice that is at least 10 times more effective in transmitting HIV than vaginal sex.\textsuperscript{102}

In another study, 71\% of married men but only 21\% of married women reported having extramarital sex.\textsuperscript{103} Teenage pregnancy is an increasing problem, but abortion is not readily available other than through local unlicensed, underground practitioners using herbal mixtures. A person who performs or has an illegal abortion faces up to 14 years in prison if prosecuted and found guilty. Nevertheless many women appear at hospital emergency departments with post-abortion problems such as septicemia and severe hemorrhaging.

According to UNESCAP, child prostitution is “rampant” in PNG; the entertainment industry targets very young girls, and many male adults are reported to exploit male children sexually and rape them.\textsuperscript{104} The PNG Family Health Association, based in Lae, is one of the few organizations in the country offering sustainable sexual and reproductive health training programs. It has a youth drop-in center that offers information and referrals on HIV, abortion, STIs, teenage pregnancy, and emergency contraception.

### Violence Against Women

PNG ranks 124th out of 157 countries on the UN gender-related development index.\textsuperscript{105} The exceptionally low social position of women leads to high levels of violence against them in PNG—some of the highest rates of family and sexual violence in the world for a country not at war. The vast majority of women have been beaten by their husbands.\textsuperscript{106} Research shows that:

(i) On average, two out of three women have been beaten by their husbands or partners, with the figure rising close to 100\% in some areas.\textsuperscript{107} This is higher than reported in any of the 15 studies conducted by the World Health Organization in 10 countries.\textsuperscript{108}

(ii) One in two women has been forced to have sex against her will.\textsuperscript{109}

(iii) Sixty percent of men admit to participating in “group sex”, most likely gang rape.\textsuperscript{110}

(iv) About 50\% of rape victims who report to police or for medical treatment are under 16, at least

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\textsuperscript{102} Kelly, A. 2008. PNG Institute of Medical Research, National Centre for HIV Social Research (UNSW). The Art of Living: The Social Impacts of ART on PLWH on Treatment in PNG. Port Moresby.


\textsuperscript{107} PNG Law Reform Commission. 1992. Final report on domestic violence in PNG. This document summarizes national research between 1982 and 1985, surveying nearly 3,000 men and women in rural and urban areas.


\textsuperscript{109} National Sex and Reproduction Research Team and Jenkins, C. 1994. National Study of Sex and Reproductive Behaviour in PNG. PNG Institute of Medical Research.

\textsuperscript{110} Footnote 109.
one in four is under 12, and one in ten is under 8.\textsuperscript{111}

(v) Seventy-five percent of children reportedly live in homes where violence is endemic, mostly against the mother; 50\% of children say they feel unsafe in their neighborhood at night; 60\% of children are estimated to be at risk of sexual abuse.\textsuperscript{112}

Women face the possibility of rape whenever they walk or travel alone in isolated areas. In some parts of PNG, gang rape is more common than rape by an individual.\textsuperscript{113} This propensity has been ascribed to the disappearance of male rites of passage as people move from traditional rural communities to large centers, resulting in an identity crisis for many young men, who turn to sexual violence as an outlet for their frustrations.\textsuperscript{114} There are no awareness programs to educate men about the danger of infecting each other during gang rapes.

Sex workers said they insert a female condom to protect themselves in case they are gang-raped, particularly when they travel along the highway; they are not the only women who use female condoms to reduce harm in the face of such high levels of rape and sexual violence. Excessive consumption of home-brewed alcohol, with an exceptionally high alcohol content, triggers many sexual assaults. There is legislation to protect against sexual abuse, but to date it has had little impact on curbing violence against women and children.

ADB’s partnership strategy acknowledges the link between violence and HIV:

\begin{quote}
Behavior change strategies are emerging as a central issue in HIV/AIDS prevention. However, the male aspect of this gender equation is still inadequately addressed in PNG . . . Behavior change strategies should specifically be targeted at young men and boys. The project activities should identify and work closely with men who are willing to publicly campaign against gender-based violence, with the aim of developing male champions against gender-based violence.\textsuperscript{115}
\end{quote}

The United Nations Children’s Fund (UNICEF) claims that approximately a million children in PNG live in violent households, and there are some new accounts of an increase in the sexual abuse of boys. Médécins sans Frontières supports the Women and Children Support Center in Lae, one of the very few services available to victims of violence.\textsuperscript{116} Since redevelopment in late

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\textsuperscript{114} National Sex and Reproduction Research Team and Jenkins, C. 1994. National Study of Sex and Reproductive Behaviour in PNG. PNG Institute of Medical Research.


www.adb.org/Documents/CSPs/PNG/2006/default.asp

\textsuperscript{116} The Individual and Community Rights Advocacy Forum in Port Moresby also offers services, including legal aid, to support women making domestic violence or maintenance claims.
\end{flushleft}
2007, client numbers increased from 10 per week to 10 per day. The center offers emergency medical care, which acts as an entry point for HIV counseling. In instances of rape, clients are offered post-exposure prophylaxis for 1 month if they seek help within 3 days of the assault. The Salvation Army runs women’s crisis centers in Lae and Port Moresby and offers refuge and referrals to women who experience extreme violence. It does not have adequate resources to assist all women who ask for help.

**People at Risk**

**Construction Workers**
Infrastructure development in PNG exhibits varying levels of HIV prevention. Some workers on the Highlands highway had received no HIV education; by contrast, some road contractors constructed billboards and distributed male condoms. On the Korininge-Kerowagi road, the construction company’s safety officer conducts education for the workers, who said they always carry male condoms with them.

**Sex Workers**
Sex work is illegal in PNG but sex transactions commonly occur at marketplaces and bars, along roads, around docks, plantations, and other private industrial spaces. Many women exchange sex for favors without considering themselves sex workers. They begin doing so at a median age of 16 or 17, and girls as young as 10 years old sell sex.\(^{117}\) Many girls at markets exchange sex for cigarettes, Coca-Cola, marijuana, and betel nuts.

Only a minority of sex workers—24%–43%—use condoms consistently. PNG does not have a “condom culture”; there is a great deal of opposition to condoms, not just from men, but also from some religious organizations, and the supply is inconsistent.\(^{118}\) Sex workers suffer from a high percentage of sexually transmitted infections (STIs) a


(32%–78%); many women have multiple infections.\textsuperscript{119}

According to Friends Frangipani, a national network that provides sex workers with support and advocacy, most sex workers experience violence from clients at some time. The vast majority report sexual coercion, one in three reports having been raped, and one in two reports physical assault. Women are punched, kicked, and raped for refusing to have sex, for carrying condoms, or for demanding more money than the client offers. Peer educators say most sex workers have been gang-raped by groups of 6 to 20 men. Most women do not report sexual assault to the police because doing so frequently leads to their being raped yet again. Police have frequently been alleged to gang-rape sex workers.\textsuperscript{120}

Only Save the Children targets sex workers and men who have sex with men, offering HIV prevention, drop-in, and clinical services with their Poro Sapot Project. Save the Children works at many sites, including along the Highlands highway, and conducts youth outreach programs focusing on behavior change. In the Highlands and Lae, sex workers said that the situation has improved because of the work the organization has done with local police, although if they want to file a complaint, police still often demand sex in return. Only in Madang did sex workers say they readily report assault to police; there, Tingim Laip, the Australian Government Overseas Aid Program (AusAID)-funded HIV prevention programme worked with the police to improve their attitudes toward sex workers. Women are now treated with more respect and there are fewer instances of police abuse.

**Men Who Have Sex with Men**

Sodomy is illegal in PNG and few men identify as homosexual, although many men have sex with men. Many men marry


to conform to tradition and religious expectations, but continue to have sex with men without the knowledge of their female partner. Men suspected of having sex with men face verbal abuse and physical attacks, as well as hostility from health workers. The majority of homosexual men have been raped. Male sex workers, including transgenders and homosexual men, are very active but work underground and consequently are a very hidden population. They are just beginning to form organizations.

**Truck Drivers**
Truck drivers spend long periods away from home. They have been largely neglected in HIV prevention programs. Waghi Valley Transport is one of the country’s biggest employers of truck drivers. The company recently took a new approach to HIV education, moving from communication of awareness to behavior change. It runs HIV sessions three times per week. Of 40 employees who voluntarily submitted to testing, two were HIV positive. Their confidentiality was respected; the company was not told their identity. Workers describe the HIV sessions as interesting because they always talk about something different. Male condoms are always available in dispensers. The company is currently developing its HIV policy with assistance from the Business Coalition against HIV/AIDS.

**Other Vulnerable People**
In PNG, as roads improve, people become more mobile, allowing them to search for paid work. Mobile men often leave behind spouses who have no source of income. That makes these women more likely to sell sex to make ends meet. Since they do not identify as sex workers, they may be a hidden population. Some respondents said that companies should facilitate sending their workers’ wives a portion of their salary.

Tingim Laip is the most active non-faith-based HIV project in PNG; it provides behavioral change interventions to targeted mobile populations in high-risk settings, particularly workplaces with large numbers of migrant workers and sex “hot spots.” Tingim Laip operates at 34 sites in 12 provinces, providing STI and voluntary counseling and testing (VCT) referrals, condoms, information, and education. Staff said that at first they faced many challenges in identifying gatekeepers and introducing the concept of behavioral change, with many reluctant to listen. The biggest challenges were to promote a culture of condom use and to tailor messages for each group. Staff report that condom use has increased at Tingim Laip sites. In Lae, people living with HIV are involved in very focused on-site training; as a result, people now request VCT and STI screening as well as condoms.

Programs such as the Tingim Laip Project, Save the Children’s Poro Sapot project, and ADB’s rural economic enclaves project, which is helping to strengthen rural health clinics, involve participatory learning including role-playing and go far beyond HIV awareness raising. They develop a sound understanding of risk and tend to translate that understanding into behavior change.

**Condom Availability**
Female condoms have been marketed very well in parts of PNG; women now ask for them at outlets. Many sex workers...

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say they prefer the female condom and many men prefer their partners to use one because they are closer to the “real thing.”

Male and female condoms are available free from health clinics, but there are frequently serious shortfalls in supplies, even running out of stock. Similarly, many health facilities, hotels, plantations, and markets run out of condoms. At Kaiwe market, where sexual transactions continually occur, no condoms, male or female, were available for the 6 months before this assessment. Kaiwe is the western gateway to Mt. Hagen and areas with rapidly improving roads, increasing mobility, and growing HIV prevalence. In 2007, the Tingim Laip outreach worker at the market distributed only 10,000 male condoms but claims he could have distributed several times that number if supplies had been consistently available. Madang Province has about 50 male condom dispensers, in locations including government buildings and hospitals, but usually they are empty. Presently, the National AIDS Council Secretariat (NACS) has no more condoms packaged to fit these dispensers. People want condoms. People are asking for condoms. But they are not available. When dispensers are empty, some people get angry and rip them off the walls.

One respondent said condoms sit on shelves in the Department of Health until after their expiry date but NACS does not have the ability to supply provinces with the large orders they request. Tingim Laip in Morobe and the Madang Provincial AIDS Council Secretariat (PACS) now go directly to the provincial Health Department for their condom supplies.

**STI and HIV Treatment and Care**

The Department of Health intends that all hospitals provide a one-stop shop for STI testing and treatment and VCT. At the end of 2006 there were 75 VCT sites in the country, but only 47 submitted annual reports. The national surveillance plan for 2007–2010 is guiding the strengthening of behavioral and sentinel surveillance systems. Some people who are able to afford it travel to Australia for testing.

Seven provinces offer services to prevent HIV transmission from mother to child. Pediatric care is available only in a few major centers such as Port Moresby, Mt. Hagen, Goroka, Lae, and Madang. In addition to health clinics, twenty-three community-based care centers offer support and advice from community volunteers on self-care to people with HIV. These centers, often little more than a shed, are greatly under resourced.

Faith-based organizations have been prominent in the HIV response since early in the epidemic. From the outset, the Catholic Church has provided quality
care to people living with HIV in PNG, although it only provides condoms to serodiscordant couples. The church integrates HIV treatment and care and VCT, operating in 19 provinces. However, the lack of nongovernment organization (NGO) involvement delayed a robust response to the epidemic until recently. Even so, most NGOs operate in urban areas and there are few programs available to people in rural areas.

Access to antiretroviral drugs (ARVs) has been expanded rapidly. ARVs are dispensed at 38 sites throughout the country (compared to only four sites 4 years ago) to 2,250 people, 91% of whom receive them through the public health system. All clinics are currently stretched to their limits. According to the secretary of health, PNG does not have the infrastructure to support such large numbers of people on ARVs without strengthening the health services delivery system. The Day Care Clinic at Angau Memorial General Hospital in Lae, for example, has only one HIV doctor, one trained HIV counselor, and one computer, so clients must endure long waits. The clinic provides a mobile VCT service that visits a major oil company regularly, testing about 30 staff for HIV each time. The clinic is in serious need of extra funding to cater to increased demand. Some people in the Highlands need to walk for 2 days to reach their nearest ARV provider, or pay K70 ($20), which is more than prohibitive for most rural women, for a return fare. In 2007, the Clinton Foundation started a pilot project to expand HIV treatment and holistic care in remote areas of Eastern Highlands Province.

It can also be a challenge to supply ARVs in timely fashion. Sometimes stocks run out and prescribers “borrow” ARVs from each other. As ARV therapy expands throughout the country, the problem of sustaining drug supplies will be exacerbated. Operational and logistical support for drug supplies is needed and a study of the supply chain would help to ascertain where supplies get stuck or lost.

Poverty and Income Generation

Poverty is a serious issue throughout the country, particularly among the urban unemployed. Most people in rural areas can grow food for their basic needs, but they cannot pay for health care. Employment among people living with HIV is an increasingly pressing need, particularly for households headed by women and women who have to travel great distances every month to obtain their ARV supplies. Lae Port development will include income-generation skills for women and rehabilitation of people living with HIV.

Human Trafficking

Several respondents in Lae and Madang transmitted rumors of increased trafficking in children, both boys and girls, for sexual exploitation, but the issue does not appear to have received high priority to date. Some respondents said that working and living conditions of some adults in PNG plantations and rural economic enclaves are very substandard; among other things, they have no access to clean drinking water or sanitation. Most do not have the option of changing their job, suggesting coercion, a key element of human trafficking.

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122 In a serodiscordant relationship, one partner in the couple has tested positive for HIV and the other has not.
Business Response

One of the organizations leading PNG’s response to HIV with impressive results is the PNG Business Coalition against HIV and AIDS (BAHA). It has garnered support from over 100 diverse companies and developed a reputation for providing high-quality service. Its major focus is encouraging businesses to develop workplace policies and train employees. In 2008, BAHA started the first HIV telephone hotline. In its first month of operation, the hotline received over 300 calls; 91% were from men, over 50% of whom were from outside Port Moresby. The service also fills an information gap in that many people ask questions about oral sex, a taboo topic in many PNG cultures. BAHA distributes 10,000 male condoms per week from its office alone.

The Well Women’s Clinic in Lae, funded by Oil Search, is a good example of private-sector support for community health initiatives. The clinic offers general health checks, free pap smears, and information about women’s health. The clinic sees 30 to 40 women per day; one or two will have abnormal cervical cells, for which they are treated with antibiotics. Many sex workers visit the clinic, which could easily cater to twice as many women if it were not limited to one staff member with no resident doctor.

Current Challenges

The Highlands is now the epicenter of HIV in PNG. Notoriously, women lack of power, can make little contribution to decision making, and are subject to violence in this area. Road improvements are also opening up the Highlands very rapidly, precipitating a collision of development, cash, HIV, and traditional practices. Both Mt. Hagen, in the Highlands, and Lae, the second largest city in PNG (located on the eastern coastline at the end of the Highlands highway), have ever-increasing daily influxes of people, resulting in a strain on all services.

More women and men will migrate to Lae Port as it develops into an expanding hub in the subregion. These people must be provided with skills and resources to protect their health. They need quality HIV education, strengthened local health services, targeted interventions for those most at risk (specifically mobile populations and sex workers), reduction of HIV-related stigma, reliable provision of condoms (including female condoms), and the creation of real and sustainable income opportunities for women. HIV education must incorporate challenges to the cultural norms of violence and imbalanced gender relationships. A key lesson from ADB’s work to date is the need to include gender-specific indicators and targets.

HIV education is most successful when it is participatory. In order to sustain behavior change, all HIV education needs to employ targeted participatory learning approaches, involve people living with HIV, and have a strong focus on gender-based violence. HIV messages need to be closely monitored to ensure that they do not become distorted.

The behavior change efforts of projects such as Tingim Laip are promising, but it is counterproductive to expect behavior change without providing consistent, reliable condom supplies. STI health services must be strengthened throughout the country, though is the effort will be difficult without consistent drug supplies. In addition, VCT must be more widely promoted, challenging though this goal is without the active involvement of people living with HIV.

Development has to be planned with great care because parts of the country are
volatile nature and because development catapults many people from subsistence farming to a cash culture, which can harm them more than help them. The Mt. Kare gold mine in Enga Province remains a cautionary example after almost two decades; new wealth was quickly spent, leaving the people with sustained high STI rates.123

The Minister for Community Development said that there should be no infrastructure development without “building the people who will be impacted by the infrastructure,” ensuring that the members of the community fully understand all the implications and have the skills to participate in future economic development. The minister further suggested that social impact studies should use local expertise and that women should be involved in decisions about infrastructure projects, to encourage a sense of ownership by the whole community. The National Council of Women suggested investments in building women’s networks and institutions, as well as cultivating their business, accountability, and management skills. They suggested that road construction projects need to incorporate discussions with women about their needs, such as paths down to creeks and placement of concrete blocks to help them do washing, and seats and cover for them in markets. Women should be consulted to find out what facilities they need close to their homes, such as schools and clinics.

Many female respondents suggested that women should be offered more work in road maintenance teams, because there are very few income-earning opportunities available to women, and few women are employed on the roads even though the project design requires that they be.

Appendix 6: Country Brief—Tajikistan

Background

Tajikistan is a mountainous, landlocked country, bordered by Afghanistan, the People’s Republic of China (PRC), Kyrgyz Republic, and Uzbekistan. Although it has high literacy rates, it is one of the world’s poorest nations.\textsuperscript{124} The annual per capita income is approximately $364. The country has approximately 7.2 million people, an ethnically varied population consisting of approximately two-thirds ethnic Tajiks and one-quarter Uzbeks, with ethnic Kyrgyz and Russians making up most of the remainder; other ethnicities include Tatars, Ukrainians, Belarusians, Kazakhs, and Turks. Approximately 85% of the population is Sunni Muslim and 5% is Ismaili Shi’a. Ethnic Russians, Ukrainians, and Belarusians are predominantly Christian.

Economic stagnation led to a severe lack of employment opportunities and a failing social safety net in the wake of Tajikistan’s independence and the civil war that followed in the 1990s. This resulted in a rapid rise in cross-border seasonal migration, particularly to the Russian Federation. Data on migration flows vary according to the source. An International Organization for Migration (IOM) survey conducted in 2003 suggests that up to 18% of the population—approximately 630,000, roughly equivalent to the population of the capital—worked abroad in 2000–2003 in both the formal and informal sectors. Official estimates from the Ministry of Labor indicate that 412,000 people left Tajikistan in 2005, and that the number for the first 9 months of 2006 was 337,000. According to IOM, most migrants at first were unskilled young males (age 20–29), though more recent trends suggest that migration among older males (age 40–49) is increasing. Almost 20% of the male population has left Tajikistan at one time or another to seek work.\textsuperscript{125}

Some of the men who migrate return extremely infrequently or not at all. About 70% are seasonal migrants who have no secure jobs and whose wives never travel. Women are estimated to constitute only 4% to 15% of all migrants from Tajikistan. Some migrate with their husbands, infrequently returning, and others operate petty trading services across nearby borders. Female migrants from Rasht are exceedingly uncommon; women leave the area infrequently, rarely without other family members. Consequently, the project area under assessment has many households headed by women, including war widows and women whose husbands have migrated.


High rates of out-migration and rapid privatization of economic assets such as land associated with formerly collectivized agriculture have encouraged young women, especially if unmarried or with absent husbands, to move into multigenerational households, disrupting social relations within and among families and communities. Many of these women have to adhere to gender stereotypes to remain within the security of extended families, affecting their ability to remain economically independent. For example, in rural areas such as Rasht women are discouraged from seeking employment outside the home, and have to fill in for missing men by providing unpaid labor on family farms.

Tajikistan has low HIV prevalence—842 known cases in 2007. However, poor surveillance mechanisms and limited testing mean that the real number of HIV infections is unknown. Most people diagnosed with HIV are under 30. HIV is fueled by intravenous drug use and migration, combined with increasing restrictions on the ability of women to question their spouses’ sexual behavior or negotiate lower-risk behavior such as condom use. An increase in infection rate is of concern, particularly as HIV testing is not widespread. Testing is available at hospitals in the capital and smaller cities, but pre- and post-test counseling is usually not. Reported cases of sexually transmitted infections (STIs) are increasing, with the incidence of syphilis and gonorrhea nearly doubling in the past 5 years according to local health workers interviewed during this assessment. Most cases are from rural areas, arising from men’s seasonal migration out of Tajikistan and their return for the winter, carrying STIs, to their spouses and sexual partners.

The project examined in this assessment is the Asian Development Bank (ADB)-financed Dushanbe-Kyrgyz Border Road Rehabilitation Project (Phase II) (Loan No. 2196 TAJ), which continues the refurbishment of a frequently used two-lane road that occasionally narrows to one lane. This 3-year project was scheduled for completion at the end of 2008. Phase 1 included 140 kilometers on the stretch of road from Dushanbe east toward the Kyrgyz Republic and 77 kilometers of rural roads. Phase 2 continued with rehabilitation of the remaining stretches from Nurobad to the Rasht Valley and onward to Nimich (kilometers 140 to 217 of highway on A-372), the 12 kilometers closest to the Kyrgyz Republic border, and 60 kilometers of rural roads, primarily in the Rasht Valley. This road project was already half-completed when the technical assistance (TA) contract to carry out HIV and STI interventions was assigned. At the time of this assessment, the contract for ADB loan–related HIV and gender programming had not been awarded.

The design of STI/HIV prevention programs for the project took several factors into account that influence gender relations Rasht Valley communities. These include conservative attitudes in traditional rural communities towards gender relations and women’s roles and responsibilities, with stereotypes of expected behavior from women reinforced by religious beliefs; seasonal male labor migration leading to a high percentage of households headed by women; and increasing gaps in girls’ and women’s access to postsecondary education and health services because of their limited mobility. Only 2% of women in 210 households surveyed had attended vocational schools or colleges, compared with 17% of men. Females reported lower literacy. Limited access to health services is a critical factor contributing to high maternal mortality rates. Household surveys indicate that men have a wide
range of employment opportunities, while women are predominantly limited to agriculture (78%) and tending livestock (13%). The average income of women was only 60% of men’s.\(^\text{126}\)

The report and recommendation of the President specified that the Ministry of Transport would monitor the project’s effects on women and encourage their employment in project activities. The project includes an HIV and migration component, focused in the Rasht Valley in conjunction with phase 2 of the road rehabilitation, to be implemented by the Ministry of Health’s National HIV/AIDS Center. The mission is to develop an integrated, community-based, gender-responsive approach to STI/HIV prevention in the contractor’s campsites and in the corridor of influence.\(^\text{127}\) The report and recommendation further specified that civil works contractors were to receive information on HIV and STIs in their languages at the campsites. The bidding process was underway at the time of this assessment.

The road sections under improvement form an integral part of a regional road network in Central Asia that directly links, Afghanistan, Kazakhstan, Kyrgyz Republic, the PRC, Tajikistan, and Uzbekistan. This road provides the only substantial link between the Rasht Valley and the capital, Dushanbe. Much of the regional road network is being rehabilitated with support from ADB and other international and bilateral agencies, with many of the projects already completed. The network will have a significant impact on the danger of HIV transmission associated with drug trafficking, and hence on the design of HIV initiatives along the corridor of influence. The road and the United States (US)-funded bridge to Afghanistan that opened in 2007 will affect the routes used to transport precursor chemicals and illicit drugs. Precursor chemicals from the PRC are already transported along the road, with opium and heroin traveling in the other direction from Afghanistan to Tajikistan and on into the PRC. Efforts to address drug transportation elsewhere will likely have effects in Tajikistan.

**Policy Environment**

**HIV Policies**

Tajikistan established its first National Program on HIV/AIDS and a National Coordination Committee for HIV/AIDS Prevention in 1997. The National Program is based on the premise that a multisector approach to HIV is necessary because it affects every member of

\(^{126}\) ADB. 2005. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Republic of Tajikistan for the Dushanbe Kyrgyz Border Road Rehabilitation Project—Phase 2.* Manila.

\(^{127}\) Footnote 3.
society. HIV-prevention strategies involve the ministries of health, education, labor, interior, defense, justice, mass media, and NGOs. National strategies recognize the need for care and treatment.

The “State Law of the Republic of Tajikistan on HIV/AIDS Prevention” (1993) includes antidiscrimination clauses concerning the care and treatment and access to education, employment, and pensions of HIV-positive people. Confidentiality regarding HIV status is enshrined in the law, which specifies that HIV status may only be revealed to the person who has been tested.

Tajikistan has a policy for the distribution of HIV-prevention information and promotion of condom use for migrants, injecting drug users, sex workers, and youth.

**Gender Policies**

Men and women achieved considerable social and economic gains under the former Soviet Union, but gender equality in practice has been undermined since independence. Tajikistan’s Constitution guarantees full equality of men and women, but inequalities persist in most areas of public and private life. The chair of the Commission on Women’s and Family Affairs recognized that many people are unaware of their rights under the law or of avenues to pursue these rights. Tajikistan’s 2005 gender equality law was enacted in response to growing inequalities in areas such as employment, education, and health outcomes. This law specifies parity in wages for equal work, provides for equal access to education, and equal access to assets such as land. However, even among government officials there is limited recognition of the degree of gender inequality reflected by Tajikistan’s standing on international measures such as the Gender and Development Index, and evident in the poverty levels among rural women. Violence against women, which was extreme during the civil war, continues to be inadequately addressed in Tajikistan law.


**Workplace Policies**

There is no workplace HIV policy in Tajikistan. The government requires migrant workers who are not nationals of Tajikistan to be tested for HIV prior to arrival in the country. Sino Hydro reported having 105 nationals from the PRC, including eight women, and approximately 100 Tajikistan nationals working on the road project. The construction contract stipulated the hiring of local laborers.

**Sexual Practices and HIV Awareness in the Community**

HIV is not regarded as a health problem or priority in Rasht. Most health officials are unaware that HIV, drug use, sex work, and extramarital sex exist in Rasht or do not recognize their presence, and many medical professionals perceive HIV as a foreign problem. Most people believe that communities in Rasht are protected from HIV by adherence to Islamic practice and morality. Sex outside marriage does occur however, but usually far from home.

Traditional gender-defined roles and expectations of girls and women limit their access to education, skills, resources such as land, and even, frequently, to knowledge of the outside world. Pressure on men to meet all their
families’ needs is also strong, and this stress is sometimes released as domestic violence or psychological harassment in the household. Bride-price was a feature of marriage in Tajikistan and weddings were enormous affairs that could bankrupt families. Laws have been introduced recently limiting the number of guests that can be invited to weddings. One woman described her own husband’s multiple divorces by saying, “We have lots of divorces now that weddings are cheap.”

Gender roles are strictly enforced within the household, with women expected to do housework, cook, and take care of children as well to produce income. While abroad, men from Tajikistan therefore typically seek relationships with local women who will do these tasks for them. In the Russian Federation, poor women seek out migrants upon arrival to pursue relationships in which they handle men’s cooking, cleaning, and laundry in exchange for financial support. Sex is also a part of these relationships, and many male migrants establish a second family.

Second wives are permitted by Islam, but not by the government. However, the practice continues and is not limited to out-migrants. Sometimes second wives in Tajikistan are kept secret from other wives; sometimes polygamy is overt and justified as a solution to the number of young women widowed by the civil war or without husbands due to migration. Women’s organizations also report a trend of unmarried men just about to migrate forcing young women from the same community into marriage. Families fear that their daughters will be left without the protection of a husband, if he fails to return or support his new wife. When husbands do not return, they leave these young women economically dependent on their new families and powerless to defend their rights. These relationships leave women vulnerable to abuse and gender-based violence, and may force them to flee or seek transactional sex to survive.

Government investment in schools is now increasing and attendance is up, but...
there are still far fewer girls in secondary school than boys. Some families claim that they end their girls’ education for fear of physical harassment. Nationally, the gender gap in education that begins during secondary school grows in higher education. Because many girls in Rasht leave school early, they have difficulty reading public health and HIV messages. In response, the Women’s Resource Center offers literacy tutoring; its efforts are most effective when it takes them to the villages rather than requiring women to travel to the town. The Aga Khan Foundation funds programs in HIV education and encourages girls aged 12 to 17 to complete secondary school.

**Populations at Risk**

**Construction Workers**

Construction workers reported being able to buy sex at most but not all construction sites. Construction workers from the PRC for Sino Hydro uniformly reported having received HIV education before leaving the PRC. Tajikistan nationals reported having no HIV-prevention education. Educational materials about HIV have been developed in Tajik, Russian, and Chinese. Male condoms were available at the company headquarters on the road between Garm and Navdi but they were not distributed at the work sites, where many workers slept.

**Sex Workers**

Sex work is extremely stigmatized and marginalized, arguably more so in conservative areas such as the Rasht Valley than in the rest of Tajikistan. Sex workers in Rasht, as elsewhere, are extremely secretive about their activities. One official, when asked about HIV and sex work, said, “We don’t have any information. Two years ago there was an “easy woman” who was forced out of this district. Officially, we do not have sex work. Secretly, maybe.” HIV awareness in Rasht is very low in general, and lower still among women. As far as

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128 Falkingham, op. cit. page 65.
HIV education, though some attention is paid to “innocent” women who may be at risk, particularly the wives of migrants, little is given to sex workers, in part because they have to operate in such a clandestine manner. It is even risky for these women to carry condoms that might be discovered by their families.

A number of rural women travel to the cities to sell sex. They travel to the capital for a day to earn money for a week, and then go home. They may be away from home for as little as 14 hours if they are lucky in finding clients. According to interviewees, these women tend to come from the most deprived villages and have the least schooling; sometimes they do not even understand telephone numbers. Women interviewed had very little knowledge regarding HIV transmission.

**Men Who Have Sex with Men**

Men who have sex with men are extremely secretive in Tajikistan. Even in the development sector, people ridicule them. Efforts to reach men who have sex with men are limited to the capital, despite the overwhelmingly male environment of the road construction camp.

**Truck Drivers**

Truck drivers are not sought by the women working on the roadside, who prefer men who drive private cars and have more money. Some drivers were hostile when approached with questions about HIV. Outreach workers require great delicacy and experience in discussing sensitive topics to avoid arousing ire among this population.

**Migrants and Their Families**

Migration is an important factor in HIV transmission. The first time away from their village, young men typically have two to three sexual partners over the course of an 8- or 9-month work season abroad. Many young men are at high risk for contracting HIV because they take on construction work in Russia, where HIV prevalence is high.

Wives of male migrants face particular challenges. Some have a tacit understanding that their husbands will have sexual experiences or even second families while they are away. Most people have only a limited understanding of contraception and most men have strong feelings against the use of condoms. Condom use is associated with sex outside marriage; in 2003, only 2% of women aged 15 to 49 reported it. There is a widespread belief that only sex workers and the dissolute can contract HIV and other STIs. These attitudes make it difficult for wives to raise the subject of STIs, HIV, and testing with their partners. Many, if not most, Tajik labor migrants have irregular status in their countries of destination. Their health can be put at risk by poverty, discrimination, vulnerability to labor exploitation, separation from families and partners, separation from the sociocultural norms that guide behavior in stable communities, and especially lack of access to health care and social services.

**Condom Availability**

Population Services International conducts social marketing of male condoms in much of Tajikistan, but it is not active in the Rasht Valley. Many people in the Rasht Valley are not open to information about how to protect themselves from HIV. Providing information about safer sex and safer

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drug use is seen as encouraging bad behavior. All the women interviewed described fearing social condemnation, ostracism, divorce, and abandonment if they brought up the issues of HIV and condom use with their husbands. Family is the center of life, especially women’s lives, and the desire for children conflicts with safer sex.

**STI- and HIV-Related Treatment and Care**

The Rasht Valley is an area in crisis with regard to health care; there are no government facilities and people rely on “religious healing.” Health professionals are in high demand but are poorly paid; many leave the Rasht region and some even leave Tajikistan for better working conditions. Women’s and girls’ access to medical care sometimes depends on the availability of female health practitioners because women are expected to see female doctors for any medical investigations requiring an unclothed examination. For injecting drug users (IDUs), there are needle exchanges in the cities, but not in rural areas where the need is growing.

STI screening is done only in Garm, some distance from the Rasht Valley. There are only six gynecologists for the four districts in the Rasht Valley, serving a population of 99,235. There are only about half the medical personnel required to meet minimum standards of care. HIV testing is available for free in Garm and Dushanbe, but everyone expects to be asked for informal payments by the doctor; physicians’ wages are too low to support a family. One village woman said, “I am concerned about the expense of the test” immediately after being told that it is free of charge. Respondents said that confidentiality is impossible to maintain in village communities. Few of the people most at risk of infection are tested for HIV because of the stigma associated with the virus.

Health services are often out of reach of the poor. In addition to physical obstacles such as an absence of clinics, bad roads, and limited access to transportation, the poor frequently have a difficult relationship with health officials, many of whom are poorly paid themselves and who attempt to extract supplemental payments from their most vulnerable patients.\(^{131}\) Antiretroviral drugs (ARVs) are available in the capital, but only 16% of people diagnosed with HIV in Tajikistan receive ARVs.\(^{132}\) Very few medical professionals have the necessary training treatment protocols to supervise ARV treatment. To date, no one has requested ARVs in the Rasht area.

**Poverty and Income Generation**

As of October 2007, some 9,535 people were registered as unemployed in Rasht—a situation unknown during the Soviet period. For some households, unemployment has led to extreme poverty. Poverty is generally more severe and prevalent among women, whose poor education and limited ability to leave their households leave them with few work opportunities. The Third Deputy Mayor of Garm, who is also the chair of the Women and Family Committee of Rasht, said that women head 65% of the poorest households in Rasht. The impetus for male migration is economic, but not all men live up to the expectation

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that they will support their families from abroad, do. Abandoned or unsupported women slip deeper into poverty.

**Trafficking Concerns**

Tajikistan is one of the most important labor-exporting nations in the Central Asian subregion, but awareness of the possibility of human trafficking is generally low. Women are most likely to be trafficked into domestic or sex work in the Middle East, the Russian Federation, or the former Soviet republics. Women who are heads of families are typically most vulnerable. Internal trafficking of adolescent girls has also been documented. Coming from the most deprived areas and having the least education, the few women who leave the Rasht Valley are highly vulnerable to promises of work from traffickers.

Some men who travel outside Tajikistan, mostly to work in construction, find themselves in conditions that meet the definition of trafficking in persons, where force, fraud, or coercion are used in debt bondage or working conditions that resemble slavery.  

**Use and Transportation of Drugs**

Drug use is reportedly high in Tajikistan; about 80% of drug users are men. Tajikistan straddles major drug trafficking routes; better roads will likely increase the availability of narcotics along the corridor of influence from infrastructure projects. The road being refurbished with support from ADB is the main route for the transportation of drugs from Afghanistan to Kyrgyz Republic. The prevalence of HIV among IDUs is not yet high, but testing is not common. Men and women have been deceived or coerced into transporting illicit drugs across borders, particularly by plane to the Russian Federation. These activities frequently lead to drug use.

**Current Challenges**

As the road improves, mobility increases, bringing benefits and challenges. Increased trade between the PRC, Kyrgyz Republic, and Pakistan will contribute to local economies but will also increase vulnerability to HIV from mobile populations. STI rates are low but rising, and in the Rasht Valley, condom use remains low and supplies are insufficient.

No one in the Rasht Valley seems ready to address the risks of having multiple sex partners or men having sex with men. It is important to address routes of HIV transmission, including anal sex, in HIV prevention education for all people. Health care workers and some religious leaders are very willing to address HIV transmission, but the Department of Health in Garm and in the Rasht Valley needs a great deal more support. Currently health care workers in the valley do not even have rubber gloves. Effective outreach to drug users, sex workers, truckers, migrants, and other hidden or hard-to-reach people is another critical tool that will be challenging to implement in the Rasht Valley.

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Appendix 7: Regional Responses to HIV

Southeast Asia

Southeast Asia is a hub of economic activity and therefore of population movement. Many Asian Development Bank (ADB) infrastructure development projects in the Greater Mekong Subregion (GMS) are linking countries more efficiently and increasing cross-border migration. There has been a more robust response to HIV in the GMS than in other parts of the Asia and Pacific region, but its institutions still have only a weak ability to deal with HIV in a context of increasing mobility. The Association of Southeast Asian Nations (ASEAN) has long recognized the risks that HIV poses to economic development in the area. At its seventh summit in 2001, ASEAN heads of governments devoted a special session to HIV and formed the ASEAN Task Force on AIDS, a pioneering initiative in the Asia and Pacific region. The task force developed and implemented three consecutive regional work programs on HIV, which included specific cooperation agreements concerning mobile workers.

Under the guidance of the United Nations Regional Task Force on Mobility and Vulnerability Reduction in Southeast Asia, in 2001 the six GMS countries signed the Memorandum of Understanding for Joint Action to Reduce Vulnerability Related to Population Movement (the MoU), which was renewed in 2006. Unfortunately little has been done to put this MoU into effect. The current Regional Strategy on Mobility and HIV Vulnerability Reduction recommends that mobility technical working groups be set up in each country to coordinate, monitor, and evaluate the national response to HIV and mobility. The task force claims that although national strategic plans for HIV have been developed for every ASEAN country, those plans have yet to include comprehensive and coordinated responses that meet the needs of migrant and mobile workers, including access to HIV prevention, care, and treatment. One of the major problems in dealing with mobile populations is that no government structure takes responsibility for them and they have no national champions, so it is left to the donors to drive issues of concern.

In 2003, to foster collaboration among countries, a workshop was held to build regional resilience against HIV along the network of highways in Southeast Asia, bringing together representatives from ministries of transport, construction, and public works, national AIDS authorities, and

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nongovernment organizations (NGOs) from the six GMS countries. The aim of this consultation was to ensure that communities are proactive in dealing with infrastructure construction projects, to minimize their negative effects.

At the second GMS summit in 2005, the governments of Cambodia, the People’s Republic of China (the PRC), the Lao People’s Democratic Republic (Lao PDR), Myanmar, Thailand, and Viet Nam signed the Kunming Declaration, which included an agreement to support the development of the transport sector and complete major transport links. However, the declaration barely refers to HIV and does not mention gender. The Thai government has signed bilateral MoUs with the governments of Cambodia, the Lao PDR, and Myanmar on cooperation against human trafficking. In addition, it has signed other MoUs, some with other countries, on the employment of workers.

The Declaration on the Elimination of Violence against Women in the ASEAN Region does not mention HIV in spite of its aim of promoting and protecting women’s rights and eliminate gender inequalities and gender-based violence by creating an enabling environment for the empowerment of women and strengthening their economic independence. ASEAN’s Vientiane Action Program highlights the core issues of poverty reduction, equity, and health for preventing the spread of HIV.

ASEAN acknowledges the possibility of achieving an effective response to HIV through strong leadership, country ownership, political foresight and commitment to sustainable financing, multi-sectoral coordination and partnerships with civil society including the private sector, particularly people living with HIV, and communities vulnerable and most at risk to HIV, through region-wide and global policies that respect, protect and promote the rights of people living with HIV and groups vulnerable and most at risk to HIV.

In May 2006, the ASEAN Secretariat consulted with the Seven Sisters (the Coalition of Asia Pacific Regional Networks on HIV/AIDS, which represents key regional civil society organizations) to include inputs into the strategic framework for the third ASEAN work program on HIV (2006–2010) and the draft official declaration.
for the 12th ASEAN Summit Special Session on HIV and AIDS. The Seven Sisters’ statement to ASEAN made the following points:

(i) Some government leaders had contradicted their commitments to fighting HIV, promoting misguided policies and practices that had resulted in HIV infection rates that had remained stable or even increased.144

(ii) Governments have not instituted adequate mechanisms to resolve denial, stigma, discrimination, and criminalization of vulnerable people.

(iii) Stakeholders had made calls to involve civil society in responses to HIV, but inadequate processes, mechanisms, and structures, constrain its capacity for meaningfully involved.

(iv) HIV programs offer dismal coverage and have limited potential for expansion; by 2005, only 19% of sex workers were covered by HIV outreach programs, only 5.4% of intravenous drug users were receiving HIV services, and only 1% of men who have sex with men were covered by prevention programs in almost all ASEAN countries.

The statement concluded with a call to earmark and long-term funds for civil society HIV programs, including funding for institutional development service delivery, research, program management, and networking.

In January 2007, at the Special Session, ASEAN affirmed that responses to HIV require meaningful civil society participation—including greater involvement of people living with HIV, who should be involved as equal partners in responses to the HIV epidemic.145 The meeting resulted in commitments to

(i) make it a priority to lead the mainstreaming and alignment of HIV policies and programs with national development and poverty reduction plans;

(ii) address the gender dimension of the epidemic;

(iii) move prevention and education, including public information campaigns, beyond the health sector, addressing the vulnerability of young people and women;

(iv) put legislation, regulations, and workplace policies into place to ensure that persons living with HIV are protected from discrimination;

(v) remove obstacles to access to quality HIV prevention products and treatments;

(vi) strengthen and facilitate the work of national AIDS coordinating authorities; and

(vii) ensure that civil society organizations, including organizations representing people living with HIV, have financial and technical support to participate meaningfully, in HIV prevention efforts, including at the policy-making and decision-making levels.

The strategic framework for the third ASEAN work program on HIV

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144 Seven Sisters. 2006. Statement for the 12th ASEAN Summit Special Session on HIV and AIDS. www.ahrn.net/7%20Sisters%20Statement%20to%20ASEAN.pdf

stated that the response to HIV is being held back because of lack of program coverage, including the following.

(i) Vulnerable populations are insufficiently served.
(ii) Condom promotion is inadequate.
(iii) Most people are unaware of their status.
(iv) Young people lack the skills to prevent HIV transmission.
(v) Institutional obstacles—persist, including limited engagement outside health sector, lack of support for civil society organizations, insufficient or poorly allocated financial resources, complacency, stigma, and discrimination.  

The framework suggested that national responses need a balance of HIV prevention, care and treatment, and impact mitigation programs. It focused on

(i) strengthening government leadership to move from commitment to action;
(ii) supporting and improving collaboration with civil society organizations;
(iii) facilitating effective involvement of people living with HIV and enhancing development of people-centered initiatives in each country’s response;
(iv) addressing gaps, strengths, and emerging issues in countries’ responses, such as improving access to affordable medicines for people living with HIV, reducing HIV vulnerability of mobile and rural populations, improving their access to predeparture and post arrival programs, and legislative protection; and
(v) integrating the HIV response into ASEAN’s development priorities.

South Asia

The South Asian Association for Regional Cooperation (SAARC) also recognizes the threat that HIV poses to development in Asia, although the response has been much slower than in Southeast Asia. During the 12th SAARC Summit in 2004, SAARC signed an MoU with UNAIDS to help member states improve HIV prevention and ensure care and support for those affected by HIV. SAARC launched its regional strategy on HIV in 2006. SAARC has also actively advocated an end to gender disparities in Asia. The 2005 Islamabad Declaration includes a commitment by SAARC to address HIV and agrees to give priority to efforts and actions on violence against women, economic empowerment of women, political empowerment of women, disaster preparedness and management, and health and education.

The United Nations Development Programme subsequently commissioned research and a desk review of mobility and HIV, and Coordination of Action Research on AIDS and Mobility Asia was selected to lead baseline research on laws, policies, and migration flows related to HIV.
Central Asia

Central Asia is experiencing one of the fastest growing HIV epidemics in the world, driven largely by intravenous drugs and increasingly by sex workers and their clients. The region is also critically important for improving road connections between Asia and Europe, particularly since the eight countries in the region decided to build six new transport corridors over the next decade to increase trade between Asia and Europe. The Central Asia Regional Economic Cooperation Program (CAREC) works to pursue the shared vision of regional cooperation, particularly in its priority areas of transport, energy, and trade facilitation. The current CAREC comprehensive action plan, developed in 2006, is based on four pillars. One of them, regional public goods calls for the expansion of the CAREC program to address selected transboundary issues such as environmental and health concerns including HIV. Although CAREC recognizes that improved transport routes increase the danger of HIV and the movement of drugs, it has no specific plans for mitigating the impact of HIV in infrastructure development.

The Pacific

In 2005, ADB, the World Bank, the New Zealand’s International Aid and Development Agency (NZAid), and (AusAid) agreed to join in a collaborative framework to address the priorities of infrastructure service delivery in the Pacific, and appointed a task force with ADB as secretariat. The main impetus was recognition of the need to harmonize infrastructure development activities at all levels throughout the region and improve donor coordination and increase private sector participation in development. The task force produced a report entitled Infrastructure in the Pacific: Obstacles and Opportunities to Improved Performance in 2006. In collaboration with all stakeholders, the task force will develop a regional strategy for implementing service delivery improvements.

There are no specific regional strategies or plans in the Pacific to reduce the impact of HIV on infrastructure development. Although the prevalence of HIV infection is low in all countries in the Pacific except Papua New Guinea (PNG), the potential for the spread of HIV in the Pacific is high because people move in quest of work. In 2005, ADB approved a grant of $8 million over 5 years to the Secretariat of the Pacific Community (SPC) for HIV prevention and capacity development. The project has four components: strengthening surveillance, community-based interventions, targeted interventions for vulnerable groups, and project management.

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Road works, Western Highlands, PNG
Appendix 8: The Asian Development Bank Policies on HIV and Gender

Commitment to Addressing HIV

The Asian Development Bank (ADB) recognizes that annual poverty reduction estimates may be reduced throughout the region because of HIV; the trends this reduction reflects significantly threaten ADB’s overarching goal of poverty reduction in Asia and the Pacific. Where development projects threaten development gains—for example, when they bring increased morbidity and mortality as a result of HIV infection—ADB has long recognized its responsibilities to address the danger. In this instance, it has supported many efforts to tackle the challenges of HIV. ADB acknowledges that HIV is not merely a health issue but an economic and development issue that is exacerbated by the development of infrastructure, by poverty, and by social practices. ADB’s Strategic Framework for HIV includes its strategic response, its gender and development policy, and the Joint Initiative by Development Agencies.

In 2005, ADB adopted its Strategic Response to HIV and AIDS. This document identifies social and economic marginalization, weak health systems, youth and vulnerability, and mobility and migration as major factors contributing to the spread of HIV. Each of these factors is at play at different levels in every country in which ADB operates. ADB plays a key role in mobilizing and supporting government leadership and working with governments to design and implement activities that mitigate the risk of contracting HIV, particularly among people who are poor, vulnerable, or behave in a high-risk manner. ADB understands that the preconditions for a successful response include government commitment and ownership of the situation, multisector participation, a gender-responsive antidiscrimination policy, legal frameworks and regulatory measures, promotion of public–private partnerships, and strong involvement of civil society, including people living with HIV. ADB’s multisector approach has strengthened the response to HIV in many countries. ADB gives first priority to support for leadership and increasing capacity to address HIV at national and regional levels.

In particular, ADB is developing approaches to mitigate the risk and impact of HIV and AIDS in the transport and energy sectors. Its strong relationship with government places it in a particularly strong position to contribute to the response to HIV. ADB understands that preventing HIV transmission requires a comprehensive program that must include:

(i) targeted and general social marketing of condoms;
(ii) community mobilization of high-risk youth, sex workers, men who have sex with men, and mobile populations,

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153 Footnote 1.
including peer-based behavior change;

(iii) use of multiple communication channels, including effective message development by target groups for target groups;

(iv) promotion of (VCT) for single individuals and couples alike;

(v) provision of accessible, efficient (STI) diagnostic and treatment services;

(vi) gender-responsive legal and structural reform;

(vii) a policy environment that protects the rights of all people to access services in a manner that does not threaten their lives livelihoods;

(viii) harm minimization for drug users;

(ix) sound and transparent financial management; and

(x) rigorous and timely monitoring and evaluation.

ADB policies aim to enhance the resilience of affected communities to the HIV epidemic. ADB is committed to promoting and funding both HIV prevention in high-risk environments (especially in the context of an ADB project) and HIV impact mitigation, and is increasingly managing the risks of HIV via responses integrated into the overall design of projects rather than through separate technical assistance components.

Over the past 5 years, an increasing number of ADB loans for infrastructure projects have stipulated that measures for HIV prevention be integrated with the infrastructure development. All large infrastructure projects now routinely include covenants that require that construction workers and communities in the vicinity of construction projects be educated about the danger of HIV and other STIs, although these commitments are not always followed through. Until 2003, these interventions were almost exclusively “awareness raising,” which is now known to have limited effectiveness. Since then, HIV programs have increasingly focused on behavior change, including condom distribution and marketing, promotion of HIV and STI testing, and training health care staff. Recent infrastructure development projects have included specific subcomponents to support health awareness campaigns and access to health services and commodities; these components are supported by loan funds or grants.

ADB also recognizes the impact of HIV on poor individuals and households. It recommends support for HIV projects that specifically focus on women and girls as well as projects that address the poor, the vulnerable, and people affected by HIV and AIDS.154

Gender Mainstreaming in Infrastructure Projects

ADB’s gender and development policy is based on the premise that addressing gender equity and improving the status of women is crucial to achieving sustainable development and effective HIV prevention.155 ADB’s strategic response acknowledges that gender-based discriminatory practices and the low status and lack of power of most women and girls are key factors contributing to HIV transmission, and that the feminization of poverty is a serious issue among people living with HIV.

The policy indicates that gender mainstreaming is a key strategy that

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154 Footnote 152.
will be actively promoted throughout ADB’s work at all stages of the project cycle. Though gender mainstreaming is the preferred strategy under the policy, stand-alone projects directed exclusively at women or projects with special components for women may be warranted to address gender disparities. ADB also recognizes that “investing in women’s health has positive impacts on reducing the country’s population growth rates, improving the health and welfare of children and families, reducing health costs, and contributing to poverty reduction.” The gender and development policy stipulates that in all development activities, women’s participation in decision making is to be encouraged.

HIV components were incorporated into the project design of ADB infrastructure loans to an increasing degree from 2002 to 2007, but gender mainstreaming has not been incorporated into many ADB infrastructure projects to date. Many opportunities have been lost and to the possibilities for addressing gender issues are sometimes limited. Many recent loans lack project-specific gender action plans (GAPs) with systematic steps for effective integration of gender concerns.

Nevertheless there is a trend to incorporate gender-related design features into more aspects of infrastructure loans, particularly to include a gender analysis in the project design. Gender mainstreaming has appeared in ADB infrastructure projects in a range of ways, including

(i) identification and analysis of HIV risks and gender-based vulnerabilities;

(ii) involvment of women in consultation processes;

(iii) commitment to employ women on projects;

(iv) equal pay to men and women for work of equal value;

(v) priority given to women in training and employment opportunities;

(vi) restoration and enhancement of women’s income opportunities;

(vii) availability of microcredit funds;

(viii) linkage of HIV prevention with antitrafficking activities;

(ix) improved targeting of female sex workers and other vulnerable women;

(x) inclusion of interactive, participatory peer education training for sex workers;

(xi) increased targeting of men who have sex with men;

(xii) behavior change activities focusing on both males and females;

(xiii) gender-sensitizing activities incorporated into HIV prevention;

(xiv) gender-sensitive HIV prevention training and capacity building for project implementers and partners;

(xv) access to and social marketing of condoms for all sectors of the community;

(xvi) strengthening of primary health care, including maternal and child health;

(xvii) provision of primary and secondary education for women and girls;

(xviii) collection of sex-disaggregated data; and

(xix) incorporation of gender-based targets and indicators.

Footnote 155.
Various projects in Papua New Guinea (PNG) are beginning to incorporate community empowerment. Lae Port development is a rare good practice example of an infrastructure loan design that includes the involvement of people living with HIV and of people, men and women, at particular risk of HIV infection (including men who have sex with men and sex workers) in the consultation phase, as well as in the provision of services.

ADB’s gender mainstreaming strategies have yet to be fully incorporated into the development of sustainable HIV interventions. Sustainability is enhanced when the community has a sense of ownership of the interventions, including the implementation arrangements. Sustainability improves when

(i) the project includes formalized links between key stakeholders, women’s departments, and government structures dedicated to improving gender equity;

(ii) women, people living with HIV, and other vulnerable populations—sex workers, youth, men who have sex with men, and drug users—have been integrally involved in consultations during the project design phase through focus group discussions;

(iii) gender-sensitive targets and indicators are developed and management systems are strengthened to enable stakeholders to monitor performance;

(iv) the project design incorporates a multisector approach based on strategic partnerships between key stakeholders and the government;

(v) a strategy for partnership with the private sector is developed; and

(vi) a GAP is incorporated into project design, providing comprehensive steps for the implementation of gender and social-inclusion design features into all project components, particularly those related to HIV—together with adequate budget allocations.

Workplace Policy and Practice

The Joint Initiative by Development Agencies for the Infrastructure Sectors to Mitigate the Spread of HIV/AIDS was signed by ADB and five other development agencies (the African Development Bank, the Department for International Development of the United Kingdom, the Japan Bank for International Cooperation, the German Development Agency, and the World Bank) at the International AIDS Conference in 2006. This initiative acknowledges the urgency for action to reduce the impact of HIV in the infrastructure sector, particularly on large-scale and long-term projects.

It endorses the International Labor Organization’s Code of Practice for addressing HIV, providing the basis for including HIV education and AIDS mitigation in infrastructure projects.

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The initiative outlines the intention of the development agencies to coordinate infrastructure efforts in order to cooperate more fully, prevent fragmentation of the response, and contribute to expansion and better targeting of efforts without duplicating what is being done. The signatories committed to mainstreaming HIV prevention and treatment programs into infrastructure sectors, and to strengthening the HIV strategies of partner countries. However, the initiative does not refer to the gender considerations drive the epidemic, such as women’s particular vulnerabilities and discriminatory gender relations.

ADB’s resource book for the transport sector is intended for use by ADB staff, transport ministries, national HIV/AIDS authorities, and key organizations and research institutions working with mobile and migrant populations. Training materials are organized around the stages of the project cycle, to enable operational staff to integrate HIV into the regular project planning. The resource book contains an analysis of key gender issues in the transport and infrastructure sectors and a checklist on gender sensitivity.

In collaboration with several major donors, ADB is currently developing guidelines for harmonizing HIV prevention initiatives in infrastructure operations in the Greater Mekong Subregion (GMS); the basic elements of the HIV prevention package will include advocacy and capacity building, core HIV services, and research, monitoring, and evaluation. These guidelines are the outcome of the 2007 case-study review of HIV interventions associated with transport routes in GMS and two technical workshops in 2008.

Workshop participants proposed the following core principles in their work:

(i) safe mobility and migration;
(ii) a gender-responsive, inclusive approach;
(iii) an ethnic-specific approach;
(iv) community consultation;
(v) consideration of international, regional, national, and local policies and commitment;
(vi) a human-rights-based approach;
(vii) an evidence-informed approach before, during, and after construction;
(viii) monitoring and evaluation mechanisms;
(ix) dialogue between engaging members of legislative bodies and people living with HIV in;
(x) challenging HIV-related stigma and discrimination;
(xi) forging partnerships and building partners’ capacity; and
(xii) tapping into existing local mechanisms.

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Intersections: Gender, HIV, and Infrastructure Operations
Lessons From Selected ADB–Financed Transport Projects

ADB is committed to mainstream gender equality approaches in all sectors of its operations. This publication assesses the nexus between gender inequalities, HIV spread, and infrastructure development. A desk review and comparative analysis of existing infrastructure sector policies, legal and regulatory frameworks related to HIV prevention in Cambodia, the People’s Republic of China, India, Papua New Guinea, and Tajikistan identifies factors which may contribute to promote an effective response to the epidemic. The assessment of and field visits in selected ADB transport project sites identified promising practices for a more sustainable and gender-inclusive response to the epidemic.

About the Asian Development Bank

ADB’s vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region’s many successes, it remains home to two-thirds of the world’s poor: 1.8 billion people who live on less than $2 a day, with 903 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.