

Document of  
The World Bank

Report No: ICR2437

IMPLEMENTATION COMPLETION AND RESULTS REPORT  
(IDA-42990)

ON A

CREDIT

IN THE AMOUNT OF SDR 167.9 MILLION

(US\$259 MILLION EQUIVALENT)

TO THE

REPUBLIC OF INDIA

FOR A

THIRD NATIONAL HIV/AIDS CONTROL PROJECT

March 26, 2013

Human Development Sector  
South Asia Region

## CURRENCY EQUIVALENTS

(Exchange Rate at Closing on September, 31, 2012)

Currency Unit = Rupees (Rs)

Rs52.75 = US\$1.00

US\$1.00 = SDR 0.64843

FISCAL YEAR

April 1- March 31

## ABBREVIATIONS AND ACRONYMS

AIDS	Acquired immune deficiency syndrome
ANC	Antenatal care
ART	Antiretroviral therapy
CAS	Country Assistance Strategy
CBO	Community-based organization
CD4	Cluster of differentiation 4 (HIV receptor in humans, a glycoprotein found mainly on the surface of helper T cells)
DIR	Detailed Implementation Review
DfID	Department for International Development, United Kingdom
FA	Financing Agreement
FSW	Female sex workers
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	Human immunodeficiency virus
HRG	High-risk groups
IBBS	Integrated bio-behavioral survey
ICR	Implementation Completion Report
ICTC	Integrated Counseling and Testing Center
IC-WM	Infection Control and Waste Management
IDA	International Development Association
IDU	Injecting drug user
LAC	Link ART Centre
MDG	Millennium Development Goal
M&E	Monitoring and evaluation
MSM	Men who have sex with men
MTR	Mid-term Review
NACO	National AIDS Control Organization
NACP	National AIDS Control Program
NGO	Nongovernmental organization
NRHM	National Rural Health Mission
PAD	Project Appraisal Document
PDO	Project Development Objectives
PLHIV	People living with HIV (includes people with AIDS)
PMTCT	Preventing maternal-to-child transmission
PPTCT	Prevention of parent-to-child transmission
QALP-2	Quality Assessment of Lending Portfolio Review

QER	Quality Enhancement Review
Rs	Rupees
RTI	Reproductive tract infection
SACS	State AIDS Control Societies
SMART	Specific, measureable, actionable, realistic, time-bound (variations exist)
STI	Sexually transmitted infection
TA	Technical assistance
TAP	Tribal Action Plan
TB	Tuberculosis
TI	Targeted interventions
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDP	United National Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

Vice President: Isabel M. Guerrero  
 Country Director: Onno Ruhl  
 Sector Manager: Julie McLaughlin  
 Project Team Leader: Sameh El-Saharty  
 ICR Team Leader: Sameh El-Saharty

# INDIA

## THIRD NATIONAL HIV/AIDS CONTROL PROJECT

### CONTENTS

#### Data Sheet

- A. Basic Information
- B. Key Dates
- C. Ratings Summary
- D. Sector and Theme Codes
- E. Bank Staff
- F. Results Framework Analysis
- G. Ratings of Project Performance in ISRs
- H. Restructuring
- I. Disbursement Graph

1. Project Context, Development Objectives, and Design.....	1
2. Key Factors Affecting Implementation and Outcomes .....	5
3. Assessment of Outcomes .....	14
4. Assessment of Risk to Development Outcome.....	24
5. Assessment of Bank and Borrower Performance .....	24
6. Lessons Learned .....	28
7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners .....	29
Annex 1. Project Costs and Financing.....	30
Annex 2. Outputs by Component .....	31
Annex 3. Economic and Financial Analysis.....	34
Annex 4. Bank Lending and Implementation Support/Supervision Processes .....	36
Annex 5. Beneficiary Survey Results .....	38
Annex 6. Stakeholder Workshop Report and Results.....	39
Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR.....	43
Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders .....	44
Annex 9. List of Supporting Documents .....	45

<b>A. Basic Information</b>			
Country:	India	Project Name:	India: Third National HIV/AIDS Control Project
Project ID:	P078538	L/C/TF Number(s):	IDA-42990
ICR Date:	12/26/2012	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	GOVERNMENT OF INDIA
Original Total Commitment:	XDR 167.90M	Disbursed Amount:	XDR 156.21M
Revised Amount:	XDR 167.86M		

**Environmental Category: B**

**Implementing Agencies:**

National AIDS Control Organization, Department of AIDS Control, Ministry of Health and Family Welfare

**Cofinanciers and Other External Partners:**

Department for International Development, United Kingdom (DfID)

<b>B. Key Dates</b>				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	06/16/2005	Effectiveness:	09/05/2007	09/05/2007
Appraisal:	07/28/2006	Restructuring(s):		
Approval:	04/26/2007	Mid-term Review:		12/07/2009
		Closing:	09/30/2012	09/30/2012

<b>C. Ratings Summary</b>	
<b>C.1 Performance Rating by ICR</b>	
Outcomes:	Satisfactory
Risk to Development Outcome:	Low
Bank Performance:	Satisfactory
Borrower Performance:	Satisfactory

<b>C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)</b>			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Satisfactory	Government:	Highly satisfactory
Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Satisfactory
<b>Overall Bank Performance:</b>	Satisfactory	<b>Overall Borrower Performance:</b>	Satisfactory

<b>C.3 Quality at Entry and Implementation Performance Indicators</b>			
<b>Implementation Performance</b>	<b>Indicators</b>	<b>QAG Assessments (if any)</b>	<b>Rating</b>
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	Satisfactory
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	Satisfactory
DO rating before Closing/Inactive status:	Highly Satisfactory		

<b>D. Sector and Theme Codes</b>		
	<b>Original</b>	<b>Actual</b>
<b>Sector Code (as % of total Bank financing)</b>		
Central government administration	15	15
Health	40	60
Other social services	25	15
Subnational government administration	20	10

	<b>Original</b>	<b>Actual</b>
<b>Theme Code (as % of total Bank financing)</b>		
HIV/AIDS	29	40
Health system performance	29	25
Other social development	14	10
Other social protection and risk management	14	15
Population and reproductive health	14	10

<b>E. Bank Staff</b>		
<b>Positions</b>	<b>At ICR</b>	<b>At Approval</b>
Vice President:	Isabel M. Guerrero	Praful C. Patel
Country Director:	Onno Ruhl	Isabel M. Guerrero
Sector Manager:	Julie McLaughlin	Anabela Abreu
Project Team Leader:	Sameh El-Saharty	Kees Kostermans, Suneeta Singh
ICR Team Leader:	Sameh El-Saharty	
ICR Primary Author:	Joy de Beyer	

## F. Results Framework Analysis

### Project Development Objectives (from Project Appraisal Document)

The objective of World Bank support is to contribute to the NACP III goal of halting and reversing the AIDS epidemic by attaining the following project development objectives in accordance with two of the national program's strategic objectives:

- 1) achieving behavior change by scaling up prevention of new infections in high-risk groups and the general population; and
- 2) increased care, support, and treatment of people living with HIV/AIDS (PLHIV).

### Revised Project Development Objectives (as approved by original approving authority)

Not applicable

#### (a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years	Remarks
Percentage of FSW who report using a condom with their most recent client	50%	80%	NA	91% [83-97%]	Mean [range] estimates from BSS data in 6 states, 2009 (unpublished). Current value is consistent with data from Integrated Bio
Percentage of male sex workers who report using a condom with their most recent client	20%	60%	NA	86% [43-100%]	
Percentage of IDUs who have adopted behaviors that reduce transmission of HIV, that is who (a) avoid both sharing injecting equipment during the last month AND (b) who report using a condom with their most recent sexual partner	30%	70%	NA	(a) 62% [43-91%] (b) condom use 88% [77-95%]	Behavioral Assessment, southern high HIV prevalence states (2006 and 2009)
Number of people with advanced HIV infection receiving antiretroviral combination therapy	42,000	340,000	NA	516,412	Source: CMIS NACO (JIR, June 2012) 516,412 adults alive and on ART including 4,208 persons on second line ART

**(b) Intermediate Outcome Indicator(s)**

<b>Indicator</b>	<b>Baseline Value</b>	<b>Original Target Values (from approval documents)</b>	<b>Formally Revised Target Values</b>	<b>Actual Value Achieved at Completion or Target Years</b>	<b>Remarks</b>
Percentage of FSW reached through TI in the last 12 months	20%	60%	NA	88%	Based on CMIS data; targeted interventions (TI) have reached 88% of FSW (770,000) in past 12 months (as of September 2012)
Percentage of IDUs reached through TI in the last 12 months	20	80%	NA	81%	Based on CMIS data; TI have reached 80% of IDUs (142,000) in past 12 months (as of September 2012)
Percentage of MSM reached through TI in the last 12 months	NA	80%	NA	67%	Based on CMIS data; TI have reached 67% of MSMs (274,000) in past 12 months (as of September 2012)
Number of TI implemented by target group	1,000	2,100	NA	1821	NACO funded are 1,631 and 190 transitioned from DP in September, 2012.
Percentage of SACS who achieve at least 80% of planned expenditure targets	Nil	80%	NA	NA	
Percentage of districts which have done high-risk mapping	Nil	80%	NA	75%	One time activity with recurring site validation process. Mapping completed for 21 out of 28 states. In addition, in the context of the Link Worker scheme, mapping was done in rural areas in 127 districts of 18 states.
Percentage of SACS that submit their most recent dashboards to NACO on time	Nil	80%	NA	97%	July - September 2012. Source: NACP-III
Percentage of relevant districts which have mapped HRG in tribal areas and developed Tribal Action Plans.	Nil	100%	NA	100%	All 192 districts with minority tribal populations developed a Tribal Action Plan



Health personnel receiving training (number)	1500	200,000	NA	249,112	This is a core indicator added after program implementation started.
--	------	---------	----	---------	--

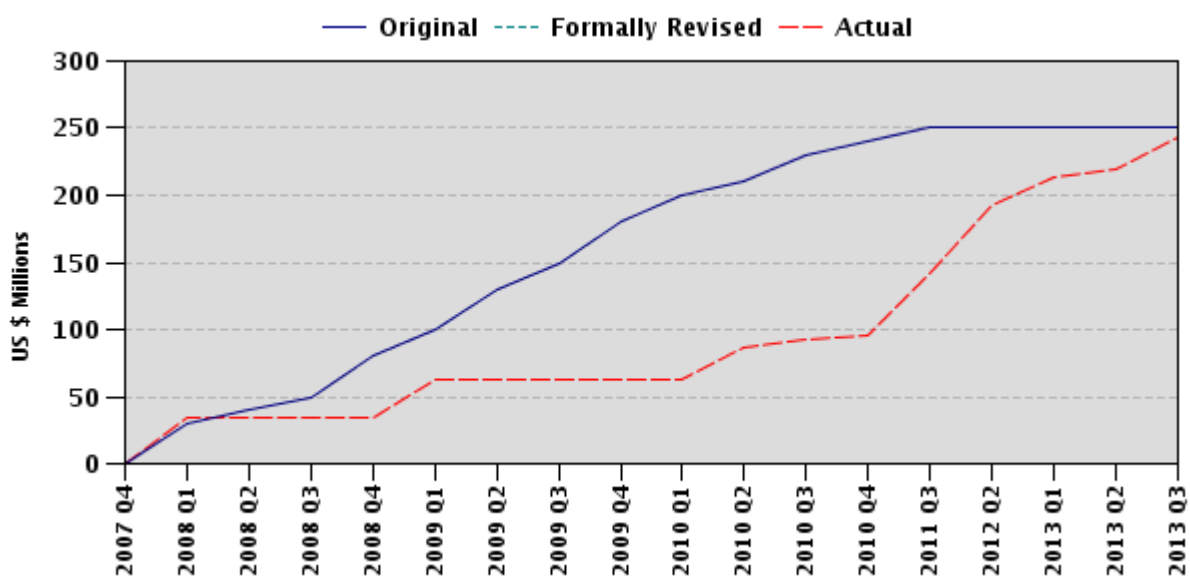
### G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (US\$ million)
1	06/26/2007	Satisfactory	Satisfactory	0.00
2	12/21/2007	Satisfactory	Highly Satisfactory	35.00
3	07/21/2008	Satisfactory	Highly Satisfactory	35.00
4	01/18/2009	Satisfactory	Satisfactory	63.27
5	06/16/2009	Satisfactory	Satisfactory	63.27
6	01/18/2010	Highly Satisfactory	Satisfactory	86.24
7	06/19/2010	Highly Satisfactory	Satisfactory	95.93
8	01/29/2011	Highly Satisfactory	Satisfactory	101.06
9	06/13/2011	Highly Satisfactory	Satisfactory	142.23
10	02/07/2012	Highly Satisfactory	Satisfactory	191.99
11	09/26/2012	Highly Satisfactory	Satisfactory	218.90

### H. Restructuring (if any)

Level 2 restructuring was approved in June 2010 to change financing shares, amend duplicative audit requirements, adjust procurement thresholds in line with inflation, and allow additional consultant procurement methods.

### I. Disbursement Profile





## 1. Project Context, Development Objectives and Design

### 1.1 Context at Appraisal

The project was prepared during a time of very rapid economic growth (6.5% per capita in 2005-09), an impressive reduction in poverty (from 37% in 2004/05 to 30% in 2009/10, estimated by the government), and more gradual but steadily improving health outcomes. But global experience has shown how sharply acquired immune deficiency syndrome (AIDS) could reverse health gains.

**HIV trends.** Prevalence of human immunodeficiency virus (HIV) infection in India was estimated to have reached 0.9% of India's adult (15–49 years) population by 2005, mostly concentrated in groups engaging in high-risk behaviors of unprotected sex with multiple partners, unprotected anal sex, and injecting drug use with shared needles. National surveillance data showed rising HIV rates in rural areas and among women, suggesting its potential to spread in the general population. As six states (30% of India's population) and several districts in three other states already had high HIV prevalence by UNAIDS criteria, India seemed to be closely approaching a generalized high prevalence epidemic.<sup>1</sup> Existing social power dynamics, gender imbalance, poverty, harmful traditions, and discriminatory legal frameworks and practices heightened risk and vulnerability to HIV, and there was real concern that economic and social changes might change sexual behaviors in ways that would undermine the protection provided by India's low rate of multiple concurrent sexual relationships.

**People living with HIV.** By 2007, at appraisal, there were an estimated 5.7 million people living with HIV (PLHIV) in India, most unaware of their infection.<sup>2</sup> Stigma and discrimination in workplaces, medical settings, and society was a deterrent to being tested for HIV. The need to scale up HIV testing, and provide appropriate care, treatment, and support to successively larger cohorts of PLHIV posed a formidable health system challenge.

**Government response.** The government had gradually enhanced its response after creating a National AIDS Control Program (NACP) in 1986, and had set ambitious goals for halting and reversing India's HIV/AIDS epidemic by 2011, ahead of the 2015 Millennium Development Goal (MDG) 6 target. Following International Development Association (IDA) credits of US\$84 million in 1992 and US\$191 million in 1999, NACP III was the third phase of sustained Bank support that helped the government develop an effective blood safety program; increase the numbers of clinics for sexually transmitted diseases and centers for voluntary counseling and testing; expand prevention of parent-to-child transmission services delivered through the quasi-autonomous National AIDS Control Organization (NACO); strengthen state-level implementation structures; and undertake widespread education and information efforts. The NACP began providing free antiretroviral therapy (ART) in high-prevalence states in April 2004, benefiting 37,368 people by March 2006, and over 47,000 people by early 2007.

**Rationale for Bank involvement.** The government requested continued IDA support to help ensure adequate, flexible, and continuous financing for the NACP. Despite significant increases in financing for HIV from other development partners, IDA's engagement was important for

---

<sup>1</sup> UNAIDS criteria: a generalized, high-prevalence epidemic - above 1% in antenatal care (ANC) attendees and above 5% in high-risk groups (HRG); a moderate, concentrated epidemic- above 5% in HRG, below 1% in ANC attendees.

<sup>2</sup> The estimate was revised down to 2.49 million later in 2007 based on new data and estimation methods.

supporting strategic, well-targeted scale-up of effective prevention and faster expansion of government-funded treatment, care, and support for PLHIV. IDA brought particular added value through (i) strong technical expertise in HIV epidemic analysis and tailored, cost-effective program response; (ii) convening power to help the NACO/government lead a well-coordinated and coherent effort; (iii) ability to support government efforts to increase convergence of NACP with other health programs through ongoing projects supporting health sector reform and the centrally sponsored Reproductive and Child Health and Tuberculosis Control Programs; and (iv) IDA's experience under NACP I and II. The project aligned fully with (i) the Country Assistance Strategy (CAS) "focus on outcomes... and ...selectivity" in supporting carefully targeted activities to achieve MDG 6; with priority given to AIDS in the South Asia Regional Strategy; (ii) the focus on prevention in the South Asia Region (SAR) HIV Strategy; and (iii) the government's conviction that "AIDS is now becoming a major national problem and we need to tackle this on a war-footing" (Prime Minister Manmohan Singh, Independence Day address as reported in *The Hindu*, August 15, 2005).

While the project was being appraised, there was controversy and uncertainty about the size of India's epidemic. Some experts believed that actual numbers were far higher than the estimates. In fact, new data and better estimation models suggested that HIV prevalence (the percentage of the adult population infected) and the total number of PLHIV were far lower (see section 3.1). This raised concern that the finance ministry might reduce funding and priority for HIV. However, experts pointed out that the adjusted estimates did not change the need for effective prevention, nor the estimated size and high infection risk among the groups where most new infections were occurring—men who have sex with men (MSM), injecting drug users (IDUs), sex workers and their clients, and their sexual partners. Thus, even with the revised much lower estimates, the project objectives and design were fully relevant and important.

## **1.2 Original Project Development Objectives (PDO) and Key Indicators (as approved)**

The Project Appraisal Document (PAD) states:

"The objective of World Bank support is to contribute to the NACP III goal of halting and reversing the AIDS epidemic by attaining the following project development objectives in accordance with two of the national program's strategic objectives:

- achieving behavior change by scaling up prevention of new infections in high-risk groups (HRG) and the general population; and
- increased care, support and treatment of PLHIV."

The Financing Agreement (FA) statement of the objectives differs:

"The objective of the project is to support the third phase of the Recipient's National AIDS Control Program (2007-2012) through:

- promotion of behavior change by scaling up prevention efforts in the high-risk groups and the general population; and
- increased care, support and treatment of People Living with HIV/AIDS."

The FA requires only that the project "support the third phase of the NACP ... through *promotion* of behavior change" whereas the PAD requires the project to "contribute to ... halting and reversing the AIDS epidemic ... by *achieving* behavior change". This report will assess the project against both the FA and the more demanding PAD standard, which is consistent with the key project indicators.

“The key indicators which will be used to track the project development objectives of World Bank support to NACP III are:

- percentage of female sex workers who report using a condom with their most recent client
- percentage of male sex workers who report using a condom with their most recent client
- percentage of injecting drug users who have adopted behaviors that reduce transmission of HIV, that is who avoid both sharing injecting equipment during the last month AND who report using a condom with their most recent sexual partner
- number of people with advanced HIV infection receiving antiretroviral combination therapy.”

### **1.3 Revised PDO (as approved by original approving authority) and key indicators, and reasons/justification**

There was no formal revision to the PDO or key project indicators. One IDA core indicator (number of health providers trained) was informally added in 2009.

### **1.4 Main Beneficiaries**

Two primary target groups were defined: PLHIV, and groups whose behaviors put them at highest risk of HIV infection and their sexual partners. The HRG—notably sex workers, MSM, and IDUs, and their sexual partners—would benefit from more intensive and effective prevention efforts supported by the project; PLHIV would benefit from increased access to testing, ART, care, and support. The general population—especially women, young people, and others made more vulnerable by their social or economic situation—would also benefit from effective prevention. Activities aimed at strengthening capacity to provide HIV services at national, state, and district level would benefit hospitals, clinics, and other health service providers. NACO would benefit from support to expand and strengthen its capabilities, especially through support for a strategic information management unit to collect, analyze, and use data for program decisions.

### **1.5 Original Components (as approved)**

IDA’s funding for NACP III was explicitly intended to be flexible, depending on specific government needs and support from other development partners. There were four components (program/project costs are shown in parentheses):

**Component 1: Scale Up Prevention Efforts** (\$1,652 million/\$424 million). Prevention among HRG was explicitly stated as the project’s top priority. The main activities planned were:

- 2,100 targeted interventions (TI) to reach 1 million female sex workers (FSW) and their partners, 1.15 million MSM, and 190,000 IDUs and their partners;
- scale up interventions targeting highly vulnerable groups identified as long-distance truckers (3 million) and short-duration migrant workers (8.9 million); and
- devise strategies to address the most vulnerable among the general population, including youth and women.

**Component 2: Strengthen Care, Support, and Treatment** (\$414 million/\$28 million). Within a comprehensive strategy to strengthen family and community care, provide psychosocial support for PLHIV, and ensure accessible, affordable, and sustainable treatment services; the activities under this component were to provide:

- care and support services to 380,000 PLHIV including through strengthening PLHIV networks and linking them to service centers and risk-reduction programs;
- ART to 340,000 people including 40,000 children (in the public sector); and
- treatment of opportunistic infections to 330,000 persons and tuberculosis (TB) treatment to 2.8 million persons.

**Component 3: Augment Capacity at District, State, and National Level** (\$254 million/\$27 million). The main activities were to:

- develop standard operating procedures for crucial HIV services and set up internal and external quality assurance systems;
- establish improved and performance-based contracting arrangements with private providers; and
- upgrade capacity to extend the program, and strengthen training and technical support capacities within government, as well as nongovernmental and community-based organizations (NGOs and CBOs).

**Component 4: Strengthen Strategic Information Management** (\$76 million/\$33 million). The main activities were to:

- strengthen the monitoring framework to provide more accessible and ready-to-use information across program content and management functions;
- enhance HIV surveillance systems to provide epidemiological, clinical, and behavioral data, especially for specific high-risk behaviors, at state and sub-state levels; support a strategic information management unit; and train program officers to use available information for evidence-based planning; and
- conduct independent evaluation and research to inform and support program implementation.

The causal linkages between the first two components and the PDO of preventing new HIV infections and providing care, support, and treatment to more PLHIV are self-evident.

**1.6 Revised Components**—No components were revised.

### **1.7 Other significant changes**

The project was implemented very largely as planned. Three changes needed formal approval by the Regional Vice-President (level 2 project restructuring approved in June 2010); namely:

- A change in the financing shares, by “depooling” part of the government’s financial contribution, with a corresponding increase in the percentage of eligible expenditures in categories (1) and (2) financed by IDA from 48% to 55% and by DfID from 35% to 45% with effect from 1 April 2008. This was to speed up lagging disbursements and enable full disbursement of IDA and DfID funds, and enable the government to pay for a very large single-source information, education, and communication (IEC) contract that IDA preferred not to reimburse. There was no change in overall financial contribution levels.
- The Management Audit (FA Schedule 2, Section II D) for the State AIDS Control Societies (SACS) was merged with the internal audit to streamline the auditing process, which had proved duplicative.
- Minor changes in procurement methods were authorized (adding two additional consultants hiring methods—Fixed Budget contracts and contracts with United Nations (UN) agencies, and relaxing the requirement that even those medical supplies not procured under international competitive bidding be governed by World Health

Organization (WHO) Good Manufacturing Practices) and, to adjust for inflation, increases from US\$75,000 to US\$100,000 were agreed for both the prior review threshold for single-source consultancy contracts issued to firms and the annual ceiling for NGOs and CBOs for contracting for TI/care, support, and treatment services.

## 2. Key Factors Affecting Implementation and Outcomes

### 2.1 Project Preparation, Design and Quality at Entry

The project was prepared in two years (2005 to 2007),<sup>3</sup> a reasonable time given the scope, programmatic approach, and thoroughness of preparation. This is in the typical range for India. Project design benefited from the recommendations of a technical quality enhancement review (QER) panel of the World Bank in July 2006, shortly before appraisal.

The Bank team included recognized world experts in HIV prevention and treatment. The co-task team leaders combined extensive AIDS experience and good understanding of the country context. There was close collaboration and coordination with key development partners (DfID, USAID, GFATM, Bill & Melinda Gates Foundation, UNAIDS, WHO, UNDP, UNICEF, and the Clinton Foundation), exemplifying the “Three Ones” approach (which applies the Monterey Consensus and Rome Declaration on Harmonization of Development Assistance to HIV/AIDS). Mutual respect and trust is evident in correspondence between the Bank, the client, and other partners.

**Solid rationale for Bank involvement.** The clear rationale is well reflected in the project objectives and design: “to help ensure adequate, flexible and continuous funding” to meet the “urgent need to strategically scale up prevention, care and treatment.” The PDO and two main components focus fully on this need, and the other two small components support that focus. Institutions and procedures had all been well tested in previous projects, so preparation could build on strengths and work with NACO to make improvements.

**Responsive PDO.** These reflect an effective response to India’s circumstances and priorities. It would have been preferable to ensure consistent specification in the PAD and FA (section 1.2 notes the differences). While the PDO are qualitative, a set of “SMART” project indicators are specified.

**Strong government commitment and stakeholder engagement.** These are evident in the preparation and participation of a wide range of stakeholders.<sup>4</sup> “The process for preparing the project seems very inclusive and positive” (QER, July 10, 2006). A NACO planning team led preparation of the Strategic Framework for the NACP; 14 working groups gave detailed expert consideration to specific topics<sup>5</sup> including human resources requirements and improving the

---

<sup>3</sup> The project identification mission took place in January/February 2005, pre-appraisal in October 2005, appraisal in July/August 2006, negotiations on February 26, 2007, Board approval on April 26, 2007, and effectiveness on October 5, 2007.

<sup>4</sup> Stakeholders included the public and private sectors, civil society, PLHIV and other high risk groups, academics, and development partners.

<sup>5</sup> The 14 topics: TI; STI/RTI treatment and convergence with reproductive and child health; Condom programming; Communication, advocacy and community mobilization; Mainstreaming and partnerships; Gender, youth, adolescents, and children; Service delivery; Care, support, and treatment; Greater involvement of people living with HIV/AIDS (GIPA), human rights, and legal and ethical issues;

financial management processes and system. There were consultations with the public through the internet, and face-to-face with civil society organizations and HIV-positive people; two state and one national "Three Ones" consultations; and state-level meetings. (Reports are available summarizing these consultations). An important part of preparation was a two-day workshop<sup>6</sup> for SACS heads and other key stakeholders to explain the logic, science, and evidence behind the project design.

**Benefits of key lessons incorporated in project design.** The design was strongly guided by lessons from the previous two AIDS projects and other IDA health projects in India, which helped to deepen understanding of the factors driving the HIV epidemic, and to bring global and regional experience and knowledge to bear.<sup>7</sup>

**Rigorous background analysis.** Specifically for the project, it was extensive and much of it of excellent quality. A detailed analysis of the epidemiology and response ("AIDS in South Asia", World Bank, 2006) was peer-reviewed by global experts. The main findings and recommendations of six research studies that informed project design are summarized in the PAD Annex 16 (studies on MSM, HIV among police and paramilitary forces, rural populations, health workers, social marketing and communications), and a social assessment of HIV among tribal populations was the basis for a Tribal Action Plan. Analysis of the project economic and financial aspects, and cost effectiveness comparisons of various prevention and treatment scale-up options are documented in PAD Appendix 10. A detailed Governance and Accountability Plan was developed.

**Straightforward and coherent project design.** The project had four components reinforcing each other. The programmatic approach ensured full alignment of project goals with national goals. The complexity of working with 38 states was well recognized and managed in part by prioritizing states and districts with greatest prevalence and largest increases in new infections.

---

Programme management; Financial management; Research, development, and knowledge management; Surveillance; and M&E.

<sup>6</sup> In this workshop, the dynamics of the epidemiology of HIV in India were explained, the biology of HIV infection and treatment, and the Chief Executive Officer of the Avahan project (a renowned management consultant) talked about the business imperative of reducing stigma and discrimination, which are major barriers to reaching the project objectives.

<sup>7</sup> Key lessons noted in the PAD and reflected in the project design (and subsequent implementation) included: (i) the most effective and cost-effective way to stop HIV infections is to scale up targeted prevention with "laser-like focus" on groups and areas where most new infections occur, with high coverage of groups at highest risk of becoming infected and spreading infection; (ii) NGOs/CBOs have proved most able to reach highly marginalized HRG (MSM, sex workers and IDUs), especially using peer groups; (iii) sentinel surveillance data must be triangulated with data from behavioral surveys and geographical mapping to track epidemic trends and patterns; (iv) HRG are fluid and mobile so small-area mapping must be repeated periodically to identify coverage gaps; (v) mapping is done best using CBOs and participatory methods; (vi) a more rigorous NGO/CBO selection process, careful monitoring, and quality assurance and standards can improve accountability, quality, and results; (vii) attention needs to be given to the enabling environment within which interventions are implemented (e.g. working with the police and local authorities, raising awareness among the general population, and combating stigma); (viii) convergence between HIV services and broader reproductive health and infectious disease services can improve effectiveness and efficiency of all programs; (ix) prevention and treatment are mutually reinforcing because of their biological and social synergy; and (x) sustained support can do much to strengthen management capacities (including financial management, procurement, and information systems) at central and state levels.



The design also recognized the need to enhance capacity within NACO (components three and four).

**Design improvements.** The project improved on earlier projects in six main ways: (i) a much stronger focus on TI aiming to fully cover clearly identified HRG; (ii) improved information systems and more strategic and routine use of data for program management and to adjust plans; (iii) progressive decentralization of activities to states and districts to better respond to local conditions, coupled with continuous technical support and capacity building; (iv) more attention to the enabling environment and to ownership by and organization of target communities; (v) more strategic, professional, and well-coordinated IEC; and (vi) taking advantage of the recently (2005) established National Rural Health Mission (NRHM) and increasingly integrating HIV services—especially testing, counseling, and treatment—with other health care services, providing the necessary skills training for health care providers. To this effect, one of the preparatory studies assessed changes needed in institutional and organizational arrangements and supplies in health facilities, and in the knowledge of medical and paramedical personnel and their attitudes to HRG and others seeking HIV-related services.

**Generally appropriate risk assessment.** The pre-appraisal decision meeting (July 2006) considered whether risks had been appropriately assessed and addressed. Hindsight suggests that most were, except for two: (i) the ability to identify, reach, and effectively change the behaviors of MSM and IDUs was overestimated; and (ii) early-expenditure disallowances related to central procurement and supply of drugs and the ensuing decision by NACO to withhold submission of all reimbursement claims until after the expenditures were audited (instead of submitting claims against Interim Unaudited Financial Reports) was not foreseen—an unprecedented change in procedure that meant that many of the measures to strengthen and streamline financial management did not produce the intended results in avoiding disbursement delays.

## 2.2 Implementation

**Factors contributing to consistently strong implementation of planned activities.** They included the following:

- *Continuity of a strong Bank team*, with one task team leader for most of the project, supported by a local team with excellent working relationships with NACO, as well as a Delhi location of the senior Regional AIDS coordinator until the final months of the project. Supervision was systematic, detailed, and every six months throughout implementation, with an intensive Mid-term Review (MTR).
- *Good donor coordination and harmonization among all the large development partners.* This is reflected in joint support for the national program, reliance on a single program monitoring system, information sharing, and Joint Implementation Reviews throughout the project. These measures avoided duplicative reporting, saved much time for NACO, and enabled the donor group to do more thorough reviews and field visits to at least four states a year (five during the MTR visit.)
- *Clearly documented procedures, guidelines, and standards for all project aspects.* They were in place when implementation began: all manuals and guidelines had been reviewed during preparation and many were revised and improved.
- *Consistent strong government commitment to the national AIDS response.* This is reflected, among other areas, in adequate counterpart funds and the decision to allocate limited IDA resources to AIDS; assignment of highly competent and experienced officials to run NACO;

permanent civil service posts for NACO and SACS financial managers and other key posts (not fixed-term contractual staff as is the norm for other projects). This provided continuity in staffing and low turnover, and enabled the NACO and SACS teams to become increasingly skilled and knowledgeable.

- *A strong computerized management information system (CMIS) and surveillance data triangulation.* The CMIS included financial management information, and data were triangulated with data from surveillance and special studies that were used in making decisions, directing efforts, and improving activity implementation. All states were classified by prevalence rates (and later by level of risk) and periodically reclassified in response to data trends. NACO customized and adjusted interventions as the epidemic patterns changed. This exemplifies best practice advice from the Bank, UNAIDS, and others to “know your epidemic” and match the HIV response to the epidemic’s particularities and trends.
- *High caliber of NACO management, and good use of technical assistance.* For example, the contract to develop and continuously upgrade a customized computerized Centralized Program Financial Management System included two IT/financial specialists working on site at NACO for the project duration. After inevitable “teething” problems with the system in the first year or two, it proved a time-saver and a good tool for project management.
- *Numerous “best practice” innovations by NACO.* These included the Link-Worker Scheme, Link and Link-plus Centers; the computerized financial management system; initial capacity assessment and annual performance reviews of NGOs; and methods for assessing the numbers of HRG (see Annex 6).
- *Very thorough preparation for the MTR, including analysis and recommendations from 10 special studies.* These studies assessed impact, coverage, and quality of interventions; NACO management capacity and performance; and budget projections and gap analysis. Also, suggestions were solicited from implementers, beneficiaries, and other stakeholders through the Solution Exchange Network.<sup>8</sup>
- *Constructive and real beneficiary participation in planning, evaluation, data collection, and outreach to peers.* Some support was provided to build capacity and organizational skills in target groups to enable an increasing role in implementation.
- *Attention to quality and efficiency.* Elements included Technical Support to states, districts and implementers, as well as clear procedures, guidelines and manuals, and regular training (some details are provided in section 3.3).
- *Greatly accelerated demand for ART.* In 2008, the High Court of India ruled that no PLHIV who met the ART eligibility criteria should be denied access to treatment. In 2011, in line with revised UNAIDS and WHO evidence-based good practice guidance, the CD4 count threshold for starting ART was raised from 250 to 350, instantly increasing the number of eligible people.

**Factors causing implementation difficulties.** They included the following:

- *India’s immense size and diversity.* This posed a particular challenge for a national program that had to reach some of society’s most marginalized groups and to change deeply personal, often secret, taboo and illegal behaviors.

---

<sup>8</sup> An online forum that enables people from the grassroots, NGOs, multi- and bilaterals, private sector, academia, activists and government to share experience and knowledge and facilitate collaboration.

- *Huge project scale and scope.* The project funded about 10% of a \$2.575 billion multifaceted program that included an enormous range of activities and technical areas. For example, the MTR Aide Memoire had 100 specific recommendations. Any program of such scale and scope poses management and implementation challenges, exacerbated by the complexity and sensitivity of many aspects of HIV.
- *Federal–state allocations of responsibilities.* Health is a state-level responsibility in India, so states are responsible for implementation, and the central level for oversight and support. Accountability to the Bank was at central level. The center has few levers and little direct authority over the states, making the relationship between the national Implementing Agency (NACO) and the states (SACS) key. Fund transfers to the states are triggered not by performance, but against work plans, audit certificates, and fund utilization certificates. This is a challenge for all centrally sponsored programs in India, inherent in the political realities of India’s federal structure. Yet staff in the country office note that this project has been significantly more successful than most, given the best practice manuals, guidelines, and financial management system; frequent supportive supervision; and intensive technical support and training.
- *Some SACS had difficulty filling finance positions.* There were a very few instances of incomplete or destroyed project spending records, which prompted thorough investigations, and recovery of any funds that could not be fully accounted for.
- *Slow procurement and disbursement.* The Detailed Implementation Review (DIR) by the Bank’s Integrity Vice Presidency (INT) on five health projects in India, including the precursor AIDS project, was under way during project preparation (final report January 2008) and led to very conservative procurement and disbursement decisions that were more restrictive than warranted by the DIR findings. Although the trust and positive personal relationships between NACO and the project team largely insulated the project from the tension caused by the DIR, a lawsuit by one of INT’s consultants against the NACO director (for telling a newspaper that he was in error) was disruptive. (The court ruled in the director’s favor.) Instances of risk aversion within the Bank slowed some decisions—delays in one very large IEC procurement decision<sup>9</sup> contributed to static disbursement and then to the change in financing shares (see section 1.7). The procurement restrictions and early decisions by auditors to disallow some expenditures were a disincentive to draw on IDA funds, and with adequate non pooled government and other donor funding to use instead, IDA disbursements were well below schedule for most of the project. Also, NACO decided not to claim reimbursement against Interim Unaudited Financial Reports but to wait for Audited Annual Reports. So instead of credit withdrawals processed three to four months after the close of the financial year (as planned in project design), it took at least nine to ten months. In the final two years, disbursements were shifted back to Interim Unaudited Financial Reports and accelerating disbursement became an increased focus of supervision. Frequent and regular follow-up with NACO (as often as weekly meetings) sharply accelerated disbursement in the final year.
- *A too-steep learning curve for the procurement agent.* Contracting an agent to procure and deliver inputs to users across all of India solved some problems but created others. The agent had virtually no experience in Bank-financed procurement and required extensive hand-holding and support from the Bank team. Reimbursement claims could not be submitted to

---

<sup>9</sup> The selected IEC contractor with unmatched capacity for the task would not submit to external audit as required by WB rules. The project team’s solution was for NACO to contract instead a media buying agency that agreed to be audited. The “no objection” decision was referred to an unusually high level within the Bank, where the decision was left pending.

the Bank until the agent had sent NACO all the paperwork relating to import, delivery, testing, and quality assurance that had to be collected from hundreds of different points and could amount to “trucks full of documents”. Additional delays were caused by the decision to replace the procurement agent.

- *Financial oversight and flow of funds with a plethora of NGOs.* The project involved around 1,200 NGO front-line implementers of the TI in 38 states was a constant challenge and also slowed disbursement. One of the major concerns in the DIR was the large advances to NGOs and inadequate accountability for funds. In response, NACP III financial management arrangements required NGOs to document expenditures using quarterly statements of expenditures, which SACs could compile and submit through NACO for reimbursement, and which would be adjusted if required after annual audit reports. However, varied practices emerged across the states: some required the NGOs to submit complete supporting documentation or audited financial statements before the expenditures were documented in SACS books of accounts and submitted to NACO and on to IDA. NACO adopted a robust transparent system of selecting and appraising NGOs with periodic evaluations against performance norms and targets, which were then not aligned with the conservative fiduciary arrangements of input-based funding. This caused tension between the NGOs and NACO as delayed funding flows to the NGOs inhibited their effectiveness. The difficult experience with the DIR contributed to NACO’s reluctance to bring financial management of NGOs in line with the focus on performance instead of inputs, and was a missed opportunity for the Bank to introduce good practices from elsewhere in performance-based payments to NGOs.
- *Overambitious target for CBO TI.* NACO set the ambitious target that 50% of all TI should be CBO led by 2012, for reasons of efficacy and sustainability. But there were far too few CBOs among HRG, and most had very limited organizational and technical capacity. Resources were simply too few for NGOs to build CBO capacity and take on the TI. Also, too few NGOs had relevant experience or ability in working with MSM and IDUs, a major barrier to scaling up at the speed and to the level needed.

Neither of the two safeguard policies triggered (see section 2.4) was an important factor affecting implementation or outcomes. The Quality Assessment of Lending Portfolio review (QALP-2, May 2010) summary of the project was as follows:

“The combination of a team of competent and experienced Bank staff with a politically committed government fully aware of the need to reduce a serious threat to the health of the population and to the economy of the country has resulted in a well-designed and executed operation. This good practice is reflected in the ratings.”<sup>10</sup>

### **2.3 Monitoring and Evaluation (M&E) Design, Implementation, and Utilization**

**The M&E design is best practice.** The PAD (Annex 3) defines a clear project results framework, with a parsimonious set of SMART indicators (four to measure PDO progress and six

---

<sup>10</sup> The detailed ratings were: “The likelihood of achieving the DOs is rated 2 - likely. The Quality of Design and the three sub-dimensions of design (Strategic Relevance and Approach; Fiduciary, Safeguards and GAC; and Realism of Project Design and Risks) are rated 2 - satisfactory. Implementation Progress is rated a 3 - moderately satisfactory mainly because of the moderately satisfactory ratings for fiduciary and safeguards. Quality of Bank Supervision is rated 2 - satisfactory; the sub-dimensions: Focus on Development Effectiveness, Fiduciary/Safeguard Aspects, and Supervision Inputs and Processes are rated 2 - satisfactory; Candor and Realism of ISRs is rated 3 - moderately satisfactory.”

intermediate outcome indicators) all with baseline, mid-term, and end targets, data sources, and frequency of data collection. India has steadily expanded and improved its HIV surveillance, and the data sources combined the use of surveillance data, routine health system records, routine project data (with important improvements in the CMIS supported by the project), and special studies. The PAD also lists 23 core indicators with sources and targets used for annual “state of the epidemic and response” reports, organized by project component. These indicators measure behavior change, intervention coverage and planning, coverage of services for people with HIV, resource availability and management, and strategic information flows and use. As recommended by the QER, a Dashboard of 21 indicators was defined to help NACO focus on crucial management information to monitor and support implementation performance by the SACS. The indicators were defined in line with accepted best practice as defined by the UNAIDS M&E Technical Expert Group.

**The project also stands out in its M&E implementation and use.** A dedicated component and adequate resources promoted strong attention during implementation to data quality, on-time collection, compilation, and use. The program allocated 3.5% of the total budget to M&E, well above the norm for AIDS programs and projects. Appropriate epidemic data were collected regularly using best practice collection methods. Surveillance sites were added, especially among sex workers, MSM and IDUs. India pioneered use of small-area mapping and methods to make direct estimates of the size of the highest-risk groups in urban and rural areas in 2009. With these data, the unit of data collection and use shifted from states to districts and subdistricts, enabling interventions to be better targeted. In 2010, another highly detailed HRG mapping study was done to investigate emerging new pockets of infections, and these results and data triangulation were used to reclassify districts by risk and epidemic level (although NACO could have been faster in finalizing the revised district categories). Resources and efforts were redirected based on these new data for changed epidemic patterns, so as to increase interventions and supportive supervision in districts with high epidemic potential.

The MTR report (p. 57) states that “The use of data for programming in NACO – be it routine monitoring, surveillance or special evaluation and operations research such as the MTR studies – is a global best practice.” There are numerous examples of M&E data—including special studies to assess impact and effectiveness of activities—being used to make improvements: The Link ART Centre (LAC) and LAC-plus centers<sup>11</sup> were set up in response to the findings of evaluations of ART patient experiences, and the protocol changed to provide patients with drugs for two months instead of one. A study on causes of low retention of people who tested positive led to changes in tracking and follow-up that increased the proportion who registered for treatment from 50% in 2007, to 80% in 2012. Evaluations of the impact of the “Red Ribbon Express” led to changes in the messages, organization, and services provided to increase its reach and impact. NACO’s original migrant strategy had low reach using one-to-one sessions at migrants’ homes or workplaces. It was completely redrawn after extensive consultations, to focus on hot spots in districts with high in-migration and high HIV prevalence among antenatal care (ANC) attendees.

A well-justified investment in continuous on-site Technical Assistance (TA) throughout the project enabled the CMIS to be developed and deployed on time. Periodic system upgrades improved its speed, accuracy, and usefulness (for example, moving from data transfer using floppy disks, to web-enabled direct data entry by reporting units in 2011). NACO’s reports to

---

<sup>11</sup> LACs were not part of the original project design. They offer ART services at testing centers in district/subdistrict hospitals, to reduce the distance for patients. LAC-plus are LACs which also offer pre-ART management, to deal with problems found in evaluation that 25–30 percent of people who test HIV positive had no access to care, support, and treatment.

project review missions contained consistently informative and comprehensive data throughout implementation.

**Yet there are two data weaknesses.** First, the MTR report notes that incomplete reporting from intervention sites and clinics made NACO data on prevalence of sexually transmitted infections (STI) inadequate as a basis for estimating the STI burden of disease, leading to possible overestimation of NACP III STI treatment targets. Second, a nationwide behavioral survey integrated with HIV testing (integrated bio-behavioral survey, or IBBS), planned for 2011/12 to provide end-project data, has been delayed to late 2013. This leaves a data gap for assessing the project's final outcome on behavioral change. Happily, a better measure of project results is available—the latest estimates of new infections, an impact measure that is directly and closely linked to condom use and needle sharing (see section 3.2).

Data quality from behavioral surveys is always suspect because of social desirability bias. Validation is difficult. The MTR report was skeptical of 86–91% levels of self-reported condom use with last sexual partner by MSMs, IDUs, and FSW in 2009 behavioral surveys in six states. NACO triangulated the data against similar data collected in (some of) the same states by the Avahan project<sup>12</sup>, and found overall similar levels. The results of the delayed IBBS will show whether the reported behavior change is sustained and validated by HIV levels of these groups.

Overall, the continuous improvement in the M&E system functioning and efficiency, its consistent use by almost all SACS, and its demonstrated value in freeing time of NACO managers and providing detailed information on program implementation and finances, bode well for its sustainability. The follow-on project continues and builds on the strong M&E developed under NACP III.

## **2.4 Safeguard and Fiduciary Compliance**

Two safeguard policies applied. Both were handled satisfactorily.

### ***(a) Environmental Assessment***

A sound and comprehensive Infection Control and Waste Management (IC-WM) plan to ensure efficient and sustainable management of potentially harmful HIV-infected medical waste was developed, discussed with stakeholders, and finalized during appraisal. Its implementation and adequacy were assessed at mid-term, and again near the end of the project, and the findings confirmed those of supervision missions:

- satisfactory awareness and IC-WM practices in most ART centers, STI clinics, and prevention of parent-to-child transmission (PPTCT) centers and hospitals where these facilities are located;
- training and capacity building has been undertaken widely; IEC materials and personal protective equipment supplies appear adequate; most staff have been vaccinated against Hepatitis B; and
- compliance with IC-WM activities such as disposal of needles and coordination with district hospital for sharps disposals is routinely monitored and reported by program officers of TI project areas.

Some minor gaps in the IC-WM plan and shortcomings in its implementation and suggestions for improvements were noted and are being taken up in the follow-on project: (i) better waste management systems—particularly for sharps—in blood donation camps; (ii) standardized simple

---

<sup>12</sup> The Avahan program applies modern business-management principles and a very strong results focus and has been independently evaluated and globally recognized.

protocols for off-site infection control and waste management; (iii) standardized double-meshed containers for used sharps to prevent double-handling; (iv) continued capacity building and training on waste management; (v) and work with states to replicate cost-effective, simple, innovative practices used in various hospitals and centers for efficient waste management.

A key challenge as AIDS is increasingly integrated into broader health services is that the project has very little leverage on the overall health care waste management systems of the hospitals and healthcare facilities where HIV services are offered. Moreover, it is inefficient for each health project to undertake a similar environmental assessment and develop its own IC-WM plan. This is an issue best addressed systemwide at state level. (Rajasthan and Tamil Nadu have moved in this direction, with their State Health Systems programs taking a lead role in initiating convergence through the Directorate General of Health Services and Department of Health and Family Welfare, in consultation with NRHM and the single-focus programs.)

### ***(b) Indigenous Peoples***

To ensure that India's tribal populations received culturally appropriate benefits to prevent HIV infection, and care if HIV-infected, a Tribal Action Plan was developed, informed by a social assessment of issues relating to access to program benefits by tribal people. Comprehensive Operational Guidelines for implementing the Tribal Action Plan (TAP-OG) were finalized in April 2009. They covered prevention, communication, public-private partnerships, capacity building, M&E and surveillance, research, mainstreaming, and implementation management, with detailed guidelines to help states, districts and integrated tribal districts develop and implement plans. More than 14,000 people were trained.

The focus of TAP implementation is in 65 A/B category districts (50% or more tribal people) in 13 states (a third of the 192 integrated tribal districts). Progress in implementing their TAPs is uneven across these 13 states. At IDA's recommendation, a study was done in 2010 to better understand specific HIV vulnerability related to tribal status. It found no difference in HIV prevalence between tribal and nontribal populations in study-area ANC clinic data, and no specific vulnerability to HIV due to tribal status. Rather, like other people, tribal people are vulnerable to HIV because of migration, sex work, and low media reach, etc., that may in some cases correlate with (but are not a result of) tribal status, except in the case of the few tribal groups with institutionalized economic reliance on sex work.

Rather than segmented efforts for tribal peoples, and consistent with NACP's evidence-based approach, NACO believes it is more effective to address the causes of vulnerability and to target sex workers (for example) and to extend access to needed HIV services to all areas, including tribal areas, with TI appropriate to local conditions—such as special folk programs in tribal languages, and IEC in tribal languages, etc.—than to have special HIV programs for tribal peoples. So although implementation of the TAP in itself must be judged as inadequate, this review agrees that NACO's integrated targeted approach is the optimal one, and that effort to implement the TAP would undermine, rather than improve, achievement of project objectives.

## **2.5 Post-completion Operation/Next Phase**

Planning for a follow-on operation began before the end of NACP III, and the transition is expected to be smooth, with adequate other funding to continue activities until the new project becomes effective (expected June 2013). Many activities funded by IDA under NACP III are now being fully supported by the government from the domestic budget. This enables the follow-on project to focus more narrowly on remaining challenges, with continued support for improving effectiveness and coverage of evidence-based TIs, supported by limited funding for behavior

change communication and institutional strengthening. The Bank and other donors are phasing out funding counseling and testing. NACO is continuing to support integration of HIV services into the NRHM.

The systems established during NACP III (and previous projects) remain used by NACO and are embedded in the design of the new project—for example, the maintenance and use of the computerized, web-based financial management system, and use of a contracted procurement agent.

### **3. Assessment of Outcomes**

Bank-financed projects that provide programmatic support must be judged by their contributions—financial and technical—to outcomes attributed to the overall program. IDA financed about 10% of total program costs, and nearly half the total project funding, with DfID providing 35% and the government 16% of project costs. IDA's technical contribution was important—it helped NACO to ground decisions firmly in evidence and global best practice, and supported an impressive array of studies and analyses that kept the program focused on the most cost-effective approaches, met all aspects of the comprehensive institutional strengthening effort detailed in the FA, and made major improvements in M&E of both the program and the epidemic.

This section details impressive project achievements in all three aspects—relevance, meeting and exceeding objectives, and efficiency, with many innovations and best practices that could be replicated in other countries. However, disbursement was slow, and challenges remain, especially in reaching IDUs, streamlining some processes, and ensuring continued TI quality assurance.

#### **3.1 Relevance of Objectives, Design, and Implementation**

The project's relevance is High in all respects—objectives, design, and implementation. On the relevance of government policy priorities and global goals, India is strongly committed to the MDGs—halting and reversing the HIV epidemic is one of the targets for MDG 6—and it has repeatedly stated its commitment to achieving universal access to needed HIV prevention, care, and treatment (as strongly advocated by UNAIDS). India sent a large government and civil society organization delegation to the 2011 UN High Level Meeting on AIDS, and approved the Declaration, whose stated goals echo the project objectives. There are many explicit high-level statements of India's commitment to addressing AIDS, such as the prime minister's address and statements at the July 2011 National AIDS Convention. Even more compelling is that the government budget and IDA funding allocations align with these repeated statements of commitment—AIDS is one of only a small number of national level initiatives in health, and the only one with a dedicated agency led by a special secretary and coordinating body chaired by the prime minister.

**Objectives.** While India has made notable progress in stopping the AIDS epidemic, maintaining that progress requires persistent and more effective prevention of new infections among groups with high-risk behaviors, especially in the pockets of high and even rising rates of new infections. There is also a clear and growing need for treatment of PLHIV, and only highly effective prevention will make high treatment coverage feasible.

The following shows the continued relevance of the project objectives. In July 2007 (just before the project became effective), HIV estimates for India were revised substantially—from 5.2 million (0.9% of the population aged 15–49) to 2.5 million (0.36%), on the basis of important new data from three sources: an HIV component of the large 2006 national health survey of the general population, 461 new HIV sentinel surveillance sites, and data from the first Integrated Behavioural and Biological Assessment of HRG in states with high HIV prevalence.



The new data and estimates reflected a more detailed understanding of where and how most new infections were occurring in India, and validated the project objectives and strong prioritization of focused prevention among sex workers, IDUs, and MSM, as well as their sexual partners—the “bridge populations” through which infections spread to the general population.

UNAIDS summarized the key findings as showing that “overall, the HIV epidemic shows a stable trend in the recent years (but)...variation between states and population groups...high levels of infection among...MSM...and IDU... Prevalence levels are declining among sex workers in areas where TI have been implemented, particularly in the southern states, yet overall prevalence levels among this group continue to be high necessitating focused prevention interventions” (UNAIDS Press Release, New Delhi, July 6, 2007).

The latest estimates (released November 2012) show continued decline in prevalence and estimated new infections in the general population and among sex workers and MSM, stable trends among IDUs nationally with declines in the North Eastern states but newer pockets of high HIV prevalence among IDUs in nine other states and several pockets of higher HIV prevalence among MSM.

**Design.** The sharply focused major components relate clearly and directly to the PDO, and the two smaller components strengthen capacity to carry out planned activities, and enhance strategic information for stronger management and a more efficient program. The project’s strong focus on HRG and their sexual partners and its evidence-guided and decentralized approach, strong partnership with beneficiaries and increasing integration of testing, counseling and treatment with other health services all exemplify good practice in HIV programs, as promoted by the Bank’s Global AIDS Program, UNAIDS, and WHO. The project also aligns with the emphasis in India’s 11<sup>th</sup> Five Year Plan on *inclusive* growth, by reaching out to marginalized groups as its main target beneficiaries.

**Implementation.** The project responded to changes in the health sector—notably the development of national rural health services, to increasingly deliver HIV services through and integrated with other health care. It also carefully tracked changing HIV epidemic patterns and redirected effort and resources in response, maintaining relevance in implementation.

The PDO align with the India CAS 2005-2008 strategic principle of “focus on outcomes” by aiming to help achieve an MDG6 target. The TI emphasis on groups in which most new infections were occurring fit the CAS principle of “selectivity”. The CAS recommended co financing under common arrangements for national programs, as done with DfID. The project exemplified the global AIDS community best practice “Three Ones” approach with all donors aligned behind one national AIDS strategy and one national M&E system, and supporting one national coordinating authority (NACO).

The project remains relevant to priorities set out in the current CAS (2009-2012), in particular, the focus on improving service delivery effectiveness: “The Government of India has requested the World Bank to place special emphasis in its new strategy on centrally sponsored schemes that aim to achieve the MDGs.” The CAS summary notes that “Public services ... have little or no accountability to the ultimate client, and outdated management systems are unable to provide the information needed for decision-making. These issues are particularly acute in centrally sponsored schemes which are designed and funded by the central government but implemented by the states and lower echelons of government. Given the importance of these schemes, systemic improvements in design and governance are crucial to get results from public spending.” NACP III’s implementation stands out for the attention paid to improving management and information systems, supportive supervision and strong oversight of the state AIDS agencies, and its efforts to

assure quality, efficiency, and accountability by the subcontracted NGOs, districts, and state agencies responsible for project implementation, and working with beneficiaries and civil society.

### 3.2 Achievement of PDO

The wording of the PDO in the legal agreement set a less ambitious objective for the project—“to support the third phase of the Recipient’s National AIDS Control Program (2007-2012)” than the PAD. These PDO have been fully met by financing about 10% of the costs of India’s NACP and through regular technical advice and supportive supervision. The PDO continue: “...through promotion of behavior change by scaling up prevention efforts in the High Risk Groups and the general population; and increased care, support and treatment of People Living with HIV/AIDS”. Achievement of these PDO defined in *output* terms requires only that the project activities be successfully implemented, and indeed most output targets have been exceeded, with only minor shortfalls in the number of TI as a result of the decision to improve efficiency by having fewer interventions each covering more beneficiaries. The 80% coverage goal for targeted prevention interventions for the main HRG was exceeded for FSW (88%) and IDUs (81%) with a modest shortfall for MSM (67%), and substantially surpassing the target for treatment (152%).

The PAD PDO wording and the key indicators for tracking project objectives require the project to contribute toward achieving an *impact* objective: “to contribute to the NACP III goal of halting and reversing the AIDS epidemic” or at least the *outcome* objective of “achieving behavior change...” (There is no difference between the PAD and FA in the wording of the outcome objective of “increased care, support and treatment of PLHIV”, which is addressed separately, later in this section.) The causal chain is clearly laid out: the TI aim to change behaviors (specifically correct and consistent condom use, and for IDUs, also not sharing injecting equipment) that are known to protect against HIV infection, and therefore prevent new infections. Scaling up ARV treatment prevents AIDS-related deaths and helps prevent new infections by greatly reducing viral load.

So the key questions are: Did the project interventions increase condom use and decrease sharing of injection equipment? Did the number of new HIV infections and AIDS-related deaths decrease? And if so, Can the changes be attributed to the interventions supported by the project, or might other factors be responsible?

*Did the interventions that the project supported increase condom use and decrease sharing of injection equipment?* The primary data source to measure behavior change is self-reported behavior from surveys, which, as noted, is subject to social desirability bias. IBBS in which respondents are also tested for HIV improve the validity of reported behavior to some extent, but do not solve the verification problem. Unfortunately, the national IBBS originally planned for 2011/12 will only take place in 2013. The most recent behavioral data are from a 2009 IBBS in six high-prevalence states, which indicate that project targets were substantially exceeded (Table 1). Although there is no objective measure of their reliability, and they were not intended to be nationally representative.

**Table 1: Most Recent Behavioral Data, 2009**

Indicator	Baseline	Target	Mean Value 2009, 6 states	Range
Percentage of FSW who report using a condom with their most recent client	50%	80%	91%	83-97%
Percentage of MSM who report using a condom with their most recent sex partner	20%	60%	86%	43-100%
Percentage of IDUs who report not sharing needles and syringes in past month	30%	70%	88%	77-95%

Source: 2009 IBBS.

These values are similar to 2006 and 2009 data from IBBS in Avahan intervention areas in high HIV prevalence states in the south. The consistency gives some comfort by showing that to the extent that both surveys are reasonably reliable, interventions supported under the project are achieving similar behavior change results as the “best practice” Avahan program. But there is no counterfactual and no way to assure that reported behavior closely reflects actual behavior. And of course these data cover only six states and were collected only two years into the project. If project *impact* can be assessed, then this data gap is of less concern—a measure of impact is a stronger criterion for project success than outcome measures.

*Did the number of new HIV infections decrease?*

In November 2012, NACO and the India National Institute of Medical Statistics released new estimates of HIV prevalence and new infections (incidence), using data from the 2011 population census and an expanded number of sentinel surveillance sites. While subject to (specified) levels of uncertainty, the estimates meet the “gold standard” of reliability given India’s improved surveillance data collection and quality assurance methods, global best practice estimation models with India-specific parameters derived from extensive research, and the world-class group of national and international technical experts responsible for the estimates.

The results confirm that India’s HIV epidemic trend was “stable to declining from 2007 to 2011”. The national trends from 2007 to 2011 are “primarily attributable to the roll-back of the epidemic in the high prevalence categorized states of Andhra Pradesh, Karnataka, Maharashtra, Manipur and Nagaland...” where annual new HIV infections fell 76% during the period. “Post 2010, however, the epidemic is generally stable in these states” (p. 30, Technical Report, pre-publication draft).

Nationally, estimated annual new HIV infections fell from 143,000 in 2007 at the start of the project, to 130,000 in 2010 (Table 2 and Figure 1). There was a marginal increase of “few hundred cases” in 2011 due to increases in some states (Assam, Chhattisgarh, Delhi, Haryana, Jharkhand, Odisha, Punjab and Uttarakhand), possibly because some of these states had relatively lower prevalence rates at the outset and less resources were allocated to the TI. These increases “may not be significant enough to currently impact on the overall national trend, they nevertheless provide evidence on the changing trend of the epidemic and need for appropriately tailoring the response” (Technical Report).

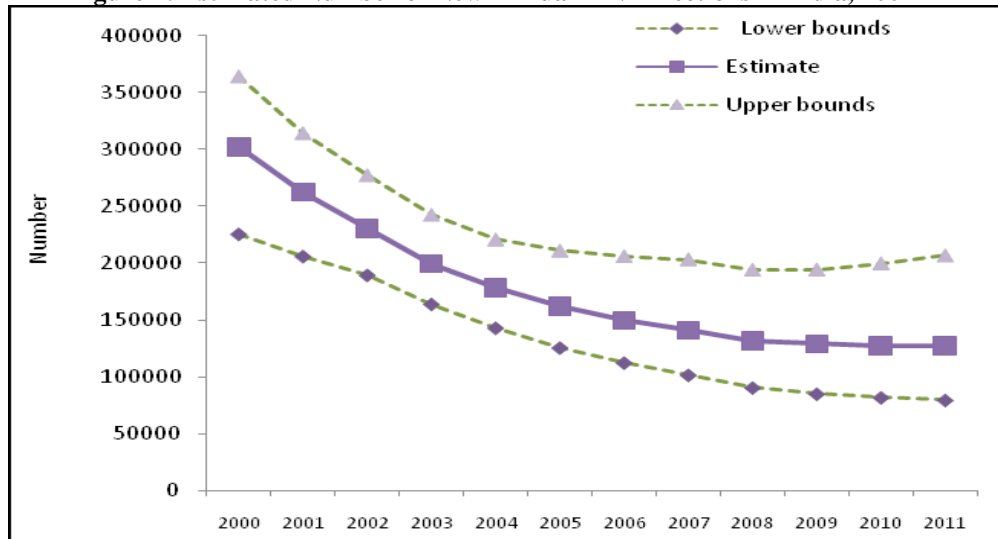
So yes, the data show about 10% fewer new infections in 2011 than in the first year of the project, but they also show a marked slowing of the decreasing trend in new infections, and perhaps a rise in the later years. The PDO can be judged to have been met, but continued effort is needed to sustain and continue the gains.

**Table 2: Estimated Number of New Annual HIV Infections in India, 2007-11**

<b>Year</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
New HIV infections (Total)	143,856	134,776	132,033	130,594	130,977
Lower uncertainty bounds	104,131	928,72	880,79	841,32	825,35
Upper uncertainty bounds	203,470	197,506	200,337	206,437	218,551

Source: Technical Report, HIV Estimates—2012, NACO.

**Figure 1: Estimated Number of New Annual HIV Infections in India, 2007-11**



Source: Technical Report, HIV Estimates—2012, NACO.

*What about infections among HRG?*

For HRG, only prevalence trends are available, which reflect the net effect of deaths and new infections. Considerable declines in HIV prevalence are recorded among FSW at national level (5.06% in 2007 to 2.67% in 2011) and in most states. Declines also have been achieved among MSM (7.41% in 2007 to 4.43% in 2011), although there are several pockets where HIV prevalence among MSM has not fallen. Given the large expansion of ART and resulting decrease in AIDS-related deaths, this suggests that new infections are very likely to have fallen significantly among these groups during the project period.

Prevalence trends during the project years are stable among IDUs at national level (7.23% in 2007 to 7.14% in 2011). In North Eastern states, where the TI for IDUs have mainly focused, declines have been achieved, but newer pockets of high HIV prevalence among IDUs have emerged in Punjab, Chandigarh, Delhi, Kerala, Mumbai, Odisha, Madhya Pradesh, Uttar Pradesh and Bihar, prompting NACO to increase prevention efforts among IDUs.

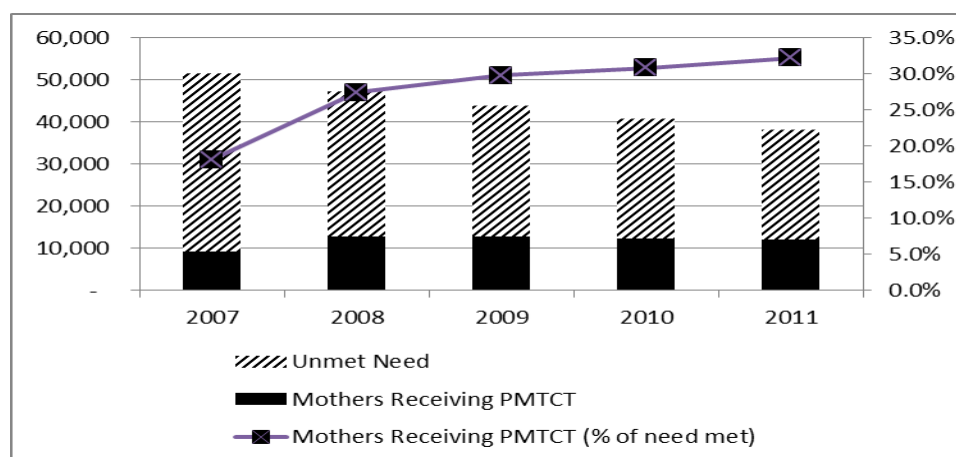
**Preventing maternal-to-child transmission (PMTCT).** The target defined in the PAD is to increase the number of HIV-positive pregnant women and their babies receiving a complete course of ART from 8,000 to 76,500. Data from the 2012 Technical Report indicate only a relatively small increase to 12,000–13,000, with numbers actually falling in the later years of the project (Table 3). However, this shortfall must be judged in the light of the relative contribution of parent-to-child transmission to all new infections, and the 2007 revised epidemic estimates which halved the estimated need from over 100,000 HIV-positive pregnant women to 51,375 in 2007, with new data indicating steady annual falls in the estimated number of HIV-positive pregnant women to 38,200 in 2011 (Figure 2). The coverage rate rose from 18% to 32%, but this is still well below the (implied) original target of around 75% coverage.

**Table 3: Estimated Mothers Needing PMTCT in India and the Proportion Receiving Treatment, 2007-11**

Year	Mothers Needing PMTCT	Mother Receiving PMTCT (%)	Mothers Receiving PMTCT (N)
2007	51,375	18.04	9,268
2008	47,122	27.35	12,888
2009	43,788	29.72	13,014
2010	40,767	30.83	12,548
2011	38,202	32.10	12,269

Source: Technical Report, p. 43. Number of mothers receiving PMCTC calculated for ICR from Table 3.6 data.

**Figure 2: National Estimated Need, and Percent and Numbers of Mothers Receiving PMTCT, 2007–2011**



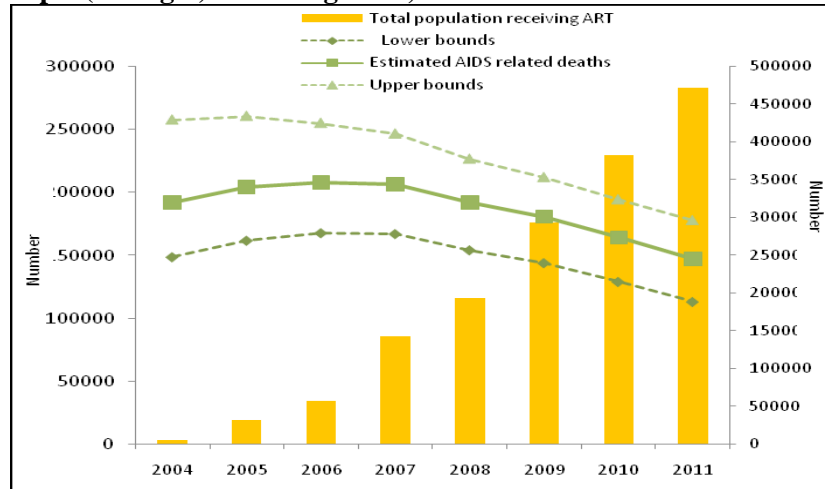
Source: Technical Report, p. 43. Number of mothers receiving PMCTC calculated for ICR from Table 3.6 data.

About 5% of new HIV infections in India arise from parent-to-child transmission. The risk of infection at birth falls from around 20% to 11% with single-dose Nevirapine and from 0.75–1.5% per month after birth (because of breast-feeding) to 0.3% if the mother is on triple therapy ART. With prevalence among pregnant women in India at about 0.33%, identifying HIV-positive women requires testing large numbers, raising the cost and reducing cost-effectiveness of PMTCT, and likely contributing less cost-effectively to stopping the spread of HIV than prevention among higher-risk groups. For example, only 0.18% of pregnant women tested in 2011 were HIV positive, compared to 1.5% of all others tested (general population and HRG). This meant that 5,427 pregnant women were tested for each HIV-positive woman detected. PMTCT has large benefits for HIV-positive mothers, their infants and families, but is far less cost-effective in preventing new infections than TI among HRG, which have an estimated cost of only \$105 per new infection averted (see Annex 3).

**Assessment of treatment, care, and support versus prevention.** Outcomes of increased treatment, care, and support for PLHIV and attribution to the interventions and activities supported by the project are much easier to assess than the prevention PDO. The key outcome indicator target—the number of eligible persons with advanced HIV infection receiving ART—was exceeded by more than 150%, with 516,412 people on treatment by June 2012 compared with the target of 340,000. This includes fewer children than planned—30,802 against the target of 40,000. The survival rate for all those who have started treatment is 79%, which indicates good compliance and quality of treatment services, supported by PLHIV care coordinators who help patients adapt to treatment regimens and maintain adherence. In 2012 the goal of no drug stock-

outs reported by any ART center was reached (down from 3–10 centers each quarter in the previous two years), an extremely important indicator of quality and efficiency.

**Figure 3: Estimated Number of Annual AIDS Related Deaths (All Ages) in India and Number of People (All Ages) Receiving ART, 2004-11**



Source: Technical Report, HIV Estimates—2012, p. 38, NACO.

**ART impact.** The new November 2012 HIV estimates include the impact of the expanded access to ART: estimated annual deaths from AIDS-related causes fell to 148,000 in 2011, a 29% reduction during NACP-III (2007-121). Estimates use global best-practice methods and updated evidence on survival with and without treatment. States with especially large declines in estimated annual deaths have had the greatest scale-up of free ART.

**Link to project outputs.** The scale-up in treatment was matched by related project outputs also exceeding targets—355 functioning ART centers (142% of the target of 250), plus 739 Link ART centers that decentralize treatment access and decongest ART centers, and 10,515 Integrated Counseling and Testing Centers (210% of the target of 4,994). The total number of people tested annually for HIV increased to 19.47 million in 2011-12, 12.5% short of the end-of-project target of 22 million, but still a strong achievement from the 3 million baseline and 15.8 million people tested in 2010-11. Especially important is that the numbers tested from HRG more than doubled from 0.7 million in 2009-10 to 1.5 million in 2011-12.

**Care and support.** ART centers are linked to a network of 253 community care centers that provide related care, support, and training. In addition, the 739 Link and Link plus centers offer pre-ART management services to 41,500 PLHIV. The project has also worked with states to mainstream care and support for PLHIV, through schemes that provide nutritional support, subsidies for travel to ART centers, legal aid, pensions, safe shelter for women and children with HIV, income support, occupational skill training, education benefits, and setting up PLHIV mutual help groups in 60% of designated districts.

*Can the outcomes and impact be attributed to the activities supported by the project, or might other factors be responsible?*

The change in the law guaranteeing ART access to people who meet the criteria, and the change in the CD4 level for initiating treatment will have increased demand, but the successful treatment outcome and impact could not have been achieved without the project activities adequately expanding the availability of quality testing and free treatment with a reliable supply of drugs, and providing support for patients to promote high treatment compliance. The outcome indicator

for treatment includes only ART provided free under NACP III. Treatment provided through the private sector would increase the numbers on ART by less than 10% (data from Avert.org, 2009), with a correspondingly modest contribution to the impact on AIDS-related deaths.

Confidence in attributing lower incidence and behavior change to the project is less certain, but still high, for three reasons. First, the project supports the national program, which encompasses most prevention efforts in the country. Second, the pattern of new infections across states correlates strongly with the allocation of NACP III effort supported by the project. Third, it is highly unlikely that decreases in incidence are the results of the natural course of the epidemic rather than of concerted prevention efforts, extrapolating epidemic patterns observed across India and in other countries with similarities in epidemic patterns and underlying social and behavioral risk factors.

### 3.3 Efficiency

The project performed well on both allocative efficiency (spending on the “right things” most likely to achieve the desired outcomes) and technical efficiency to keep the cost per unit of the outcome as low as possible.

(i) Effort and project funding were strongly focused on “best practice” targeted prevention efforts for groups at most risk of infection and HIV “hot spots”, with periodic remapping of HRG to guide reallocation of resources and focus where most needed. This is in sharp contrast to many “comprehensive” country programs that fail to prioritize based on epidemic data and evidence of effectiveness. For example, only 3% of Round 8 AIDS funding from the Global Fund for AIDS, Tuberculosis and Malaria was allocated to sex workers and their clients (and much less for IDUs and MSM), whereas about two-thirds of NACP III funds were allocated to interventions targeted to these groups. The UNAIDS/WHO Annual State of the Epidemic Report 2011 notes that India is one of only three low- and middle-income countries that meet the recommended target of providing at least 200 clean needles/syringes to each IDU. In 2010 India provided 228, far above the median of 51 for all countries that reported. Although only 3% of India’s estimated numbers of IDUs were on opioid substitution therapy in 2010, this service had only just started in India, and even so, India was above the median of 2.4% for all reporting countries.

In efficient use of resources for HIV prevention, what is NOT done is as important as what is, given the tendency of most programs to do what is easiest rather than the more difficult but most strategically important things. India is the only non-African UNAIDS priority country for scaling up the percentage of pregnant women tested for HIV because the sheer number of pregnant women in India mean that India contributes a large proportion of global parent-to-child transmission, despite relatively low prevalence among pregnant women. However, in India’s highly concentrated epidemic and low and falling prevalence among pregnant women, scaling up testing of this group is not the highest priority. India has managed to balance steadily increasing HIV testing among pregnant women from 2% in 2005 to 23% in 2010, while appropriately resisting pressure to dilute its higher priority focus on rapid expansion of testing for groups with much higher HIV prevalence and risk.

(ii) The project ceased support for TI that evaluations found to be relatively ineffective. The same numbers of beneficiaries were reached with 20% fewer TI, by significantly increasing the average number of beneficiaries served per TI from 475 to 595. The average cost per HIV infection averted for the TI was around \$105, highly cost-effective compared with the cost of treatment, which is estimated at roughly the same per year for first line treatment, and six times as much for second-line treatment (*Hindustan Times*, December 2011).

(iii) Investing in activities that reinforce each other also enhanced impact and improved project efficiency. Three examples are: (a) expanding treatment offers an incentive for testing which provides opportunities for prevention counseling, and treatment reduces viral load and the risk of infecting sexual partners; (b) NACP III shifted the use of IEC from generating awareness to behavior change and demand creation linked to service expansion (HIV testing, ART and PPTCT); (c) components 3 and 4 were designed to enhance capacity in NACO, states, districts, and NGOs to expand and improve treatment and prevention.

(iv) Costs were cut by integrating HIV services into existing service delivery channels. Stand-alone counseling and testing centers (CTCs) were transitioned to fully integrated centers at NRHM-supported facilities, increasing the proportion of these centers from 20% in 2009 to 57% in 2012. Partnership agreements with “preferred private providers” take advantage of India’s very large private sector. Having private and public sector providers initiate testing for pregnant women enabled rapid increase in coverage of HIV tests and ART prophylaxis for positive women) and of STI detection and treatment. Cross-referral of TB and HIV patients improved detection, treatment, and survival rates for both.

(v) The project’s rigorous attention to quality is also likely to have contributed to efficiency. Guidelines, protocols, and performance standards were set and applied and good practices shared for all aspects of the project. NACO identified 40 institutes of excellence to deliver training and required pre- and post-testing to ensure learning goals were met; when 20 of the institutes failed to meet NACO’s quality standards in an evaluation, they were dropped. To ensure quality of HIV testing a state-of-the-art External Quality Assessment Scheme was implemented in most states. NACO set up a decentralized support and supervision system to assure and improve the quality of clinical services, with additional supervision provided to improve poorly-performing facilities. Systematic collaboration among ART centers, community care centers and PLHIV networks helped reduce loss to follow-up. A smart card program was piloted successfully and rolled out in 2010, enabling continuity of ART treatment for patients who seek care at different facilities.

(vi) Improvements in procurement and supply management of condoms, drugs, and other supplies reduced costs. Stock-outs of test kits, ART and condoms fell over the course of implementation, and the speed of resupply when stock-outs were reported improved. The MTR reported a 30% reduction in the cost of ARV drugs, CD4 tests and bulk purchases of HIV testing kits, and that NACO had achieved savings of Rs 500 million by streamlining free condom distribution and setting up systems to estimate condom demand in each TI and track supply and usage. Prevention costs were reduced by setting cost norms, and more than halving the number CBOs to achieve economies of scale, and selecting those that proved the most efficient.

(vii) NACO shifted to electronic transfer of funds in 2007/08 to speed fund release, which had been a barrier to efficient implementation in the previous project. Procedures for preparing and approving annual work plans and budgets were streamlined—from 2008, annual plans submitted by states were put on the NACO website with the approved budget against the proposal. The Financial Management Manual was updated to improve and streamline processes and incorporate and spread good practices identified in a review of states.

### **3.4 Justification of Overall Outcome Rating**

*(combining relevance, achievement of PDO, and efficiency)*

**Rating:** Achievement of PDO and efficiency are judged satisfactory, relevance is highly satisfactory, for an overall outcome of satisfactory. Achievement of many objectives exceeded targets, and although there are no national data on behavior change and no more recent data than 2009, there is strong evidence of impact and a causal chain linking that impact to project outputs.



Shortcomings in achieving some objectives are judged to be minor as they had little effect on the project's contribution to impact on the epidemic.

### **3.5 Overarching Themes, Other Outcomes and Impacts**

#### ***(a) Poverty Impacts, Gender Aspects, and Social Development***

The project addressed poverty and vulnerability by reducing inequity in access to HIV prevention and treatment, and by supporting PLHIV, especially the poor who qualify for social protection programs. The TI that are a centerpiece of the project specifically address the needs of marginalized/stigmatized groups who face social exclusion: sex workers, IDUs, and men who have sex with men. A Link Worker outreach scheme extended project benefits to these target beneficiaries in rural areas and to other vulnerable groups—migrants, women household heads, truckers, PLHIV, and the partners and spouses of high-risk and vulnerable groups. Project innovations to increase access to HIV services for socially disadvantaged groups include mobile counseling and testing services and boat clinics in Assam and West Bengal, and piggy-backing on cultural festivals.

While the project results matrix set no specific results targets for gender equity, social inclusion or special activities for tribal populations, the actions proposed in the PAD (main text para. 62) for addressing barriers to social inclusion were far exceeded—policies were developed for mainstreaming gender in HIV/AIDS, greater involvement of PLHIV, and universal access for children affected by HIV; guidelines were prepared for treating children with HIV and AIDS, and for mainstreaming HIV/AIDS for women's empowerment; SACs were given specific instructions on preventing stigma and discrimination; a massive IEC campaign targeting youth and students was rolled out in more than 100,000 schools and three phases of the Red Ribbon Express HIV information campaign; and mobile services travelled to hundreds of rural and urban areas across the country, reaching about 16.5 million people. Folk media were used extensively in rural areas especially in tribal districts to reach 13 million people in a single year, and were identified as best practice in a mid-term study of “social inclusion and equity” commissioned to identify project achievements and areas for improvement. Technical training and standardized scripts ensured correct technical messages.

#### ***(b) Institutional Change/Strengthening***

The QALP-2 gave institutional development the highest rating (1). The recommendations of an organizational assessment of NACO led to strengthening of its staffing and capacity. Strategic and effective use was made of TA, and a procurement agent hired to address NACO's shortfall in procurement capacity and difficulties in hiring appropriately experienced staff. A systematic program of training for SACS and other implementers was undertaken by training institutes that had to meet NACO quality/excellence criteria, and NACO provided specialized TA to enhance implementers' capacity to undertake key project activities well. All of the institutional developments listed in the FA are in place.

#### ***(c) Other Unintended Outcomes and Impacts (positive or negative)***

- The extent to which the project catalyzed and shared innovations
- Introduction of smart cards to enable centralized, computerized data storage and retrieval of patient records to cope with patient mobility—especially to help ensure uninterrupted supplies of ART drugs, but also enable easy linking with other social and health schemes, and facilitate the generation of important MIS reports.

### **3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops: N/A**

#### **4. Assessment of Risk to Development Outcome**

**Rating:** Negligible risk that the PDO as stated in the FA will not be realized and maintained. Negligible to low risk that the PDO as stated in the PAD will not be realized and low risk that it will not be sustained.

The risk that new HIV infections could rise again in future might be considered moderate, because HIV epidemics can ignite and spread very rapidly if IDUs share needles and their sexual networks intersect with those of sex workers, and if effective, well-focused prevention efforts that achieve high coverage of these marginalized, difficult-to-reach populations are not sustained. There are many mitigating factors that are good cause for optimism in India, justifying a risk assessment of low rather than moderate: (i) the clear recognition of the risk and understanding of HIV transmission dynamics in India; (ii) appraisal of the proposed follow-on project shows continued strong government commitment and full ownership of the NACP; (iii) good availability of government and donor financing; (iv) strong track record of NACO and most SACS in sustained strong implementation performance; and (v) outstanding surveillance and track record of reallocating effort and resources to areas of new infections to match India's HIV response to the changing epidemic.

India has made sound strategic decisions, balancing dedicated stand-alone management, quality assurance, and implementation of HIV services with progressive mainstreaming and converging or integrating of services where efficiencies, cost-savings, and faster scale-up can be achieved. However, if India were to decide to phase out the vertical or specialized part of the HIV/AIDS program, the PDO might not be sustained in future. Since this is not an idea with any currency in India, the risk is not considered significant.

#### **5. Assessment of Bank and Borrower Performance**

##### **5.1 Bank Performance**

###### **(a) Bank Performance in Ensuring Quality at Entry**

Rating: *Satisfactory*

The Bank team performed extremely well in delivering a project that was fully aligned with government and Bank priorities and global development goals, informed by excellent and wide-ranging analytical work, and that fully reflected lessons learned from previous Bank projects and many of the recommendations of the Independent Evaluation Group's 2005 Review of the Bank's AIDS portfolio. Detailed tested implementation arrangements and covenants to ensure that key staff would be in place contributed to a rapid start to implementation. The project design and approach are best practice in many respects, especially in quality assurance, and use of data to focus effective targeted prevention interventions on high coverage for groups where most new infections were occurring. M&E was best practice. Risk assessment has proved generally sound. Attention to issues related to poverty, gender, and the environment was appropriate.

The two-year period for identification, preparation, and appraisal was reasonable for a complex national program in such a huge and diverse country with such a large number of implementing agencies, and given the thoroughness of the analysis and planning. The schedule was also partly dictated by the programmatic approach and consequent need to keep in step with the

government's own program planning schedule, and the close collaboration with all the many development partners active in HIV/AIDS in India.

Three shortcomings are noted. Project design might have been more innovative in the fiduciary arrangements for NGO and CBO implementers; however, the difficult situation of an ongoing DIR produced a very low tolerance for innovation and extreme risk aversion in the Bank. The interpretation of the safeguard policy related to Indigenous People as requiring a Tribal Action Plan seemed more designed to satisfy the letter of the law than to tackle the many very complex and sensitive social issues involved in an HIV prevention project that needs to reach, engage, and support behavior change among the highly marginalized and often hidden groups of sex workers and their clients, IDUs, and MSM. And measures to ensure smooth and timely disbursement did not function as anticipated after the government changed the basis for submitting reimbursement claims.

The "bottom line" judgment of the QER made shortly before the decision to proceed to appraisal generally endorsed the design: "There are clear strengths in the design of the program, including the micro-mapping and TI along with other sets of interventions and capacity building activities. The team has clearly done a great job in taking the project preparation to this stage" (p. 6). However, the QER team questioned the sustainability of a vertical AIDS program; recommended more attention to the role of private health care providers; found the decision to set up about 600 district-level implementing structures "not very appealing"; thought the institutional arrangements too rigid and hierarchical; and suggested trying to "change the orientation of the management to one that focuses on performance ... and link payment to results, while encouraging states and districts to come up with their own organizational approaches." The May 2010 QALP-2 review rated Quality of Design and the three sub dimensions of design 2, or satisfactory.

***(b) Quality of Supervision***

Rating: *Satisfactory*

The project was supervised by a very high-caliber and strongly committed, diligent, and proactive task team, many of whom were based in the country office, with the advantage of a deep understanding of the country context and dynamics and easy access to and for the client. There was strong continuity in the team membership, and people with additional specialized expertise were added to the team as needed. The mutual respect and excellent working relationships between the project team and government counterparts were clear in the tone of supervision reports and comments made by NACO. This respect and regard were especially important during the tense period of strained relationship between the Bank and the government during and after the DIR investigation, when implementation began. That implementation proceeded smoothly with no change in the cordial, constructive, and frank nature of supervision missions attests to the high regard in which the team was held (and to the professionalism of the client).

Supervision took place regularly and predictably every six months, and the reports reflect attention to detail with precise recommendations and follow-up actions for all aspects of the program, combined with thoughtful strategic focus on the big picture, and overall development goal. The team was diligent in monitoring safeguards, including recommending special assessment studies to provide additional information, and also in ensuring fiduciary compliance (financial management and procurement) throughout the project, with especially strong efforts in the final year of the project to ensure that persistent systemic lags in disbursement were finally remedied to achieve almost full use of the project funds. Preparation of a follow-on project to continue support to the national program in future started well before the project closing, and

supervision consistently reflects strong attention to sustainability and continued strong performance beyond the end of the project.

The persistent disbursement lag that developed after the first six months was much less of a shortcoming than would have been the case had implementation of planned activities not been proceeding very strongly throughout the project periods. Moreover, the Bank team's strong support to the procurement agents while they became familiar with Bank procurement requirements helped ensure that all procurement of goods, test kits, and other supplies were completed smoothly without causing any stock outs.

This rating is **consistent with the QALP-2 (May 2010)** rating of Quality of Bank Supervision at 2, or satisfactory. The sub dimensions Focus on Development Effectiveness, Fiduciary/Safeguard Aspects, and Supervision Inputs and Processes are rated 2, or satisfactory; Candor and Realism of ISRs is rated 3, or moderately satisfactory. The QALP-2 noted that "The task team and its immediate management spotlighted and responded to problems effectively and in a timely manner.... This project is an example of effective supervision in all aspects. The Sector Manager and Country Management Unit paid close attention to this operation."

***(c) Justification of Rating for Overall Bank Performance***

Rating: *Satisfactory*

With a rating of satisfactory for preparation and supervision, overall Bank performance is rated satisfactory.

**5.2 Borrower Performance**

***(a) Government performance***

Government ownership and commitment to the overall project objective is clear and strong, seen in high-level public statements and consistent provision of adequate government funding. Such funding also ensured no hiatus between projects, and the use of career civil servants rather than the usual practice of fixed-term contracted staff for financial posts (which resulted in tighter financial control). High-level and highly competent government officers were assigned to manage the project with minimal turnover, and the project director post was upgraded from Additional Secretary to Full Secretary and a Department of AIDS Control was created within the Ministry of Health and Family Welfare to reflect the importance and role of NACO.

The government provided a supportive policy and legislative environment for the project, most notably by legislating the right to free ART, offering strong political backing for the bold and critical focus on marginalized groups at highest risk (including from the parliamentary forum), and changing the Penal Code (Law 377) in 2009, which decriminalized sex between men after the decision of the Delhi Supreme/High Court, in a legal process driven by collaboration between government and civil society with full backing of the Department of AIDS Control, to reduce the difficulty of reaching out and working with MSM.

***(b) Implementing Agency***

NACO was consistently competent and committed and effectively overseeing the project, monitoring and coordinating implementation by SACS, contracting NGOs and CBOs, and resolving issues. The Implementation Completion Report agrees with the MTR description of NACO as "a high performing organization", noting in particular the best practice explicit operational guidelines; regular training and supportive supervision for SACS and NGOs/CBOs as well as systematic TA provided as needed for all key project activities through specialized TA

units; attention to quality and performance-contracts of underperforming NGOs were not renewed following annual reviews against goals and national guidelines; and a formal and disciplined system of reporting, planning, and reviews for close monitoring of the program and unusually good use of rich M&E data to adjust activities and reallocate effort and resources.

Beneficiaries were consulted and involved in a meaningful way. (For example, committees of beneficiaries advised NACO on various aspects of the project, especially the implementation in prevention interventions, which an LBGT activist and transgender NACO consultant described at NACO's March 2012 Innovation Dissemination summit as "a hugely successful addition to NACP III". Extensive stakeholder consultations organized by NACO in preparing the project and for the MTR benefited project design and implementation. The centralized Program Financial Management System (CPFMS) specially developed for NACO with on-site TA throughout the project enabled financial data from all the states and other implementers to be compiled in a day, monthly reports were consistently sent on time, and Aide Memoires consistently noted the comprehensive and clear reporting for Joint Implementation Reviews. Data collection was continuously improved, and information from sentinel surveillance, HIV services data, HRG mapping, and an extensive program of relevant research was used for program decisions.

NACO established a network of Indian institutions for HIV/AIDS research (NIIHAR) to participate in studies, training, and capacity-building activities to inform priority program areas, and assessments and evaluations of many program aspects were used to guide decisions to improve quality and impact. There has been no interruption in activities since the closing of the project. The Implementation Completion Report also notes the very strong coordination of development partners, with all reviews jointly conducted by NACO and development partners, all documents shared, and duplication of reporting, assessment, and other effort avoided.

The shortfalls in performance noted are: delays in recruiting qualified procurement personnel at NACO, small delays in submission of audits by NACO, delays in procuring services including that of a procurement agent, significant delay in the national bio-behavioral survey, and delays in requesting reimbursement from IDA that resulted in disbursements falling off schedule after the initial six months of project implementation, and not recovering until the end of the project. These delays did not, however, affect smooth, vigorous, and timely implementation of project activities, and should therefore be given far less weight.

Examining the quarterly dashboard of 21 indicators used by NACO to monitor performance by the SACS shows generally good performance in most states with some variability and only a few instances of late submission of audits by state agencies, problems in decentralized procurement of contracts, and minor instances of fraud and corruption, which NACO investigated promptly and dealt with decisively.

***(a) Government Performance***

Rating: *Highly Satisfactory*

***(b) Implementing Agency or Agencies Performance***

Rating: *Satisfactory*

***(c) Justification of Rating for Overall Borrower Performance***

Rating: *Satisfactory*, combining the ratings of satisfactory for Implementing Agency performance, and highly satisfactory for government performance.

## 6. Lessons Learned<sup>13</sup>

1. Evidence-based cost-effective interventions targeted to the groups, behaviors, and geographic areas where most new HIV infections are occurring, working closely with the affected communities, can be highly effective in preventing new HIV infections. But the HIV epidemic is dynamic, and the prevention strategy needs strategically collected data to monitor impact and trends and to identify and respond to new hot spots of infection.
2. Business management principles can be applied successfully to HIV prevention interventions for sex workers, MSM, and IDUs when they are regarded as clients to whom services need to be marketed and delivered, with rigorous attention to results, quality, and efficiency, and detailed monitoring using a management information system in which data are collected routinely and used to guide decisions, adjust operating procedures, and propagate good practice.
3. Prevention can be effective when a tailored localized HIV response relies on trusted CBOs and NGOs as front-line implementers. Clear performance criteria with initial and annual evaluations and action to terminate poor performers or to help them improve can ensure strong performance. Requiring records of all expenditures to be submitted, checked, and audited, makes oversight onerous, and can delay flows of funds and be frustrating and counterproductive to a strong focus on results. Performance-based funding in NGO/CBO contracts might be a better alternative to traditional input-based funding, and is worth at least a small pilot trial.
4. Detailed procedural and protocol manuals, guidelines, and standards—backed with regular training, with periodic review and updating to reflect best practice—can greatly enhance the efficiency and quality of program implementation.
5. Developing a computerized management system is a process, and investment in on-site long-term technical IT support can have a strong pay-off in debugging the system in its initial stages, and then in seeking ways to improve and enhance the system to take advantage of changing technology and to continuously look for ways it can better support management decisions.
6. In such a large country where the Bank often has several health projects under way at any time, it is inefficient to address common safeguard issues such as infection control and health waste management project by project. A systematic, sector-wide approach would be far better, especially in a country with a strong federal structure like India, when the relevant responsibilities rest at subnational and not central level, and compliance with the safeguard policy relies on actions by actors not under the authority of the main implementing agency (as is the case of NACO and the health facilities where HIV services are converging with the National Rural Health Mission and urban healthcare facilities). Country- and context-specific judgment is needed in deciding which safeguard policies should usefully apply, instead of bureaucratic “box-ticking” compliance that uses scarce time and other resources without adding value or gains for intended beneficiaries.

---

<sup>13</sup> All these lessons are well reflected in the follow-on project, with the exception of piloting performance-based funding for NGOs/CBOs (in lesson 3), and lesson 6 which is being taken up by the India environment staff as regards health care waste management. Lessons 1 and 2 have strong general applicability for HIV projects in all countries, and 5 applies to any projects with multiple implementers and many ways possible ways to carry out activities. Lesson 6 applies to all projects in all countries, and lesson 7 to large countries with multiple concurrent projects in the health sector.

7. A contract with a procurement agent needs to include clear agreement on the timeline, frequency, and procedures for closing out all paperwork related to procurement to enable timely submission to IDA for reimbursement. Roles and responsibilities need to be clearly defined so that this does not “slip between two stools” of procurement and financial management units in an implementing agency.

**7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners**

***(a) Borrower/implementing agencies***

None received

***(b) Cofinanciers***

None received

## Annex 1. Project Costs and Financing

### (a) Project Cost by Component (US\$ million equivalent)

Components	Appraisal Estimate Full Program (US\$ million)	Appraisal Estimate-Project (US\$ million) <sup>1/</sup>	Actual/Latest Estimate (US\$ million) <sup>2/</sup>	Percentage of Appraisal
Prevention	747	424	403	95%
Care, Support, and Treatment	51	28	47	170%
Program Management, Capacity Building	43 + 4 <sup>3/</sup>	27	30	113%
Strategic Information Management	58	33	31	95%
<b>Total Financing Required</b>	898 <sup>4/</sup> + 4			
Financing gap at appraisal	390			
<b>Total Financing available at appraisal</b>	512	512		

Note: For simplicity, this table shows only the project contribution (the final column in Annex 5 Table 1 of the PAD) and not the full program costs

1/ Assumes that project financing was allocated across components proportionately to component share of total program cost.

Latest estimate as of March 20, 2013, 10 days before final closing of project account. Primary source: category wise disbursements data in the Loan records.

2/ \$4 million provided by the Bank toward consultancy charges of the procurement agent. See footnote 10 on page 41 of the PAD. No explanation given in the PAD for omitting this amount from the PAD table.

3/ Numbers in this column sum to 899, not 898 as shown in the PAD Table, the discrepancy is assumed to be because of rounding.

### (b) Financing

Source of Funds	Appraisal Estimate (US\$ million)	Actual/Latest Estimate (US\$ million)	Percentage of Appraisal
Borrower	83	99	119%
UK: British Department for International Development (DfID)	179	172	96%
International Development Association (IDA)	250	241	96%
<b>Total</b>	<b>512</b>	<b>512</b>	<b>100%</b>



## Annex 2. Outputs by Component

NACP III completed most planned activities, and exceeded targets for many. The matrix below summarizes the outputs delivered within the project period, by component:

Sl.No	Component wise outputs
1	<b>Component 1: Scaling up Prevention Efforts</b>
1.1	Established 1821 Targeted Interventions under the Projects in the country.
1.2	Reached out to 678,000 out of 868,000 estimated FSWs with prevention services through the targeted interventions.
1.3	Reached out to 274,000 out of 427,000 estimated MSMs with prevention services through the targeted interventions.
1.4	Reached out to 142,000 out of 177,000 estimated IDUs with prevention services through the targeted interventions.
1.5	Targeted interventions for bridge population have reached out to 2.8 million migrants and 2 million truckers with prevention services like behavior change communication, condoms and referral services to STI, ICTC and ART.
1.6	Established 1,122 designated STI clinics in government health facility, 4,018 Preferred Private Providers for HRG and 28,000 STI clinics under NRHM at CHC/PHC level.
1.7	Developed standard treatment protocol for STI management and customized the drugs for treatment into color coded kits. All the STI clinics in the country are branded to improve the visibility.
1.8	Program has established 3 million condom outlets across country.
1.9	Established link workers scheme to cover 209 districts across 20 states. The intervention provides the prevention services in rural areas and covers the vulnerable populations like women, youth, PLHIVs and other high-risk groups.
1.10	Established 10,515 ICTCs (4533 stand alone and 5982 facility integrated). The program has also established about 902 ICTCs in private sector and run 105 mobile ICTCs in the hard to reach areas.
1.11	Developed multi-sector behavior change and IEC strategy. The program has successfully launched the second phase of Red Ribbon Express project that covered 162 stations across 23 states in the country.
1.12	About 561,000 frontline workers (AWW, ANM, ASHA), SHG workers, PRI members and personnel from various government departments, representatives of civil society organization and member of public and privates sectors have been trained on HIV/AIDS to address the issues related to stigma and discrimination and to carry forward the message in their ongoing programs.
1.13	Developed a comprehensive adolescent education program on HIV and life skills for the school children and covered more than 50,000 schools every year.
1.14	Organized the National Convention of Parliamentarians, Legislators, Zila Parishad Chairpersons & Mayors on HIV/AIDS. More than 800 elected representatives comprising of Parliamentarians, Legislators, Zila Parishad Presidents, Mayors, senior officials from government and international organization, civil society & community representatives participated.
2	<b>Component 2: Strengthening Care, Support, and Treatment</b>
2.1	Established 355 ART centers and 739 link Art centers.

2.2	A total 263 CD4 machines have been procured and installed in the country to serve 355 ART centers.
2.3	The project provided ART treatment to 541,000 PLHIVs (including 30,802 children) eligible with advanced HIV infection (Cumulative Total). And 4208 patients are receiving second line ART drugs.
2.4	Developed standard HIV and opportunistic infections management guidelines including improved referral to the Revised National Tuberculosis Control Program for TB treatment.
2.5	Establishing 253 number of community care centers which will provide outreach, referral, counseling and treatment, and patient management services
2.6	As efforts toward ZERO discrimination, developed Greater involvement of people living with HIV/AIDS (GIPA) policy and operational guidelines which were approved in principle by the National AIDS Control Board.
2.7	Established 10 centers of excellence and 7 exclusive pediatric centers of excellence.
2.8	Established state level, Grievance Redressal Committee has been constituted to review the functioning of the ART Centers.
2.9	Established system for decentralized supply chain management of ARV drugs.
3	<b>Component 3: Augmenting Capacity at District, State and National Level</b>
3.1	NACO developed comprehensive operational guidelines for all program components: <ul style="list-style-type: none"> <li>- Operational guidelines for High Risk Group (HRG) Interventions</li> <li>- Operational guidelines for Migrants and Truckers Intervention</li> <li>- Operational guidelines for NGO / CBO selection</li> <li>- Operational guidelines for STI/RTI service</li> <li>- Operational guidelines for Condom promotion</li> <li>- Operational guidelines for IDU interventions (waste disposal)</li> <li>- Operational guidelines for financial management</li> <li>- Operational guidelines for procurement</li> <li>- Operational guidelines for link workers</li> <li>- Operational guidelines for ART and Link ART</li> <li>- Operational guidelines for Community care centre</li> <li>- Operational guidelines for Strategic Information Management System</li> <li>- Operational guidelines for surveillance</li> <li>- Operational guidelines for blood safety</li> <li>- Operational guidelines for DIC</li> <li>- Operational guidelines for prevention of parent to child transmission (PPTCT)</li> <li>- Operational guidelines for HIV TB</li> <li>- Operational guidelines for District AIDS Prevention and Control Unit</li> </ul>
3.2	Performance based contracting system developed for NGOs implementing targeted interventions.
3.3	Established Technical support unit at National and state level, 189 District AIDS Prevention Control Unit in all A and B category districts, and established State AIDS Control societies across the country.
3.4	Technical support group established at National level for strengthening the condom promotion and truckers program.
3.5	NACO has strengthened their procurement system by recruiting the procurement agent for carrying out procurement of pharmaceuticals, medical supplies, and other goods and works required under the project

3.6	Developed computerized financial management system for effective monitoring of funds across states.
3.7	Established State Training Resource Centre (STRCs) across 18 states.
3.8	Developed training modules on more than 150 topics across program components.
4	<b>Component 4: Strengthening Strategic Information Management</b>
4.1	NACO has developed the computerized Management Information system which is percolated down till reporting unit.
4.2	Established reporting system in 35 SACS and 3 Municipal AIDS Control Societies, 9,459 Integrated Counseling and Testing Centers (Standalone ICTCs, Facility Integrated ICTCs and PPP sites), 1,785 Targeted Intervention facilities, 1,200 Blood Banks, 255 Community Care Centers and 1,112 Sexually Transmitted Infection Clinics.
4.3	NACO has strengthened their surveillance system and established 1359 number of surveillance sites across country.
4.4	NACO has published evidence based estimation report to provide better data and analysis for decision making.
4.5	All the states have conducted the HRG mapping exercise.
4.6	All the states have conducted data triangulation to identify the drivers of epidemic.
4.7	Developed Dashboard indicators for management attention and effective monitoring of the program. Presently, 97% of the states update the dashboard indicators every quarter and send it to NACO.
4.8	Developed thematic monographs and publications on program activities and innovations <ul style="list-style-type: none"> <li>- Red Ribbon Express monograph</li> <li>- Condom monograph</li> <li>- M&amp;E monograph</li> <li>- ART monograph</li> <li>- TI monograph</li> <li>- The 360 degree surround BULADI Campaign</li> <li>- Field Impact Study of NACO Campaign—A Report</li> <li>- NACP-III—To Halt and Reverse the HIV Epidemic in India</li> </ul>
4.9	Conducted studies for making program decisions. <ul style="list-style-type: none"> <li>- Assessment of ART centres in India: Clients' and providers' perspectives</li> <li>- Baseline CD4 count of PLHIV enrolled for ART in India</li> <li>- Assessment of Link ART Centres in India</li> <li>- Assessment of the Centres of Excellence (COE) in India</li> <li>- Assessment of Regional Pediatric centres</li> <li>- Assessment of Community Care centres in India</li> <li>- Factors affecting enrolment of PLHIV in ART centres</li> <li>- Baseline CD4 count of healthy adult population</li> <li>- Study of prevalence and types of baseline HIV drug resistance in the ART naive and previously treated HIV infected Northern Indian population.</li> <li>- Determination of reference ranges for CD4+T cell count and percentages for Adult Indian population.</li> <li>- Determining factors associated with ART drug adherence among HIV positive patients in India—A Multi centric Study</li> <li>- Psychosocial need and stresses in people infected with HIV/AIDS.</li> </ul>

### Annex 3. Economic and Financial Analysis

World Bank’s financial support to NACO during NACP-III was about 20% of NACO’s total expenditure during NACP-III, and strategically very important.<sup>14</sup> The component that received the bulk of WB funding (4/5<sup>th</sup> of total WB support) supported a package of Targeted Interventions (TIs) for preventing HIC, delivered mainly through NGOs. A huge scale up of TIs (from 778 in 2007 to 1655 in 2012) to extend the reach of these services to cover at least 80% of the main high-risk groups (HRGs) is the prime reason behind a significant reduction in annual new HIV infections witnessed during NACP-III (refer table 1 below).

**Table 1: Total Number of New Annual HIV Infections in India**

Year	2007	2008	2009	2010	2011	Total
New HIV infections (Total)	143856	134776	132033	130594	130977	
Fall in new Infections (2007 as baseline)		9080	11823	13262	12879	47044

Source: NACO, Technical Report, November 2012

Taking 2007 as the baseline, the total reduction achieved in the number of new annual HIV infections from 2007 to 2011 was over 47,000 cases. The main text discusses the link between the reduction in new infections and the investments in expanding TIs. It should also be noted that TIs not only contributed to averting new infections but also played an important role in other ways too, notably in referring HRGs to HIV testing Centers, and referring those found positive to antiretroviral treatment (ART) centers. Together with reducing the number of new infections through behavior change especially among HRG, increasing ART coverage was a complementary main objective of the project. There has been steep increase in the both the numbers of people receiving ART (by 425.5%), and in coverage—the percentage of people who need ART who are actually receiving it—from 16% in 2007 to 50% in 2011 (Table 2). Note that the increase in coverage is despite the change in eligibility criteria for ART (a raising of the CD4 threshold) which caused a large increase in the number of people needing ART in 2009, accelerating the increase in need, which rose about 29% over the project period. TIs contributed a great deal in ensuring the uptake of ART.

**Table 2: PLHIV patients needing and receiving ART**

Year	Need for ART	Total Number Receiving ART	Unmet Need	% receiving ART
2007	614,472	99,964	514,508	16%
2008	636,662	168,156	468,506	26%
2009	783,441	243,402	540,039	31%
2010	830,032	338,622	491,410	41%
2011	860,598	428,347	432,251	50%

Cost-effectiveness of TIs in India has been established in peer-reviewed literature. Two recent studies, one an independent impact evaluation<sup>15</sup> and the other a cost-effectiveness analysis<sup>16</sup> of

<sup>14</sup> During 2007-2012, total NACO expenditure was INR 5366 crores (about US\$ 1073 million), of which WB support was US\$ 218 million or just more than 20% of the total.

<sup>15</sup> R. Kumar, S. Mehendale, S. Panda, et al. “Impact of Targeted Interventions on Heterosexual Transmission of HIV in India.” *BMC Public Health* 2011, 11:549.

India's response to HIV, have found the TIs for female sex workers (FSWs) to be associated with the national decline in HIV prevalence, averting an estimated three million new infections. The cost-effectiveness analysis estimated that the Government and development partners spend on average US\$104 (INR4680) per HIV infection averted, and US\$10.7 per disability-adjusted life-year (DALYs) averted. Discounting at 3%, in India TIs for FSWs cost US\$105.5 (INR4748) per HIV case averted and US\$10.9 per DALY averted. Given India's GDP per capita, targeted interventions are a cost-effective strategy for HIV prevention in India. The findings of these studies are, of course, based on data that cover a much longer period than covered by NACP-III.

Besides supporting TIs, institutional strengthening was another component supported by the WB project under NACP-III. Under this component capacities at national, state and district levels were strengthened for better management of the national AIDS program, especially in contracting of NGOs and management of finances. Although the share of funding to this component was relatively small (US\$12 million or about INR 60 crores), there were significant efficiency gains achieved through this intervention. This helped enable NACO to exceed yearly targets for NGO contracting almost every year during the project period. For example, the NGO contracting target set for 2011-12 was 170 but the actual number of NGOs contracted by the project was 208.

Strengthening program information management system nationwide was yet another component of WB support under NACP-III. Under this component full M&E system was developed and made functional up to the lowest service delivery point. This component resulted in improved reporting system. For this reason, 97% of SACS could send at least 80% of computerized management information system (CMIS) reports and 97% of SACS could submit dashboard indicators regularly. Periodic reporting from CMIS has helped program managers become well-informed and enabled detailed reviews of the program through data triangulation at district level. This data triangulation fed into development of detail epidemiological profiles for each district, which contributed to better understanding of key drivers of HIV epidemics and tailoring of the response and allocation of effort across the country. Although the funding that went into developing M&E was relatively small (US\$16 million or INR 80 crores), the gains that accrued to the overall program are judged to be significant.

---

<sup>16</sup> S. Prinja, P. Bahuguna, S. Rudra, et al. "Cost Effectiveness of Targeted HIV-Prevention Interventions for Female Sex Workers in India." *STI 2011*, 87:354–61.

## Annex 4. Bank Lending and Implementation Support/Supervision Processes

### (a) Task Team members

Names	Title	Unit
<b>Lending</b>		
Mario E. Bravo	Senior Communications Officer	EXTOC
Mam Chand	Consultant	SARPS
Meera Chatterjee	Senior Social Development Spec	SASDS
Mariam Claeson	Program Coordinator	SASHN
Mohan Gopalakrishnan	Senior Financial Management Specialist	SARFM
Michele Gragnolati	Sector Leader	LCSHD
Julie-Anne M. Graitge	Program Assistant	SASHD
Cornelis P. Kostermans	Lead Public Health Specialist	SASHN
Kelechi O. Ohiri	Health Specialist	HDNHE
Roselind Rajan	Program Assistant	SARDE
Sandra Rosenhouse	Senior Population & Health Specialist	SASHN
Suneeta Singh	Senior Public Health Specialist	EASHD
Ruma Tavorath	Senior Environmental Specialist	SASDI
<b>Supervision/ICR</b>		
Neera Bhatia	Temporary	SASDO
Anne M. J. Bossuyt	Operations Officer	AFTHE
Mariam Claeson	Program Coordinator	SASHN
Sameh El-Saharty	Senior Health Specialist	SASHN
Mohan Gopalakrishnan	Senior Financial Management Specialist	SARFM
Manvinder Mamak	Senior Financial Management Specialist	SARFM
Julie-Anne M. Graitge	Program Assistant	SASHD
Puneet Kapoor	Consultant	SASGP
Shanker Lal	Senior Procurement Specialist	SARPS
Arun Manuja	Senior Financial Management Specialist	SARFM
Satya N. Mishra	Social Development Specialist	SASDS
Robert Oelrichs	Senior Health Specialist	HDNHE
Roselind Rajan	Program Assistant	SARDE
Shafali Rajora	Team Assistant	SASHD
Suneeta Singh	Senior Public Health Specialist	EASHD
William Starbuck	Senior Operations Officer	SASHN
Ruma Tavorath	Senior Environmental Specialist	SASDI
Bathula Amith Nagaraj	Operations Officer	SASHN
Joy de Beyer	Health Economist	WBIHS

**(b) Staff Time and Cost**

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	US\$ thousand (including travel and consultant costs)
<b>Lending</b>		
FY05	24.97	129.50
FY06	49.51	188.53
FY07	73.58	300.07
FY08	0.00	3.20
<b>Total:</b>	148.06	621.30
<b>Supervision/ICR</b>		
FY07	3.55	30.43
FY08	20.80	169.10
FY09	35.51	773.83
FY10	45.31	773.36
FY11	32.82	313.49
FY12	26.55	464.99
FY13	18.50	174.10
<b>Total:</b>	173.04	2,699.3

**Annex 5. Beneficiary Survey Results**  
*(if any)*

N/A



## **Annex 6. Stakeholder Workshop Report and Results**

NACO organised a 3-day National Summit of stakeholders in April 2012 to discuss and disseminate good practices and innovations practiced during NACP-III, to stock, reflect collectively, exchange experiences and, last but not least, be able to continue to improve the effectiveness of India's HIV response and health outcomes.

**Participants:** The summit was attended by multi-stakeholders from across the country representing diverse constituencies—government represented by NACO and other ministries, donor agencies (USAID, UNAIDS, World Bank, Bill & Melinda Gates Foundation, DfID), implementation partners, and numerous representatives from CBOs working with/for high-risk groups and PLHIVs.

**Learning and innovations discussed by stakeholders:** The summit was structured in 5 tracks, and a total of 85 participants presented good practices and innovations demonstrated during NACP III. A wide range of topics were discussed under each track, which are listed below, with details provided on a selected few:

***Track 1- Governance & Project Management/ Integration Mainstreaming and Partnership*** focused on the integrated approaches tried and tested in areas of targeted interventions, social protection for HRGs, improved access to health services in government health facilities and performance management system for service delivery. The innovative techniques for program management, institutional strengthening through local governance and use of media for harm reduction were also discussed.

***Track 2- Targeted Interventions*** had the most presentations, and covered a wide range of issues. The key innovations were in the following areas: (i) STI management and Syphilis Screening; (ii) responding to changing patterns of sex work practice; (iii) harm reduction and Opioid Substitution Therapy (OST); (iv) positive prevention; (v) community accountability and tracking; (vi) community mobilization and violence; and (vii) use of technology for outreach and service delivery; (viii) selection, evaluation and performance management of NGOs/CBOs.

NACO's process for selecting NGOs and CBOs to implement the targeted interventions (TI) is detailed in an Operational Guide. The selection process entails detailed review and capacity assessment of the NGOs that express interest in implementing a TI. NGOs are appraised in the field and scored on seven categories: governance structure, staffing, institutional experience, procurement system, financial management, planning and monitoring, and relationship with external partners. Based on the scores, and a detailed needs assessment, a short-list of NGOs are selected to submit proposals which are evaluated and approved for contracting. NACO uses an NGO Evaluation Tool to evaluate three aspects of the performance of NGO/CBOs in implementing TIs: finance, organizational capacity, and program delivery, scoring them on clearly defined indicators and standards for all three aspects. A weighted average of all scores is calculated for each NGO. This evaluation is done annually and NGO are categorized into three groups based on the number of years they have been implementing TIs. The TIs are evaluated using various qualitative and quantitative tools and techniques including focus groups, key informant interviews, and participatory observations. Relevant documents and registers are also verified by the evaluators. Based on the weighted average, the NGO are ranked and weak NGO are provided support for strengthening their implementation. Contracts of NGO that are evaluated

to be non-performing are cancelled. *For example, as of December 2010, 14 percent of the evaluated organizations did not pass the evaluation and half had their contracts terminated and the others were put on a three month improvement plan.*

**Track 3- Care, Support and Treatment** had highly technical discussions as well as sessions on community participation and use of technology for improving access to ART services and adherence. The innovations presented by the stakeholders included: (i) comprehensive Value Based intervention Model for Children with HIV; (ii) instituting Client Oriented Provider Efficient Services (COPE) in ART Centers; (iii) better ART-ICTC-PPTCT-RNTCP Linkage to minimize lost follow up; (iv) macro-nutrient supplementation improves Nutrition Health Outcomes; and (v) improving access to public and private resources to meet the needs of PLHIV.

**Track 4- Community Mobilization & Demand Generation included:** (i) strengthening community structures for community participation; (ii) rights-based instruments for redressing Stigma, Discrimination and Crises; (iii) risk-based segmentation for BCC to improve service uptake; (iv) social marketing through the community; (v) innovative communication methods for support system including a help line; and (vi) collectivization of community members for alternative livelihoods.

**Track 5- Strategic Information** discussions were around evidence based planning and innovative techniques used by states to make effective use of data for decision making. The innovations described in the sessions included: (i) impact evaluations among HRGs; (ii) use of information technology for reporting system; (iii) monitoring tools and techniques; (iv) surveillance systems and enhancing data quality.

The computerized financial management system and management information system, and NACP III dash board proved very useful managerial tools for monitoring the program at national and state levels and providing data that could be used to inform planning and programming at all levels, including triangulation at state level (2010) to inform annual planning and national priority setting.

**The Computerized Program Financial Management System (CPFMS)** is a web-based tool that facilitates accounting and reporting for multi-donor funding. It is operated from NACO, and connects with all State AIDS Control Societies (SACS) for on line monitoring of financial data. Standard books of accounts on a double entry basis (cash and bank books, journals, fixed assets register, advance registers) are available in the CPMS which are maintained by NACO/SACS. The CPFM allows quarterly target setting, regular review of the finance performance at state and national levels, monitoring of spending patterns and prompt release of funds. The modules on line contain all financial data from voucher entry, journal, inter-fund adjustments, bank reconciliation etc so that all financial reports are generated through the system. It also provides a menu of options for creating reports apart from the requirements of Donors so that effective financial monitoring can be done at SACS level.

**The Computerized Management Information System (CMIS)** used in NACP III captures various reports, such as the ones generated by the CPFMS, which are produced in a routine manner. The CMIS provides information on input and output level indicators useful for the program managers at the facility and district levels.

**The NACP 3 dashboard** of crucial information from the CMIS is a set of 21 operational indicators that require management attention. These indicators inform managers whether the program is on course (compared with targets) and provides early warnings of weaknesses or failing processes. At each Joint Implementation Review by NACP III pooling partners (World

Bank, DfID and NACO) and other development partners it provided an up to date snap shot of key indicators and focus for action. *For example, at the JIR May 2011, it was agreed that NACO would follow-up with each SACS that reported stock-out of drugs, test kits or condoms urgently to identify local and generic solutions, and report on action at next JIR.*

Some sample dashboard indicators: # TIs; # TI's reporting condom stock-out in last month; # clients tested; # HIV positive pregnant women receiving complete course of ART prophylaxis; % blood units provided by voluntary blood donors; % districts with at least one functional PLWHA network; % SACS with Project Director in-charge of SACS for more than one year; % SACS with at least 80% CMIS reporting; # ART centers reporting drugs stock-out.

Performance management tools and other M&E tools and processes are used by NACO strategically, as shown below:

Product/Tool	Levels	Purpose/Audience	information Sources
<b>Program Reports</b> (Monthly/Quarterly)	National, State, District	Program management of specific areas e.g., blood safety for program managers at the national, state and district levels	Computerized Management Information System (CMIS)
<b>Dashboard</b> (Quarterly)	National, State	Used by National AIDS Control Board (NACB) to monitor NACO & NACO to monitor State AIDS Control Societies (SACS) Management tool for NACO and partners	CMIS State dashboards
<b>State of the Epidemic and Response</b> (Annual)	National, State	Strategic management and accountability tool for NCA, NACB, NACO, SACS, partners, Government public and DPs, for planning, monitoring, accountability, quality and dissemination	CMIS Surveillance Special surveys Research
<b>External Program Evaluation Reports</b> (Mid-term; End of Program)	National, State, and District	Measurement of progress against objectives for NCA, NACB, NACO, SACS and DPs	Annual reports, special surveys, evaluation process
<b>Published Research/ Other Reports</b> (Periodic)	Any	NACO, SACS, partners, wider audience	Research studies Surveys

**Innovations to scale-up prevention** included: (i) Peer led high-risk group (HRG) mapping to enable effective scale-up of targeted interventions (TIs); (ii) link workers scheme as a strategy for reaching high-risk populations in rural areas; (iii) public-private partnership to expand treatment for sexually transmitted infections (STI), integrated counseling and testing centers (ICTC) and prevention of parent to child transmission services; (iv) providing opioid substitution therapy for IDUs in public health settings and through public-private partnerships; (v) using nurse practitioners to provide HIV services to people as part of primary health services is a step toward greater convergence with government health facilities; (vi) master health check-up program in Tamil Nadu linked to existing government services normalized health services for HRGs; (vii) single prick syphilis/HIV tests (viii) pre-specified color coded drug kits to treat common STI/RTI syndromes.

**Innovations relating to IEC:** (i) Using marketing professional approach and new media in developing and implementing communication activities; (ii) first use of mass media to address Sexually Transmitted Infections; (iii) Development and implementation of composite mid media and outdoor campaign in sync with the national mass media calendar; (iv) Reaching and engaging youth in the 8 North Eastern states through sports (football) and music concerts; (v) Developed designated IEC toolkit for service centers like ICTC/PPTCT, ART centers; (vi) User friendly material for FSW, MSM, IDU and Migrants for use in TIs.

**Innovations to strengthen care, support and treatment** for PLWHAs include: (i) decentralized HIV treatment through linked ART centers; (ii) electronic patient card (smart card) for improved access to ART across the country; (iii) involvement of DAPCU as district level functionary to improve access to government social protection schemes for HRGs and PLWHAs; (iv) introduction of health insurance for PLWHAs; (v) the provision of legal aid services at ART centers. These innovations enabled NACO to increase the number of people who received ART and other social entitlements.

**Innovations to strengthen the information management system** include: (i) the patient monitoring system; (ii) broad mapping of HRGs; (iii) district epidemiological profiling using data triangulation; and (iv) use of Strategic Information Management System—a web based reporting system for effective program monitoring. These innovations improved NACO monitoring and evaluation system, allowing easy transfer of data and knowledge dissemination.

**Performance management innovations** include: (i) a web-based computerized financial management system linked with program performance; (ii) TI NGO selection and evaluation procedures that assess NGOs compliance against a standard set of performance criteria, including fiduciary issues, governance, human resource and program performance; (iii) a dash board that provides crucial information for program monitoring, generated from the computerized management information system (CMIS), including a set of 21 operational indicators that require management attention; and (iv) NACO operational guidelines on every component of the program.

**Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR**

No ICR report or comments were received from NACO.

## **Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders**

No comments were received from DfID

## **Annex 9. List of Supporting Documents**

- Project Appraisal Document (PAD), Third National HIV/AIDS Control Project.
  - Financing Agreement (Third National HIV/AIDS Control Project) between INDIA and International Development Association, July 5, 2007
  - Aide Memoire of all missions conducted under the project.
  - Implementation Status and Results (ISR) documents from the project.
  - Department of AIDS Control, Ministry of Health and Family Welfare, Government of India. NACO Annual Report, 2011-12
  - NACO NEWS, A Newsletter of the National AIDS Control Organisation, various issues.
  - Adolescent Sexual Behavior and HIV/AIDS—An exploratory Research Conducted in Six Districts of Rajasthan. Aide et Action, NACO, UNDP
  - NACP III Dissemination Summit 2012. Good Practices, Innovation and Impact, 25<sup>th</sup>-27<sup>th</sup> April 2012. Abstract Book. NACO
  - National AIDS Control Programme: Response to HIV Epidemic in India
  - Targeted Interventions: National AIDS Control Programme, Phase-III, India
  - Condom Promotion: National AIDS Control Programme, Phase-III, India
  - Care Support & Treatment: National AIDS Control Programme, Phase-III, India
  - Red Ribbon Express: National AIDS Control Programme, Phase-III, India
  - Strategic Information Management: National AIDS Control Programme, Phase-III, India
-