INVESTMENT CASE FOR FAST TRACK STRATEGIES: Prioritizing Investment Options in HIV Response in Bangladesh to end AIDS by 2030

জাতীয় এইডস /এসটিডি প্রোগ্রাম
স্বাস্থ্য অধিদপ্তর, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়

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ZERO NEW HIV INFECTIONS.
ZERO DISCRIMINATION.
ZERO AIDS-RELATED DEATHS.

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National AIDS / STD Programme (NASP) 2016
Directorate General of Health Services
Ministry of Health and Family Welfare
House No. 11/B, Road No. 130, Gulshan-1
Dhaka - 1212, Bangladesh
Tel: +88 02 8829720, Fax: +88 02 8829720
Web: http://www.bdnasp.org

UNAIDS Bangladesh
IDB Bhaban (8th floor)
E/8-A, Begum Rokeya Sharani
Sher-e-Bangla Nagar
Dhaka - 1207, Bangladesh
Tel: +88 02 9183107, Fax: +88 02 9183108

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UNAIDS

Preface

Under the leadership of the Government of Bangladesh (GOB), the National AIDS/STD Programme (NASP) and UNAIDS in liaison with civil society stakeholders started the process of the Investment Case for Bangladesh to enhance the mobilization of resources (domestic and external donor) to END AIDS BY 2030 through fast track strategies. The Investment Case makes an effort to outline how to maximize efficient use of resources, based on current evidence, by re-visiting the strategic directions in prevention efforts to fast track and intensify. The process included several review sessions facilitated by the Ministry of Health and Family Welfare, engaging researchers, civil society and government. The Investment Case has been reviewed by the Technical Working Group on M&E and Strategic Information in HIV and AIDS and the Technical Committee of the National AIDS Committee has endorsed it. As the GOB and UNAIDS is committed to facilitate all efforts towards the prevention of the spread of HIV, which includes generating evidence to enhance efficient use of resources, this technical review was very relevant.

The Investment Case has helped generate evidence by using available program, research and finance data, including those that have been estimated and projected. It is now foreseen that it may provide guidance for adequate budgeting of the multi-layered strategies to be rolled out through relevant operational plans under the Health Sector. It is expected that the recommendations from the Investment Case will inform Bangladesh to allocate funds more efficiently. This in turn may lead to sustained financing from domestic and other sources. Thus national capacity in terms of health systems strengthening would be strengthened in responding to HIV and AIDS in an integrated, efficient and effective manner in line with the global “FAST TRACK” initiatives to “end AIDS by 2030”.

Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti Retroviral Therapy
ARV	Antiretroviral
AEM	AIDS Epidemic Model
ANC	Antenatal Care
DALY	Disability Adjusted Life Years
DOTS	Directly Observed Treatment, Short course
FSW	Female Sex Worker
FWID	Females who Inject Drugs
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
HBV	Hepatitis B Virus
HTC	HIV Testing and Counseling
KP	Key Populations
MSM	Men who Have Sex with Men
MSW	Male Sex Workers
MWID	Males Who Inject Drugs
NASP	National AIDS/STD Program
NSE	Needle Syringe Exchange
OST	Opioid Substitution Therapy
PLHIV	People Living with HIV/AIDS
PWID	People who Inject Drugs
PMTCT	Prevention of Mother to Child Transmission
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
TB	Tuberculosis
TG	Transgender
TRIPS	Trade_related Aspects of Intellectual Property Rights
UNAIDS	United Nations Joint Programme on HIV and AIDS
USD	United States Dollar
WTO	World Trade Organization

AIDS HAS NOT ENDED IN BANGLADESH : WE NEED TO INVEST NOW

If we aim towards "Ending AIDS" with more strategic approaches:

By 2020 we can:

Save USD 21.2 treatment cost per USD 1 investment in prevention; &

Save USD 79.6 million in future income (with a cost-benefit ratio of 7.2)

By 2030 we can:

Reduce the estimated new infections to <300 a year;

Save 7,635 lives;

Avert 10,511 infections; &

Save 286 thousand DALYs (healthy, productive life years)

> ***Investments in the AIDS response will be repaid a thousand-fold in lives saved and communities held together***
>
> ***Ban Ki-moon, UN Secretary General***

Understand and focus

Defining "Ending AIDS in Bangladesh"

UNDERSTAND AND FOCUS

DESIGN TO SCALE AND INNOVATE

INTEGRATE AND SUSTAIN

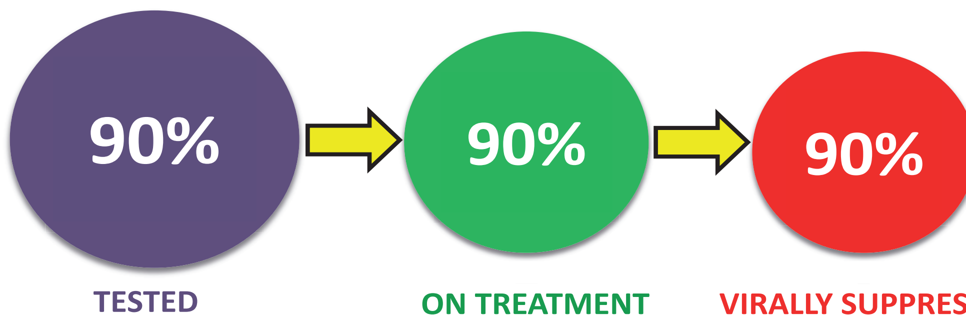
It is the reduction in new HIV infections (incidence) and AIDS-related deaths to levels that **no longer represent a major health threat to any population or country**

Indicators	Global Targets		Bangladesh Targets*	
	2020	2030	2020	2030
Case identification and treatment	90-90-90	95-95-95	90-90-90	95-95-95
New infections per year	500,000	200,000	<350	<300
Discrimination	ZERO	ZERO	ZERO	ZERO

* In 2014-2015 the estimated annual new infections in Bangladesh was about 1,100, thus HIV is still a major health threat in Bangladesh

We can fast track along with the world, leaving no one behind

To reach the commitment of the three "ZEROs" we must achieve the 90-90-90 targets



TESTED ON TREATMENT VIRALLY SUPPRESSED

To end AIDS and realize "Zero New Infections, Zero Discrimination and Zero AIDS related Deaths" we need to prevent transmission by:

- Identifying at least 90% of the estimated number of PLHIV by increasing case detection by 2020
- Ensuring that 90% of those detected are on *"Treatment"* by 2020
- Ensuring that 90% of those on treatment are virally suppressed by 2020

Fast-Track Targets

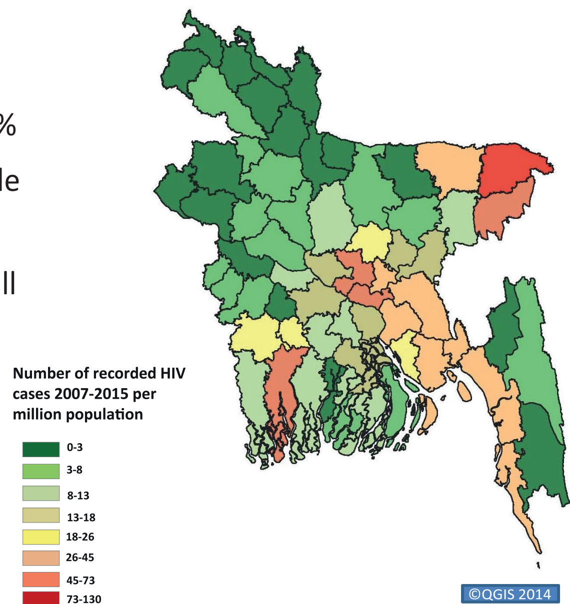
Understand and focus

How far does Bangladesh need to go to END AIDS BY 2030

HIV has been detected in 61 out of 64 districts

CURRENT EPIDEMIOLOGY

- Prevalence rate: <0.1%
- Prevalence rate among key populations: <1%
- Concentrated epidemic (5.3%) among people who inject drugs in Dhaka
- Cumulative number of reported HIV cases till December, 2015 stands at 4,143, and deaths at 658
- There were 469 new HIV cases reported, while 95 people had died in 2015
- Estimated number of people living with HIV (PLHIV): ≈ 9000



PLHIV are reported from almost all of the districts, and the estimations are much higher
NO DISTRICT IS IMMUNE FROM HIV

How far does Bangladesh need to go to END AIDS BY 2030

The status of the three "90s": THE 1ST 90 : INCREASE CASE DETECTION

Coverage of case detection (HIV Testing and Counseling/HTC) among key populations		
Population groups	Approximate % covered by prevention interventions	Approximate % received HTC (of estimated size of specific groups)
Hotel, residence & street based Female Sex Workers	≈45%	≈15%
Brothel based Female Sex Workers	100%	0%
People who inject drugs	≈80% (<500 on OST)	≈30%
Men who have sex with men & Male Sex Workers	≈25%	≈10%
Hijra	≈50%	

Testing among the general population is much less, we are now detecting about 1/3rd of the estimated cases..........where the target is 90%

Understand and focus

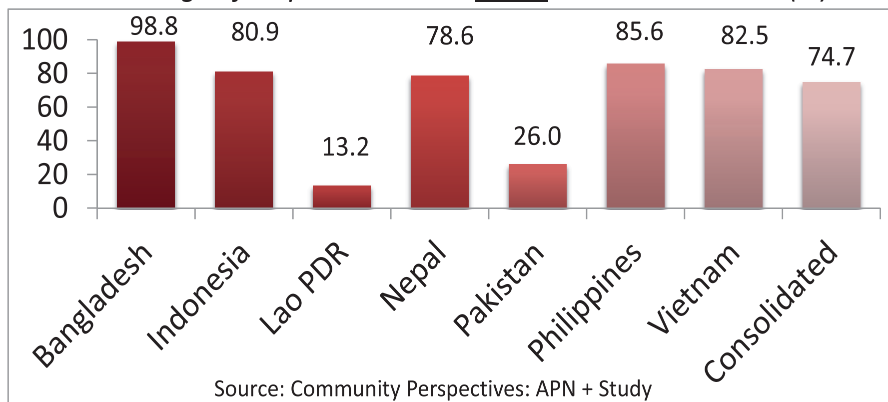
How far does Bangladesh need to go to END AIDS BY 2030

The status of the three "90s": THE 2nd 90 : ENSURE TREATMENT

Treatment gaps (Among Estimated # of PLHIV):
ART Coverage among adults and children as of 2015: 17%................it has to be 90%

THE 3rd 90: ENSURE VIRAL SUPPRESSION........*currently <5% are tested for viral load*

*Percentage of respondents who **never** had viral load test (%)*



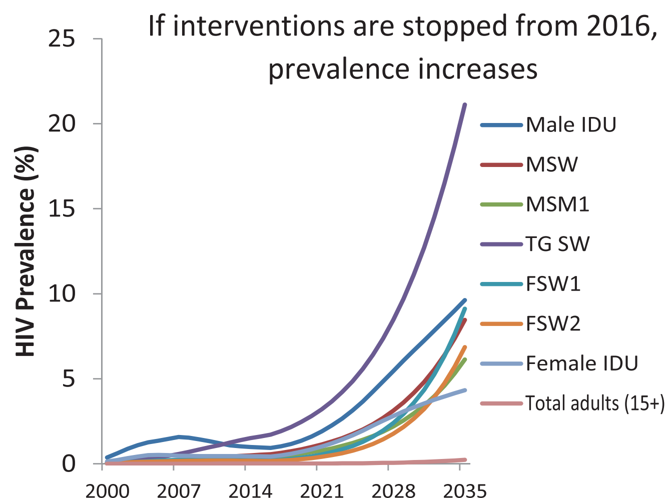
Source: Community Perspectives: APN + Study

Globally all countries are facing similar challenges – we are not alone and we can fulfill the global commitment

Why should Bangladesh plan to "End AIDS by 2030"..........
we have already contained the epidemic

If we do not continue interventions; by 2030:

- Total number of estimated PLHIV will be 117,049
- Annual estimated new infections will be 29,759
- Annual estimated deaths will be 7,889
- Almost 36,000 people will need treatment
- Almost all key populations will have a concentrated epidemic and the prevalence among the general population will be rising



For the past 20 years, ongoing interventions have:

averted a total of 141,225 HIV infections;

saved 19,545 lives since 1995;

kept estimated new infections at 1000-1500 per year

Understand and focus

Understand and focus

How will an investment case help to strengthen interventions?

The Investment Case on HIV and AIDS is developed to help Bangladesh:

- evaluate the state of the disease,
- design and propose a program that is focused on interventions with the most impact,
- improve efficiencies in programs,
- understand total cost and impact, and
- influence decision makers in funding and programming priorities based on evidence.

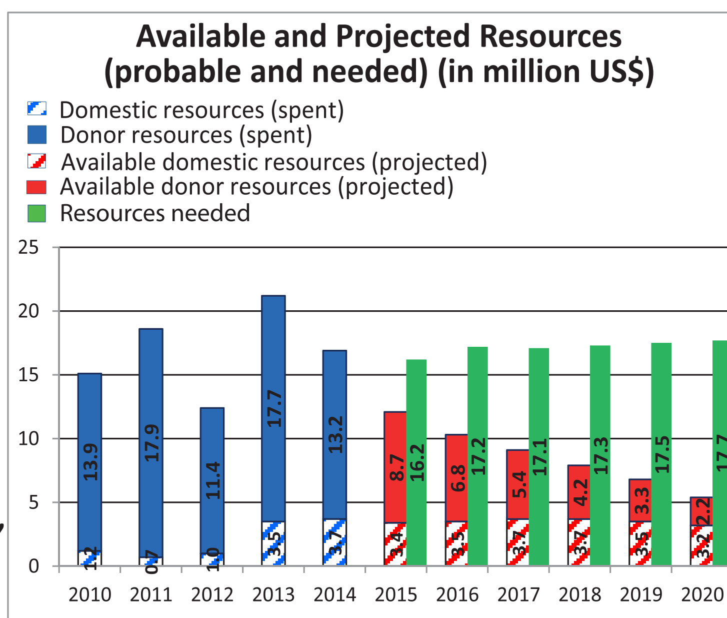
OBJECTIVE:

To help facilitate the plans and efforts for interventions with the most impact for Bangladesh in the HIV response with investors (private sector, donors, other ministries, etc.) to ultimately drive new financing opportunities efficiently to end AIDS.

Investment Case >>>>>> Fast Track efficiently

Investment case will fast track AIDS response efficiency: Business as usual cannot continue in Bangladesh as guided by an investment case

Resources supporting HIV interventions are becoming limited: We need to better understand how to rapidly achieve maximum impact in a sustainable manner to address the **resource gap.** The 'Investment Case' examines the impact of various future interventions, and prioritizes the most effective, efficient and sustainable response toward the global goal of ***'Ending AIDS by 2030'***



Understand and focus

Design to Scale and Innovate

Investment Case to Fast Track: Materializing the "Focus" and "Sustainability"

Baseline coverage The program coverage by different KPs, i.e. FSW, PWID, MSM, MSW and hijra are estimated by using the Program Reach data for the year 2014

Increased coverage Scaled coverage is as per *Revised 3rd National Strategic Plan for HIV and AIDS Response 2011-2017*

Baseline costs Unit Costs (USD per year) were as per *Costed Implementation Plan for HIV/AIDS for the Revised 3rd National Strategic Plan for HIV and AIDS Response 2011-2017*

Reduced unit costs Reduced unit Costs are used : reduced by 20%

Materializing the "Focus" and "Sustainability": GEOGRAPHICAL FOCUS: Priority and Remaining Districts

Current geographical targeting of existing programs can be more effective by scaling up interventions in priority districts as selected through weightage of the indicators tabulated. The investment case suggests maximizing intervention coverage with fewer resources in 23 districts. Various intervention options were explored to assess what would happen at different coverage scales in all 64 districts of Bangladesh.

Indicators	23 Priority districts	41 Remaining districts
Proportion of general population	52%	48%
Proportion of key population	73%	27%
Program Reach	71%	29%
Proportion of total detected PLHIVs	82%	18%
Proportion of ART recipients	81%	19%
Proportion of surveillance districts with HIV detected covered	75%	25%

Materializing the "Focus" and "Sustainability"

The methods used to consider the required interventions and activities for a holistic approach to suggest strategies to fast track:

1. Using the AIDS Epidemic Model (**AEM**):
   - AEM is the tested policy and planning tool adopted in many countries including Thailand, Indonesia, Myanmar, Vietnam, Pakistan, Uzbekistan, etc
   - The study collected relevant time series data between 2000 – 2012 to generate output results from 2013 – 2030
   - It interprets the dynamics of HIV transmissions among **different key population groups** based on information on basic **prevention, treatment, care and support**
   - It projects risk in different population groups, trends in new infections, and deaths and infections averted, etc
   - It analyses returns on investments

Design to Scale and Innovate

Materializing the "Focus" and "Sustainability"

2. Reviewing of **best practice examples** for integration and sustainability:
   - Programs for prevention of mother to child transmission (PMTCT)
   - Interventions among cross-border migrants and their families
   - Integration of HIV case detection with TB-DOTS centers
   - Strengthening of health systems (ANC/PMTCT, TB-DOTS, HTC in upazila health complexes, sexual-reproductive health, hepatitis B, viral load testing, etc.)
   - Steps towards addressing law and policy reform
   - Achievements in Universal Health Care

3. Including other supportive actions:
   - Generating evidence and real time data
   - Community systems strengthening (Community-led testing, point of care approaches, initiating innovations, etc.)
   - Multi-channel mass awareness programs, especially on HIV testing and counseling
   - Multi-level capacity building and advocacy, especially among health service and legal aid providers
   - Special focus on the most at risk adolescents and especially vulnerable adolescents
   - Exploring in-country drug manufacturing scope

Designing investment scenarios for the AEM

The following set of investment scenarios was designed for "Ending AIDS"

Baseline Option: Current program coverage and unit costs continue

Option 1: Current program coverage continues with reduced unit costs

Option 2: High-impact; program coverage will be as follows:

Targets by 2020	% Coverage of key populations*									% ART coverage *
	FSW		MWID		FWID		MSM/hijra			
	H&R	Street	NSE	OST	NSE	OST	MSM	MSW	TG	
Priority districts	80	80	85	10.5	70	10.5	40	70	90	90
Remaining districts	47.7	39	83.5	3.7	44.6	0.6	15.1	32.7	48.2	19

FSW: Female sex workers (eg. H&R-hotel and residence based); MWID: Males who inject drugs; FWID: Females who inject drugs; NSE: Needle-syringe exchange; OST: Opioid substitution therapy; MSM: Men who have sex with men; MSW: Male sex workers; ART: Antiretroviral therapy

Designing investment scenarios for the AEM

Option 3: Half prevention coverage in remaining districts; program coverage will be as follows:

Targets by 2020	% Coverage of key populations									% ART coverage
	FSW		MWID		FWID		MSM/hijra			
	H&R	Street	NSE	OST	NSE	OST	MSM	MSW	TG	
Priority districts	80	80	85	10.5	70	10.5	40	70	90	90
Remaining districts	23.9	19.5	41.8	1.9	22.3	0.3	7.6	16.4	24.1	19

Option 4: Moderate scale up of prevention interventions in priority districts; program coverage will be as follows:

Targets by 2020	% Coverage of key populations									% ART coverage
	FSW		MWID		FWID		MSM/hijra			
	H&R	Street	NSE	OST	NSE	OST	MSM	MSW	TG	
Priority districts	70	70	81.3	5	60	5	35	60	70	70
Remaining districts	47.7	39	83.5	3.7	44.6	0.6	15.1	32.7	48.2	19

Designing investment scenarios for the AEM

Option 5: Ending AIDS with moderate scale up of prevention interventions in priority districts and half prevention coverage in remaining districts; program coverage will be as follows:

Targets by 2020	% Coverage of key populations									% ART coverage
	FSW		MWID		FWID		MSM/hijra			
	H&R	Street	NSE	OST	NSE	OST	MSM	MSW	TG	
Priority districts	70	70	81.3	5	60	5	35	60	70	70
Remaining districts	23.9	19.5	41.8	1.9	22.3	0.3	7.6	16.4	24.1	19

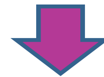
Comparing the projected results of the investment scenarios for Ending AIDS

	Epidemiological outcomes			Cost Effectiveness	
Scenarios	Estimated new HIV infections per annum	Estimated # of PLHIV by 2030	Estimated AIDS Deaths / year	Resource required per annum *(in million USD)*	Treatment savings per additional prevention *(in USD)*
Baseline	>1,000	9,256	≈1,000	13.7	-
Option 1	>1,000	9,256	≈1,000	**11.0**	0.0
Option 2	**<300**	6,010	**≈400**	16.5	-2.4
Option 3	**<300**	6,379	**≈400**	**15.6**	**21.4**
Option 4	**<300**	**5,566**	≈500	14.2	2.2
Option 5	>300	5,935	>500	13.3	0.7

Design to Scale and Innovate

The Investment option for prevention, treatment, care and support with the most consistent results

- Ensure a rapid scale-up for prevention, testing and universal access to ART (i.e. treating 90% of PLHIV regardless of CD4 count) in the 23 districts with reduced unit cost
- Maintain 50% of the existing program coverage and treatment (CD4<350) in the remaining 41 districts with reduced unit cost



- Estimated new infections will reduce to **less than 300 a year**; 2,170 **lives** by 2020 and 7,635 by 2030 will be **saved**; 2,811 **infections** by 2020 and 10,511 by 2030 will be **averted**
- Every USD spent now can generate a **return of about 21 USD** by 2020, if USD 16 million is allocated for direct prevention per annum
- Moreover, the marginal cost per DALY saved is USD 145 – ***less than the country's per capita GDP*** – making 'Ending AIDS' a cost-effective investment

We need to FAST TRACK and intensify our efforts to sustain our achievement and uphold our pride

HIV prevention can no longer remain a vertical program: Integration strategies need to be rolled out

- Integrate HIV prevention efforts into the health sector program
- Integrate new technologies in screening (eg. test for triage, saliva testing, etc.) through community systems strengthening
- Integrate HIV prevention services with existing infrastructures & experiences to address:
  - TB-HIV co-infection through existing DOTS centers
  - PMTCT through ANC services
  - Sexual reproductive health STI and HIV
  - Case detection among cross-border migrants and their families through establishing HIV Testing and Counseling centers in upazila health complexes especially those along the international border
  - Hepatitis B/HIV co-infection (HBV/HIV co-infection) and Hepatitis C/HIV co-infection
  - Set-up viral load testing facilities in existing reference laboratories
- Integrate key HIV messages into various strategic advocy opportunities (eg. mass awareness and advocacy campaigns and messages); especially those on HIV testing and counseling

SAY NO TO missed opportunities

Integrate and Sustain

Integrate and Sustain

Way forward towards a holistic approach

- **Focus geographically** – experience shows prevention among KPs well addresses our countries unique epidemic pattern compared to other neighboring nations
- **Scale up** HIV testing and treatment using mixed models for community based testing, test for triage and service integration using new tested technologies
- Strategically scale-up **universal access to ART** and prevention efforts as per targets in the National Strategic Plan in the prioritized districts
- **Integrate** new technologies in screening (eg. test for triage) & services with existing infrastructures & experiences to address TB-HIV co-infection (DOTS), PMTCT/ANC, SRH, migrants, HBV/HIV co-infection, mass awareness, capacity building, etc. SAY NO TO missed opportunities
- Ensure sufficient supply of **ARV drugs** and explore ARV drug manufacturing right of Bangladesh under WTO/TRIPS
- Continue the perusal towards **law and policy reform** and to address **stigma and discrimination**

Bangladesh needs to invest about USD 20 million (for a holistic program) per year for an AIDS free future……

“It’s not where you start, but how high you aim that matters for success”

Nelson Mandela

(1918-2013)

Let’s work hand in hand towards an AIDS free generation

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to all

WHO HAVE WORKED TO ACHIEVE THE MILLENNIUM DEVELOPMENT GOALS AND ARE WORKING TO ACHIEVE THE SUSTAINABLE DEVELOPMENT GOALS