State of the Epidemic

July 2010 - The Government of India estimates that about 2.45 million Indians are living with HIV (1.75 - 3.15 million) with an adult prevalence of 0.41% (2006). India’s highly heterogeneous epidemic is largely concentrated in six states — in the industrialized south and west, and in the north-east. On average, HIV prevalence in those states is 4–5 times higher than in the other states. HIV prevalence is highest in the Mumbai-Karnataka corridor, the Nagpur area of Maharashtra, the Nammakkal district of Tamil Nadu, coastal Andhra Pradesh, and parts of Manipur and Nagaland.

The Indian epidemic is concentrated among vulnerable populations at high risk for HIV. The concentrated epidemics are driven by unprotected sex among sex workers and their clients and by injecting drug use with contaminated injecting equipment. Several of the most at risk groups have high and still rising HIV prevalence rates. According to India’s National AIDS Control Organization (NACO), the bulk of HIV infections in India occur during unprotected heterosexual intercourse. Consequently, and as the epidemic has matured, women account for a growing proportion of people living with HIV (38 percent in 2005), especially in rural areas. The low rate of multiple partner concurrent sexual relationships among the wider community seems to have, so far, protected the larger body of people with 99 percent of the adult Indian population being HIV negative. However, although overall prevalence remains low, even relatively minor increases in HIV infection rates in a country of more than one billion people translate into large numbers of people becoming infected.

Recent data suggests there are signs of a decline in HIV prevalence among female sex workers in areas where focused interventions have been implemented, particularly in the southern states, although overall prevalence levels among this group continues to be high. Data also indicate that there is a slow decrease in HIV prevalence among the general population in southern states. Although more analysis is required, this probably means that the number of people becoming newly infected with HIV is decreasing. This decrease is more evident in states such as Tamil Nadu where the intensity of HIV prevention efforts has been high, and where monitoring activities are strong.

Risk Factors

Several factors put India in danger of experiencing rapid spread of HIV if effective prevention and control measures are not scaled up throughout the country. These risk factors include:

- **Unsafe Sex and Low Condom Use**: In India, sexual transmission is responsible for 84 percent of reported HIV cases and HIV prevalence is high among sex workers (both male
and female) and their clients. In Mumbai and Pune, for example, 54 percent and 49 percent of sex workers, respectively, were found to be HIV-positive (NACO, 2005). A large proportion of women with HIV appear to have acquired the virus from regular partners who were infected during paid sex. HIV prevention efforts targeted at sex workers are increasing overall in India. However, the context of sex work is complex and enforcement of outdated laws often act as a barrier against effective HIV prevention and treatment efforts. Although recent data suggest an increase in condom use, in many places condom use is still limited, especially where commercial encounters take place in ‘risky’ locations with low police tolerance for this activity. In addition, interventions tend to primarily target brothel-based sex workers, who represent a minority of sex workers. HIV information and awareness among sex workers appears to be low, especially among those working in the streets. Some prevention programs run by sex workers’ cooperatives —in Sonagachi, Kolkata, for example—have encouraged safe paid sex practices and have been associated with lower HIV prevalence (Kumar, 1998; Jana et al., 1998).

- **Men Who Have Sex with Men (MSM):** Relatively little is known about the role of sex between men in India’s HIV epidemic, but the few studies that have examined this subject have found that a significant proportion of men in India do have sex with other men. In two states where data have been collected, HIV prevalence of 6.8 percent and 9.6 percent were found among MSM in Chennai and Mumbai, respectively (NACO, 2004). More recently, HIV prevalence of 12 percent was found among MSM seeking voluntary counseling and testing services in Mumbai, and 18 percent prevalence was found at 10 clinics in Andhra Pradesh. In some areas, a substantial proportion of MSM also sell sex. Poor knowledge of HIV has been found in groups of MSM. The extent and effectiveness of India’s efforts to increase safe sex practices between MSM (and their other sex partners) will play a significant role in determining the scale and development of India’s HIV epidemic.

- **Injecting Drug Use (IDU):** Injecting drugs with contaminated injecting equipment is the main risk factor for HIV infection in the north-east (especially in the states of Manipur, Mizoram and Nagaland), and features increasingly in the epidemics of major cities elsewhere, including in Chennai, Mumbai and New Delhi (MAP, 2005; NACO, 2005) and in the state of Punjab. Products injected include legal pharmaceuticals (e.g. buprenorphine, pentazocine and diazepam), in addition to heroin. Current interventions targeting IDU tend to be inconsistent, and too small and infrequent to yield demonstrable results. Comprehensive harm reduction programs, including clean needle and syringe exchange and opioid substitution therapy (OST) need to be extended and expanded as a matter of urgency in those parts of India with serious drug injecting-related HIV epidemics.

- **Migration and Mobility:** Migration for work takes people away from the social environment of their families and community. This can lead to an increased likelihood to engage in risky behavior. Concerted efforts are needed to address the vulnerabilities of the large migrant population. Furthermore, a high proportion of female sex workers in India are mobile. The mobility of sex workers is likely a major factor contributing to HIV transmission by connecting high-risk sexual networks.
• **Low Status of Women**: Infection rates have been on the increase among women and their infants in some states as the epidemic spreads through bridging population groups. As in many other countries, unequal power relations and the low status of women, as expressed by limited access to human, financial, and economic assets, weakens the ability of women to protect themselves and negotiate safer sex both within and outside of marriage, thereby increasing their vulnerability.

• **Widespread Stigma**: Stigma towards people living with HIV is widespread. The misconception that AIDS only affects men who have sex with men, sex workers, and injecting drug users strengthens and perpetuates existing discrimination. The most affected groups, often marginalized, have little or no access to legal protection of their basic human rights. Addressing the issue of human rights violations and creating an enabling environment that increases knowledge and encourages behavior change are thus extremely important to the fight against AIDS.

**National Response to HIV/AIDS**

**Government**: Shortly after reporting the first AIDS case in 1986, the Government of India established a National AIDS Control Program (NACP) which was managed by a small unit within the Ministry of Health and Family Welfare. The program’s principal activity was then limited to monitoring HIV infection rates among risk populations in select urban areas.

In 1991, the scope of NACP was expanded to focus on blood safety, prevention among high-risk populations, raising awareness in the general population, and improving surveillance. A semi-autonomous body, the National AIDS Control Organization (NACO), was established under the Ministry of Health and Family Welfare to implement this program. This “first phase” of the National AIDS Control Program lasted from 1992-1999. It focused on initiating a national commitment, increasing awareness and addressing blood safety. It achieved some of its objectives, notably increased awareness. Professional blood donations were banned by law. Screening of donated blood became almost universal by the end of this phase. However, performance across states remained variable. By 1999, the program had also established a decentralized mechanism to facilitate effective state-level responses, although substantial variation continued to exist in the level of commitment and capacity among states. Whereas states such as Tamil Nadu, Andhra Pradesh, and Manipur demonstrated a strong response and high level of political commitment, many other states, such as Bihar and Uttar Pradesh, have yet to reach these levels.

The second phase of the NACP began in 1999 and ended in March 2006. Under this phase, India continued to expand the program at the state level. Greater emphasis was placed on targeted interventions for the most at risk populations, preventive interventions among the general population, and involvement of NGOs and other sectors and line departments, such as education, transport and police. Capacity and accountability at the state level continues to be a major issue and has required sustained support. Interventions need to be scaled up to cover a higher percentage of the population, and monitoring and evaluation need further strengthening. In order to induce a sense of urgency, the classification of states has focused on
the vulnerability of states, with states being classified as high and moderate prevalence (on the basis of HIV prevalence among high risk and general population groups) and high and moderate vulnerability (on the basis of demographic characteristics of the population).

While the government’s response has been scaled up markedly over the last decade, major challenges remain in raising the overall effectiveness of state-level programs, expanding the participation of other sectors, and increasing safe behavior and reducing stigma associated with HIV-positive people among the population.

The Third Phase of NACP (NACP 3) is now entering into its last phase, following a mid-term review in 2009. The program is dramatically scaling up targeted interventions in order to achieve a very high coverage of the most at risk groups. Under NACP 3, surveillance and strategic information management also receive a big boost. While for NACP I the main focus was on safe blood and general prevention, NACP 2 established the State AIDS Control Societies and started working with NGOs. Now with NACP 3, Government will build further on these partnerships with civil society organizations but also work towards greater active involvement of the target groups themselves in the program. There will be greater integration with the health systems response to the epidemic e.g. through provision of ART, STI services, and treatment of opportunistic infections through the National Rural Health Mission.

**Non-Governmental and Community Based Organizations (NGOs & CBOs):** There are numerous NGOs and CBOs working on HIV/AIDS issues in India at the local, state, and national levels. Projects include targeted interventions with key populations; direct care of people living with HIV; general awareness campaigns; and care for children orphaned by AIDS. Funding for non-government and community-based groups comes from a variety of sources: the federal or state governments of India, international donors, and local contributions. Several CBOs have also piloted innovative approaches to tackling the stigma and discrimination that hinders access to effective HIV prevention, treatment and care services among populations most at risk.

**Donors:** India receives technical assistance and funding from a variety of UN partners and bilateral donors. DFID and the World Bank are pooling partners with NACO in the financing of NACP 3. The Bill and Melinda Gates Foundation’s Avahan program, GFATM, the Clinton Foundation and bilateral donors such as USAID, CIDA, and DFID are involved (some since the early 1990s); some at the state level in a number of states.

**Issues and Challenges: Priority Areas**

- **Institutional Capacity:** The national response still faces institutional constraints, both structural and managerial, to continue to scale up at the national and state levels. It is critical that these factors be addressed as the program expands its response to the epidemic. State level performance varies significantly -- an important factor is high turnover of state level project directors, resulting in limited continuity and variability in performance across states. The capacity to mount a strong program is weakest in some of the poorest and most populated states with significant vulnerability to the epidemic.
There is a need for tailored capacity-building activities and increased attention to performance-based financing approaches.

- **Use of Data to Tailor the Response:** Although the national program generates a rich data base for monitoring purposes, there is a need for greater use of data for decision making, including the use of program data and epidemiological data at district and state levels to tailor the response. The epidemiological profiling of districts using data triangulation that was initiated in 2009 is a step in the right direction. This will help to ensure that a lot of the data that is being generated is adequately used for managing the program and informing policies and priorities. Increased emphasis is needed to evaluate behavior change toward the end of NACP 3 and to plan for the future, since changes in the national program key performance indicators are critical for assessing progress towards achievement of program goals.

- **Stigma and Discrimination:** Stigma and discrimination against people living with HIV and AIDS and those considered to be at high risk remain entrenched. Stigma and denial undermine efforts to increase the coverage of effective interventions among key populations such as men having sex with men, sex workers and their partners and injecting drug users. Harassment by police and ostracism by family and community drives the epidemic underground and decreases the reach and effectiveness of prevention efforts. Though there is significant increase in awareness due to efforts by the government, there is much room for improvement, including scaling up to stigma reduction innovations, piloted by communities at risk.

- **Targeted interventions for most at risk populations:** Although India is increasing the coverage of targeted interventions for the most at risk populations, it will be critical to sustain these efforts and expand more rapidly in those areas and among those population groups, which are lagging behind and hard to reach; most importantly, comprehensive harm reduction programs among injecting drug users, and safe sex among men having sex with men.

**World Bank Response**

In 1991, the Government of India and the World Bank expanded their collaboration on infectious disease control programs and by 1992 the first National AIDS Control Project was launched with a World Bank credit of US$84 million. The project helped the government to broaden prevention efforts and to establish institutions and procedures necessary to curb the spread of HIV. Building upon lessons learned from the first project, India requested World Bank financing for a follow-on project. With a World Bank credit of US$191 million, the Second National HIV/AIDS Control Project was started. The use of State AIDS Control Societies to speed the distribution of funds at the state level helped increase the pace of implementation. In 2006-07, the Bank worked closely with the Government of India and other donors on the preparation of the third National HIV/AIDS Control Project (US$ 250 million) which was launched in July, 2007. The mid-term review of NACP 3, in December 2009, showed encouraging progress towards the national goals of curbing the epidemic and preventing new infections. NACP 3 coordinates all donor and NGO activities within the scope of the country’s national program on AIDS control - in consonance with the Three Ones. It aims for higher coverage of key
populations at risk of HIV infection (NACP 2 covered 10-60% of key populations, NACP 3 envisages to cover 80%). NACP 3 also clearly differentiates activities that must be delivered through general health services and places responsibility on those relevant government health programs. It will also further support CBOs to deliver about half of all interventions targeting the most at risk groups.

The Bank has undertaken analytical work to strengthen the national response, including an analysis of the full array of costs and consequences likely to result from several plausible government policy options regarding funding for anti-retroviral therapy (ART). The Bank has also carried out sector work on the economic consequences of the HIV/AIDS epidemic on India. In April, 2007, the Bank, together with UNODC, AusAID and SIDA, sponsored an inter-country consultation on preventing HIV among injecting drug users. To inform the mid-term review of NACP 3, the Bank collaborated with NACO on an impact assessment of targeted interventions for the prevention of HIV. The impact evaluation shows a significant effect on behavior change and HIV prevalence among female sex workers in high (intervention) intensity areas, attributable to the program. Preliminary data also demonstrate the high cost effectiveness of targeted HIV prevention interventions. An analysis of the economic development risks of HIV in India was conducted in 2009. The study shows the risk of escalating concentrated epidemics, the welfare costs, the disproportionate impact among the poor and the burden on the health system – and health budget -- of an increasing number of people living with AIDS, who will require treatment. The study contributes to the evidence base for an emphasis of prevention as the most cost beneficial and effective national response.