HIV/AIDS STRATEGIC PLAN
2015-2020 IN AN INVESTMENT CASE APPROACH

FEDERAL HIV/AIDS PREVENTION AND CONTROL OFFICE
ADDIS ABABA, ETHIOPIA
DECEMBER, 2014
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Acknowledgement

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FHAPCO likes to extend special thanks to Dr Tsegay Legesse who drafted the HIV Investment Case and led all the development process including the costing.

Last, but not least, FHAPCO acknowledges the participants of the consultation, validation, technical working discussions and individuals who participated in the epidemiologic data collection, investment case discussion and provided comments/ inputs on the draft document.

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Director General

Federal HIV/AIDS Prevention & Control Office
EXECUTIVE SUMMARY

The 2015-2020 Ethiopia HIV/AIDS prevention care and treatment Strategic plan was developed in an investment case approach. While developing the document, we have used the investment case tool which focuses on four core elements namely, understand the problem, design the optimal program to solve the problem, deliver and sustain for impact and ending AIDS. This investment cases aims to pave the path for ending AIDS by 2030 through averting 70,000-80,000 new HIV infections and saving about half a million lives till 2020. The targets set in this investment case are in line with the three 90’s (90-90-90) treatment targets set by UNAIDS to help end the AIDS epidemic.

The HIV Investment case includes four strategic objectives to achieve the goals and targets. These are:

**Strategic objective 1:** Implement high impact and targeted prevention program.

1.1. Behavior Change Communication program

- Intensifying Behavior change communication targeting at risk population and priority geographical areas. The population group reached with this program include female sex workers, truck drivers, migrant/seasonal/daily laborers, urban and hot spot area dwellers, out of school adolescents, workforces in mega projects and surrounding communities, uniformed forces, prisoners, PLHIV and sero-discordant couples

- Strengthening School HIV education: sustain the low HIV prevalence among youth in school.

- Strengthening community based HIV BCC through health extension and Health development army: Empower communities and sustain the gains.

1.2. Condom distribution and Use: ensuring the sustainable and equitable access to quality condom through social marketing and total market approach; and promote correct and consistent use of condom for prevention of HIV/STI.

1.3. Prevention and control of Sexually Transmitted Infections (STI)

1.4. Blood safety: Ensuring quality-assured testing of all donated blood for HIV.

**Strategic Objective 2:** Intensify Targeted HIV testing and counseling services.

The focus will be to raise the proportion of People living with HIV who know their HIV status from 60-65% to 90% by 2020 through intensifying targeted HIV testing to the identified target population groups for identification of majority of the HIV infections and through right based approach to respond to the created high community demand for testing.
Strategic objective 3: Attain virtual elimination of MTCT.

- Intensifying the primary HIV Prevention among women and men
- Universal HIV testing of all pregnant women.
- Improving the provision of family planning services to HIV positive women through integrating the Family planning services and PMTCT
- Roll out of PMTCT B option plus.

Strategic Objective 4: Optimize and sustain quality care and treatment

4.1. Increment of enrollment for ART
4.2. Strengthening TB- HIV integration
4.3. Improving adherence and retention in care
4.4. Providing ART as prevention
4.5. Enhance the fight against stigma and discrimination

In addition, four critical enablers are identified as necessary for the HIV Investment Case to deliver the results. These include:

A. Critical enabler 1: Health system strengthening: HMIS/M&E, PHPM & Laboratory services
B. Critical enabler 2: Enhance Partnership, Coordination and Leadership
C. Critical enabler 3: Increase Domestic resources for HIV response
D. Critical enabler 4: Gender equality and equity: Address gender related barriers to HIV and SRH needs of girls and boys, and women and men.

Resource for the response and returns of the investment

The six year HIV investment case was costed through a combination of model based and ingredient (activity) based costing approach. The overall resource needs for the 2015-2020 HIV investment is estimated to be US$ 1.65 billion. Scaling up the priority programs in the investment case to the set coverage targets with this cost will have a significant return through averting at least 70,000 new HIV infections and 162,000 deaths by 2020. It is more illustrated as indicated in the figures below.
A. New HIV Infections at implementation of priority programs at the set coverage in Table 5 and remaining constant from 2013 onwards (base)

![Number of New Infections](chart)

B. AIDS-related Deaths at implementation of priority programs at the set coverage in Table 5 and remaining constant from 2013 onwards (base)

![Number of AIDS Deaths](chart)
# Understanding the Epidemic and the Response

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1 UNDERSTANDING THE EPIDEMIC AND THE RESPONSE

1.1 Background

Ethiopia follows a Federal government system and consists of nine National Regional States and two City Administrations with 840 districts. The population size of the country is estimated to be about 84 million of which 83% live in rural areas.

Since the first AIDS cases identified in 1986 the country had started to respond to the epidemic in different approaches. The early response was a health sector response, but after the endorsement of the HIV/AIDS policy in 1998 the country followed a multi sectoral approach to fight the epidemic. To implement the HIV policy aligning with the dynamics of the epidemic, recent evidences of effective interventions and technologies three consecutive five year strategic frame works or plans to intensify the multisectoral response to HIV/AIDS in the country were developed. The first one was “Strategic Framework for the National response to HIV/AIDS in Ethiopia (2001-2005)”. The second and third are Strategic Plan for intensifying multisectoral in Ethiopia (SPM-I: 2004-2008) and SPM-II (2010-2014) respectively. Over these years the response was guided by these and health sector development plan (I-IV) which reversed the epidemic in the country. In order to identify the priority areas and design effective programs with high impact interventions for the post 2015 and invest the resources accordingly, it is important to understand the epidemiology and state of the current response. The Need for targeted approaches to high impact interventions, improving efficiency and increasing domestic resources to the national responses have become critical elements to achieve high infection aversion and lives saved. This is why this HIV Investment case is developed to guide the 2015-2020 national response and paving the path to ending the AIDS epidemic in the country by 2030.

1.2 Development Process of the Investment Case

Prior to the starting of the development process, HAPCO in collaboration with partners organized a stakeholders’ consultation meeting to create a common understanding on the concept of the HIV investment case and the development process. Following this a core investment case Team led by HAPCO, was establish to collect the required information to understand the epidemic and set priorities. More specifically:

- The core investment case team drawn from government sectors, PEPFAR, UN agencies, private sectors, FBOs, CSOs and Associations of PLHIV was established. The core team conducted repeated meetings during December 2013 and January 2014 to collect epidemiological information, programmatic data and set priorities.
HAPCO assigned a senior staff to lead the investment case development process and draft the document.

Reviewing of various and relevant documents were undertaken.

HAPCO conducted in depth discussion with various technical working groups or advisor groups providing support to MOH and HAPCO, namely HIV testing and counseling working group, PMTCT working group, Prevention advisory group, care and treatment working group, TB working group and PSM coordination committee. The discussion was conducted on the different thematic areas and the findings of the discussion have been used to describe the epidemiology, the response, gaps and set priorities for the post 2014.

HAPCO set the priority programs, the target population for each programs and set targets with the support of partners.

Modeling of the effectiveness of the prioritized interventions was done with the support of Futures Institute.

HAPCO drafted the document and shared the first draft to partners and in turn received inputs from partners which were used to enrich the document.

HAPCO presented the first draft at different forum, namely at the HIV Government sub forum, CSOs meeting organized by AMREF, high level consultation meeting of Health Sector Transformation plan, HIV donor groups meeting and the 2007 EFY joint annual HIV planning session where all key partners participated.

Enriching the document through incorporating the inputs of all partners and consultation sessions and developed the update version of the HIV investment case.

HAPCO presented the updated version of the document to the executive committee of the health sector and endorsed the document with its input.

HAPCO costed the investment case of the six years with a combination approach of one health tool and activity based costing with the support of PEPFAR and UNAIDS.

Validation workshop was conducted in mid July 2014 and the comments or inputs of the stakeholders/partners were incorporated and the final draft was developed.

1.3 Epidemiology and state of current response to the HIV epidemic

1.3.1 Current state of the epidemic

The Ethiopia Demographic and Health survey 2011, the 2012 Antenatal care round sentinel HIV surveillance in Ethiopia, the 2013 MARPs (FSW and Truck Drivers) survey, studies and
baseline assessments conducted on selected population groups in the last four years, the 2011 Spectrum/EPP projection and the 2013 edition of an epidemiologic synthesis of HIV/AIDS in Ethiopia have been used to describe the current situation of the epidemic in the country. The predecessor surveys and projections were used to indicate the trends in the changes of the epidemic and reductions in new infections and deaths over the periods.

1.3.2 Prevalence by Age and Sex
According to the 2011 EDHS, the national HIV prevalence among adult people aged 15-49 years was 1.5%. The prevalence was 1.9% and 0.9% among females and males respectively. The HIV prevalence among 15 to 24 years was low for both sexes, but young women have a two to six fold higher HIV prevalence than young men (ranging from 15-17 years: 0% males vs. 0.2% females to 20-22 years: 0.1% males vs. 0.6% females). In women the HIV prevalence peaked earlier and became higher (3.7%) between 30-34 years while in men peaked slowly and reached high (3%) between 35 and 39. The age specific prevalence as per the same source is indicated below.

Figure 1: HIV Prevalence rates by age group in women and men (Source: EDHS 2011 and Epidemiologic synthesis 2013 edition)

With the consideration of HIV prevalence of the 2011 EDHS as a calibration point and division making between rural and urban estimates, a Spectrum model, which used the values of the 1989 to 2012 ANC HIV sentinel surveillance, was run to estimate and project the HIV related parameters such as prevalence, incidence, etc for 2014 - 2021. Accordingly, the number of people living with HIV in the country by 2014 was estimated at 769,600 of whom 458,100
(59.5%) and 311,500 (40.5 %) were females and males respectively.

*Figure 2: HIV prevalence by sex and year (EHNRI: HIV related estimates and projections for Ethiopia-2012 and EPHI, 2014 Spectrum estimation)*

### 1.3.3 HIV prevalence by Marital Status

The HIV prevalence is higher among the separated, divorced and widowed as shown in the recent EDHS. It is significantly higher in urban areas at each stage of marital evolution reflecting greater exposure to HIV in urban sexual networks (Figure 3). The HIV prevalence among remarried adults was also found to be high in the same survey (Figure 4).

*Figure 3: HIV prevalence by current marital status and residence (Epidemiologic synthesis 2013 edition & EDHS 2011)*
Figure 4: HIV prevalence among remarried adults, by the percent remarried in each age group (Epidemiologic synthesis 2013 edition & EDHS 2011)
1.3.4 HIV prevalence by location (urban/rural & region)

Like the previous surveys, the 2011 EDHS and 2012 ANC sentinel surveillance results also show that there is an urban - rural difference in HIV prevalence in the country. According to the recent 2011 EDHS, the urban prevalence is 4.2% which is seven times higher than that of the rural (0.6%).

Even within urban areas, there is a variation by the size of the towns; the prevalence in large towns (a population size of more than 50,000), medium town (with a population size of 10,000 -50,000) and small towns (with less than 10,000 population) is 2.1%, 1.8% and 1.5% in 2011 respectively. Furthermore, the prevalence is four times higher among people who live within five kilometers of a main asphalt road compared to those living far away from the main road. Based on the 2014 spectrum projection the 2013 estimated number of PLHIV live in urban and rural areas is 530,000 (66.8%) and 266,400 (33.2%) respectively.

The 2011 EDHS also shows that the HIV prevalence varies from region to region ranging from 0.9% in SNNPR to 6.5% in Gambela. In addition to the regional differences in HIV prevalence, Variation within the region is also observed as indicated in the HIV synthesis conducted in Tigray, Oromiya and Gambela.

![Figure 5: HIV prevalence by region, 2011 (Source: EDHS 2011)](image)

1.3.5 Size estimates and HIV prevalence among key populations

Recent epidemiologic synthesis and regional KYE-KYR studies suggest presence of different group of key populations including female sex workers, truck drivers and seasonal/daily laborers.

a) **Female sex workers:** Through the PEPFAR supported partners (Save the Children and PSI) mapping to estimate the size of female sex worker population in 45 towns including Addis Ababa was conducted and identified over fifty thousand. A national MARPs survey
focusing on female sex workers and truck drivers was done recently. Of the female sex worker respondents about eight three percent had an HIV test in the last 12 months which was prior to this survey. The overall HIV prevalence among the FSWs was 23% and high in all sites ranging from 15.4% to 33%. Among the 814 FSWs who were tested and found to be HIV positives in the survey, 35% knew their HIV status before, 2% refused to tell and 63% did not know their status before. The reported vaginal discharge and genital ulcer in the last 12 months among the FSWs was 11.5 % and 7.9 % respectively. Overall the size of female sex workers in the country is estimated between 120,000 to 160,000.

b) **Truck drivers**: The national MARPS survey also included truck drivers and this component of the survey was conducted in the main transport corridors of the country. The HIV prevalence is 4.9 %. Based on the information received from the National Association of Heavy Truck drivers, it is estimated that there are about 15,000 heavy truck drivers.

c) **Migrant/season laborers**: There are over 400,000 seasonal laborers in sesame, sorghum and cotton farms in the Northern part of the country and about 600,000 daily laborers in the large development schemes, flower plantation and mining areas. Transaction baseline assessment indicated that daily laborers in building and road construction had a reported STD prevalence of 9-12% in the last six months and 43%-45% got tested in the previous six months. Regional HIV synthesis studies conducted in Tigray and Gambella that analyzed routine HCT data found higher HIV prevalence in woredas/zones where there is a larger presence of seasonal workers and commercial farming. In Tigray HIV prevalence was highest in the Western Zone (2.2%) where most seasonal farm workers are found (ANC routine data, 2010). In Gambella region according to HCT data from 2011/12 woredas with commercial farming and a large population of seasonal workers had higher HIV prevalence (Abobo:4.8%, Gog : 6.6% and Godere : 2.6%).

d) **Prisoners**: According to a recent national rapid assessment of HIV among 846 prison inmates (686 males and 160 females) HIV prevalence was estimated at 4.2% (4.3% among male and 3.8% among female inmates). HIV prevalence was higher in federal prisons (4.5%) compared to regional prisons (2.5%) and highest in Gambela region (11.4%).

<table>
<thead>
<tr>
<th>Key population</th>
<th>Size estimation in 2013</th>
<th>HIV prevalence</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSWs</td>
<td>120,000-160,000</td>
<td>23%</td>
<td>National MARPS survey, 2014, EPHI</td>
</tr>
<tr>
<td>Truck drivers</td>
<td>15,000</td>
<td>4.9%</td>
<td>National MAPS survey, 2014, EPHI</td>
</tr>
<tr>
<td>Daily /seasonal laborers and prisoners</td>
<td>1,000,000</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>prisoners</td>
<td>85,000</td>
<td>4.2%</td>
<td>Rapid assessment of HIV situation in prison settings. December 2013. UNODC, UNAIDS, Ethiopian Federal Prison Administration – draft</td>
</tr>
</tbody>
</table>
1.3.6 Trends in the HIV epidemic

a) Trends in HIV prevalence

Both the ANC and EDHS suggest substantial declining of HIV prevalence among young people and urban population. Urban HIV prevalence among pregnant women age 15-49 yrs has declined from a peak of 14.3% in 2001 to 4.4% in 2012. Similarly, rural HIV prevalence has declined from a peak of 4.1% in 2003 to 1.8% in 2012. The overall trend of HIV prevalence in all age-groups (15-49) has remarkably declined in the past 10 years (5.3% in 2003 to 2.1% in 2012).

Figure 6: Trends in HIV prevalence among pregnant women age 15-49 year by location (Source: ANC 2012)

Figure 7: Trends in HIV Prevalence by age group (Source: ANC 2012)
b) **Trends in new HIV infections by regions**

Trends in HIV prevalence in the age group 15-24 is often taken as proxy indicator for new infections. Results from a series of ANC surveys since 2001 show consistently falling HIV prevalence in this age group. In 2012, the HIV prevalence among pregnant women aged 15-24 years age-group was 2.1%.

Because of lack of empirical data on new HIV infections, our estimates for the national and regional trends in new infections come from the modeling exercise. Accordingly, the annual number of new infections has declined from 140,400 in 2000 to 21,500 in 2013. Out of these 8,300 (38.6%) are in children aged 0-14 and the balance are among adults of whom 8,300 (62.9%) and 4,900 (37.1%) are among females and males respectively. Of the estimated total number of new HIV infection by 2013, 11,700 (54.4%) and 9,800 (45.6%) assumed to have occurred in urban and rural areas respectively.

*Figure 8: Trends of New HIV infection by sex (Source: 2012 HIV related estimates & projections and 2014 Spectrum estimation)*

![Graph showing trends in new HIV infections by sex](image)

*Table 2: New HIV infection by age and sex, 2013 (Source: 2014 Spectrum projections)*

<table>
<thead>
<tr>
<th>Sex</th>
<th>0-14</th>
<th>15-19</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40-44</th>
<th>45-49</th>
<th>50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4,200</td>
<td>400</td>
<td>1,000</td>
<td>1,100</td>
<td>800</td>
<td>600</td>
<td>400</td>
<td>230</td>
<td>500</td>
</tr>
<tr>
<td>Female</td>
<td>4,100</td>
<td>1,100</td>
<td>2,100</td>
<td>1,700</td>
<td>1,200</td>
<td>800</td>
<td>500</td>
<td>330</td>
<td>360</td>
</tr>
<tr>
<td>Total</td>
<td>8,300</td>
<td>1,500</td>
<td>3,100</td>
<td>2,800</td>
<td>2,000</td>
<td>1,400</td>
<td>900</td>
<td>560</td>
<td>860</td>
</tr>
</tbody>
</table>
c) **Proportion of new HIV infection reported by transmission context**

Most of the HIV incidence data are derived from the spectrum modeling. In 2013 an epidemiological synthesis of HIV/AIDS in Ethiopia was done based on the analysis of available data particularly three rounds of DHS, ANC-base Surveillance (1997-2009), mortality surveillance, Spectrum/EPP estimation and projection of HIV related estimates, studies and assessments conducted by various organizations and individuals and programmatic reports. The epidemiologic synthesis indicates that:

- The epidemic is more urban and a substantial proportion of new infections are being passed on from mother to child.
- A good proportion of new HIV infections come from discordant couples. According to the 2011 EDHS, sixty percent of the PLHIV in the general population are married and more than half fall in the prime reproductive ages between 25 and 34. The survey also indicated that 6.8% of urban couples and 0.7% of rural couples are living with HIV. Approximately two thirds of these couples were sero-discordant.
- High rates of marital disruption and remarriage as high risk factors for HIV.
- There was threefold increase in HIV prevalence among remarried individuals and this might be an important channel for new HIV infection in the country.
- Most non marital sexual transmission is occurring among 15 to 20% of Ethiopian adults, mostly living in urban areas who are unmarried, but sexually active. These include MARPs and those engaging in multiple concurrent partnerships.

### 1.3.7 AIDS related deaths

1.3.8 Behavior changes and social context of the epidemic

A. Behavior change

The mean life time sexual partner for women and men in Ethiopia is 1.5 and 2.6 respectively and this may contribute to the low HIV prevalence in the country. A sexual behavior study conducted in five Ethiopian universities showed that 30% (1702) of the university students had ever sexual intercourse and 53% of these were sexually active in the last 12 months. Of those who were sexually active 81% of the male students and 63% of the female students have had sex with non regular partner in the last 12 months; however they have a high rate of condom use.

In addition to the encouraging preventive behaviors observed among university students, there are also similar behavior changes among truck drivers and female sex workers. The Transaction assessment showed that an 82% rate of consistent condom use among truck drivers in commercial sexual relationship and over 99% of reporting condom use at last sex with paying clients. According to the recent 2014 national MARPs survey 98.4% of FSWs reported using a condom during their last sexual encounter. HIV testing uptake among students and female sex workers was high with 51% of students reporting they had ever tested & 36% tested in the last 12 months (EDHS, 2011) while 82.5% female sex workers reported having an HIV test in the last 12 months (National MARPs survey, 2014).

However, the available evidences indicate that there are still risky sexual behaviors among different groups, more pronounced in urban areas, among unmarried women and men, daily laborers and waitresses. The 2010 Baseline survey of the Transaction program showed that waitresses, male daily laborers and trucker drivers had a high average number of sexual
partners in the past year (3 to 3.3 partners per year), presence of concurrency in the past one month (3.5% – 5.8%), presence of multiple concurrent partnership (5.4% -13.9 %) and reported STD prevalence ranging from 3.5% to 12%. Syphilis prevalence rate, which is routinely included in the Ethiopia ANC surveillance, is another proxy indicator for behavior change. Although rural sites continue to have higher syphilis prevalence rates, the overall syphilis prevalence rate has declined sharply from 2.4% in ANC 2009 to 1% in ANC 2012.

B. Gender equality

Though there is a decreasing trend in the practice of domestic violence against women in Ethiopia, the magnitude is still high. The Government of Ethiopia revised its family law in 2000 and its criminal law in 2005 to protect the rights of women and children and to promote gender equality and equity.

Early marriage among women in Ethiopia had been a common practice, but in recent years the proportion of women married by age 15 is lower among younger age groups compared to older. The percentage of women aged 20-49 years who were married at 15 decreased from 31.4% in DHS 2005 to 26.5% in DHS 2011.

Intergenerational sex is common in Ethiopia. About a quarter of sexually active women in their 20’s and men in 30’s reported their most recent sexual partner to be older or younger by 10 years or more, but this practice has fallen over 30% in the last two decades (Epidemiologic synthesis 2013 edition).

Table 3: Gender equality status by selected indicators

<table>
<thead>
<tr>
<th>Selected indicators</th>
<th>Percentage</th>
<th>Source and year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of respondents 15-49 years old who believe that, if her husband has an STI, a wife can propose a condom use</td>
<td>68.5%</td>
<td>EDHS, 2011</td>
</tr>
<tr>
<td>A proportion of young women 15-24 who have had sex in the preceding 12 months with a partner who is 10 years or more older than themselves.</td>
<td>21.1%</td>
<td>EDHS, 2011</td>
</tr>
</tbody>
</table>

C. Social Impact

AIDS related death has been reduced significantly as a result of the roll out of the ART program. This had contributed to the reduction of AIDS orphans and stigma and discrimination. According to EDHS 2011 the current school attendance among orphans and non orphans aged 10-14 was 69.1% and 76.5% respectively. According to DHS 2011, prevalence of discriminatory attitudes toward PLHIV declined between 2005 and 2011. But still it is high both in urban and rural areas.
1.4 Current response to the epidemic

The current response has been guided by the SPM-II. The main focus was on:

- Creating enabling environments with a view of strengthening the health system and mainstreaming of HIV/AIDS into all sectors
- Intensifying HIV prevention services through combination prevention approach. The Behavior change communication component largely targeted the general population, in school youth and MARPs.
- Ensuring universal access to care and treatment through making Testing and counseling, PMTCT and ART services available in more than 3000 health facilities; improving laboratory services and ensuring uninterrupted supplies of ARV drugs, test kits and other HIV commodities.
- Scaling up impact mitigation intervention addressing OVC, PLHIV and vulnerable women.
- Generating strategic information and evidences that will help to fill the data gaps and improve services during the life time of the SPM-II and beyond.

A wide range of stakeholders including governmental sectors, regions, development partners, Faith based organizations, International and Local NGOs, Associations of PLHIV, private sectors and communities have been involved in implementation of the 2010-2014 strategic plan. As a result of the intensified cumulative efforts over the decade a 90% reduction in new HIV infection and 53% reduction of AIDS related mortality were registered. But there have been gaps also in reaching the most at risk population to the required level, pediatric ART targets, PMTCT coverage and timely generation of the evidences proposed to be avail by the life time of the strategic plan. The key achievements and existing challenges by programmatic areas are illustrated as follows.

1.4.1 Prevention

A combination preventions programs targeting general communities, in school youth, female sex workers, vulnerable women, truck drivers, daily laborers in development sectors and uniformed forces have been implemented with different scales.

A. Behavior change communication (BCC)

BCC: General population

During SPM II Behavior change communication program targeting communities particularly in Tigray, Amhara, Oromia, SNNP, Harari, Addis Ababa and Dire Dawa have been implemented largely through the Health Extension program and Health Development army. In addition to these, HIV related Information, Education and Communication particularly prevention of Mother to child transmission, promotion of condom use and adherence education have been disseminated through print and electronic media. The key achievements are:
About 75-80% of Kebeles have been implementing the Health Development Army initiatives.

High level of HIV/AIDS awareness among the population with 97% of women and 99% of men having heard of HIV/AIDS (EDHS, 2011).

Increased demand for and utilization of services (HTC, ART, PMTCT, institutional delivery)

The gaps in this area include

- The Health development army largely focuses on maternal health and overlooks the HIV prevention component; field observation in different districts and kebeles indicate that there is a tendency of community complacency to HIV prevention.
- Lack of use of available evidences in the wereda and nearby health facilities to implement BCC tailored to the locality.
- Low comprehensive knowledge about HIV/AIDS among the general population.

**BCC: School**

HIV/AIDS is incorporated in the Curriculum of primary and secondary level education. In addition to this co-curricular activities such as mini media, anti AIDS clubs, Girls club etc do exist in schools which help students to have capacity of self expression, debate, negotiation and promote peer education. The positive achievements include:

- Many of the schools have teachers who received training on Life Skill Education. For instance, with HIV Rolling continuation Channel grant only, over 20,000 teachers were trained on life skilled education in late 2013 and first half of 2014.
- Majority of the Universities have been implementing HIV prevention programs
- High testing uptake and high rate of preventive behavior in University students such as condom use
- Low HIV prevalence in students and young people. For instance the study conducted among students in Amhara in 2012 showed the HIV prevalence to be 0.07% (CDC, 2012) while a study conducted among University students in Dire Dawa in 2013 found the HIV prevalence to be 0.4% (NASTAD/CDC, 2013).

The main programmatic constraints and gaps in Education sector HIV program are:

- School HIV program is neither comprehensively guided nor performance is adequately tracked. Though the Education sector has HIV specific strategic plan, it did not expansively guide the implementation of School HIV program and the Management information system of the Education sector does not track any HIV related performance.
- Percentage of university students who had sex with female sex workers or non regular partners is high.

**BCC: MARPs and other vulnerable populations**

With the implementation of the Prevention package for Most at risk population groups a better focus to targeted prevention was given during the SPM II period. Among these:

- With the support of PEPFAR and involvement of Civil society organizations, prevention program targeting female sex workers, waitresses, daily labors and truck drivers was scaled up to 169 towns and transport corridors.
- Improved mainstreaming of HIV/AIDS into large scale development schemes, road construction.
projects and sugar factories. With difference in intensity and scale, Peer education and work place interventions have been implemented in the mega projects, public and private factories and flower plantation in the country.

The critical gaps in the BCC program include

- In adequate coverage of BCC program for Most at risk population such as female sex workers, daily laborers etc. The size estimation of the different MARPs is not fully known.
- The coverage of the BCC program in the development schemes is limited and not extended to the pool of female sex workers influx to the locality and surrounding communities of the project site.
- Poor coordination and weak capacity of implementers: HIV prevention units at large scale development schemes and public health facility or Health office in surrounding towns do not exert their efforts in coordinated manner. As most of the large scale development schemes are newly established they do not have adequate program capacity.

B. Structural Prevention Interventions

Gender mainstreaming in to HIV services, enhanced community mobilization against harmful traditional practices such as early marriage, Female genital mutilation and HIV vulnerability reduction among women through strengthening economic interventions were implemented in the SPM II period. The major achievements include:

- Increased HIV service utilization among women. Women accounted for 53% of last year’s HIV tests.
- Reduction in practices of early marriage, Genital mutilation and widow inheritance.
- Income generating schemes targeting vulnerable women have been expanded and many have been benefited from the program.

Challenges/gaps

- Deep rooted social customs: though encouraging progress registered in changing social customs such as early marriage, widow inheritance and FGM, still such practices exist in some areas.
- Lack of adequate evidences on the impact of IGA on reducing HIV infection.

C. Distribution and use of condom

A great proportion of condom was distributed through social marketing using different outlets such as pharmacies, drug stores, hotels, bars, kiosk, etc. Free condom has also been distributed through health facilities, mega projects and NGOs/community based organizations and accounted for one fourth of the whole annually distributed condom. The main targets for the free condom were STI cases, work forces in the development schemes, truckers and female sex workers. During the SPM-II period there was an improvement in distributing condom to the risky population; for example, of the 126.8 Million condom distributed from July 2013 to March 2014 in the country, 30% was distributed to Most at risk population. The overall annual distribution ranged from 147 to 174 million which was over 50 % less of the target. None of the annual targets were met in the last four years. This could be due to over ambitious target.
Condom use at last sex or consistent condom use among sex workers, truckers and among causal non marital partnerships was high. Condom use among married or cohabiting partners is almost none which also holds true by implication for discordant couples.

With the involvement of pertinent partners working in the area, a national condom strategy was drafted to ensure sustainable and equitable access to quality condoms; and promote correct and consistent condom use for prevention of HIV/STIs and unplanned pregnancies among the sexually active population, with a special emphasis on MARPs and vulnerable population.

The gaps in the condom programming are:

- Lack of unified coordination and integration of efforts of actors involved in condom distribution.
- Low condom coverage
- Knowledge gaps for quantification of universal condom needs.
- Consistent condom use among sex workers and other who are most at risk is not universal.
- Incomplete understanding of condom preference by target group
- Lack of clarity on what should be the condom outlet in different sectors-fixed outlets and scheduled outlets

D. HIV testing and counseling

HIV testing and counseling service has been rapidly rolled out and as a result it is now available in 3447 Health facilities and test uptake reached 11 Million per year. According to DHS 2011, about 61% of the adult population in urban areas and 28% of the population in rural areas knew their HIV status. However, there was considerable regional variation in the coverage of testing from as low as 10.6% among women in Somali region to 65% among women in Addis Ababa.

Considering the 2012 and 2013 testing sessions of over 20 million, the proportion of adult population who know their HIV status by this time is expected to be higher than the 2011 DHS, but still there are many people and more severely a good number of PLHIV who do not know their status.

Figure 10: Percentage of people ever tested and receiving results by sex and region (DHS 2011)
During 2006 to 2009 the majority of percentage of ever tested population was through voluntary counseling and testing, but in the recent years the main testing strategy was the Provider initiated testing and counseling. For instance, in PEPFAR supported sites in FY 2013, 70% of the over six million tests were done through the provider initiated testing and counseling (PITC) approach while the rest (30%) was done through voluntary counseling and testing (VCT). Contrary to the expectation, HIV positivity rate was lower among PITC clients that of VCT (1.2% versus 2.7%).

HIV Testing coverage among female sex workers was 83% as indicated in the 2013 MARPs survey. Of those ever tested female sex workers eight percent were HIV positive and 71% of them were on ART.

In general HIV testing and counseling is a successful program, but it has quite a number of limitations in achieving the overall objective of knowledge on status and linkage to care and treatment. These include:

- Less targeting: Contrary to the expectation, HIV positivity rate was lower among PITC clients that of VCT (1.2% versus 2.7%). The intent of PITC was to target the high-risk population including those with symptoms suggestive of HIV infection. However, this goal was not achieved due to the indiscriminate testing of people who visit health facilities.
- Less post counseling which may compromise the quality of the service.
- Of those tested in non ART sites the extent of linkage is not known because of different reasons including limited referral, quality of counseling, physical access etc.
- Child testing and counseling is low. This could be due to low parent HIV disclosure, low index case testing, attitudes and skill gaps of professionals, inadequate service availability, etc.
- Weak M&E system. The data collected at health facility level has not been used locally as a source of data for identification of new HIV infections and for planning purposes of population segment specific HIV interventions by districts and localities. The system does not track repeat testers.
- Who should receive repeated testing and how frequent in a year is not clearly defined in the current practice. This could lead to over inflated or under estimated HIV positivity rate and unnecessary test kit consumption and loss of human resource time.

E. PMTCT

By December 2011 the implementation of the accelerated PMTCT plan was launched aiming at engaging the community for demand creation, rapid PMTCT site expansion and improving quality of PMTCT/MNCH services. Following this, community mobilization efforts through the health development army, Health extension workers and other existing structures in the community were intensified and PMTCT delivery sites increased from 1440 in 2011 to 2150 in 2013.

According the EFY 2005 annual review meeting report of the Health sector, of the estimated 2.9 million pregnancies in 2012/13 (EFY 2005) 68.9% were tested for HIV. With all the efforts 57% of the estimated HIV positive pregnant women were identified and of whom 42% of the mothers
received ARV prophylaxis (AZT or ART) and 18% of the infants received ARV prophylaxis (mostly probably, option A).

Elimination of Mother to child transmission of HIV (e-MTCT) plan for 2013-15 was developed and its implementation was started. Option B+ was introduced in 2013 and currently implemented in 2495 health facilities which may also increase the uptake. The existing gaps in the PMTCT program are:

- Inadequate integration of PMTCT B+ option implementation with MNCH platform.
- Weak M&E system for PMTCT. The existing HMIS does not track the required data that help to measure the key program performance.
- Limited access to and under utilization of facilities for early infant diagnosis.
- Long laboratory results turn-around-time due to limited facilities for communication and transportation
- Supply chain related problems in non ART PMTCT sites.
- Contextual factors such as limited male partner support, stigma and discrimination and fear of disclosure.
- Low skilled birth attendance coverage despite high ANC coverage.

1.4.2 Care and Treatment

A. ART

ART service is available in 1047 Health facilities of which 849 are Health centers. On the basis of the 2010-2014 strategic plan ART coverage for adults (age 15+) has reached 79.6 % but the coverage remains low (23.5%) for children (age <15) living with HIV. There is significant regional variation in pediatric ART coverage and the coverage rate is estimated to be much lower in rural areas (17%) as compared to the coverage in urban areas (83%).

An ART implementation status and outcome study for the September 2005 to May 2010 treatment cohorts conducted in Ethiopia in 2011 confirms there is an 82.4% of 12 months retention after initiation of ART, 78% of five year survival rate and 2% switch to second line treatment after five years.

Overall the adult ART program has been successful, but has challenges related to increment of enrollment, retention in treatment and detection of treatment failure against the set targets in the SPMII. More specifically:

- Enrolment rate was less than what was anticipated in the strategic plan. This could be due to less targeted testing, slow expansion of ART sites against the plan, in adequate expansion of laboratory services (DBS), supplies for EID and delay in implementation of the 2010 treatment guidelines.
- Retention in care continues to be a challenge in some of the regions and health facilities. The possible causes for this include Problems with distribution of drugs, long waiting time for CD4 testing and loss of return of samples, inadequate counseling and adherence education, and in adequate patient- provider interaction.
- Inadequate laboratory services. Frequent disruption of laboratory services particularly CD4 testing has been observed in ART sites due to broken machines, lack of trained laboratory technicians or power disruption to run equipment. Maintenance of HIV related equipment was centralized and even then there was no adequate capacity at the center to provide timely maintenance services.

- Detection of treatment failure was low. Lack of standardized guidance on patient identification for second line, the required capacity and adequate Laboratory facilities (viral load) largely contribute to the low detection of treatment failure. Treatment failure detection at health centers is low because of undefined roles and limited capacities.

By the end of 2013 the country adopted the 2013 WHO ART treatment guidelines and now it is in the early initiation of implementation. As of June 2014 there are 343,511 PLHIV who are currently on ART. Based on this new treatment guidelines (initiating ART at less or equal 500 CD4 count and enrolling all HIV positive children under 15 for ART) the adult and pediatric ART coverage is 54.6% and 14% respectively.

B. TB/HIV

Ethiopia is one of the countries with high burden of TB-HIV co infection. TB diagnostic and treatment is provided in 2307 health facilities. As a result of the intensified TB case finding among PLHIV, 92% of PLHIV who were enrolled for care by the year were screened for TB. Eighteen percent of PLHIV newly enrolled for Care had taken IPT in 2012.

Eight six percent of TB patients were tested for HIV in 2012; the TB HIV co infection was 10%. Improvement has been noticed in the provision of ART for TB- HIV co infected patients. It has increased from 42% in 2006/7 to 51% in 2011/12. Key gaps in TB/HIV collaborative activities implementation or integration.

- The number of ART sites are less than facilities providing TB diagnosis and treatment
- Weak monitoring and evaluation system
- Low coverage of IPT due to attitudinal problems of service providers, supply issues particularly distribution related problems and under reporting.
- Implementation of Infection control is weak.
- Inadequate capacity (laboratory, human resources) to detect and treat multidrug resistant tuberculosis.

1.4.3 Impact Mitigation

Based on the packages and guidelines, care and support was provided to the needy PLHIV and OVC. This was done by the Associations of PLHIV, Faith based organizations, Civil Society organizations, International partners and local authorizes in the respective implementation sites. According to joint CCRDA/ member CSOs’ contribution annual report 2011 to HIV/AIDS response, 123 member organization CSOs have been involved in providing OVC care and support services. The Major achievements:
Improved coverage of OVC care and support programs: In EFY 2005 (2012/13) out of the 1.2 million total needy orphans; 38% (454,888) received educational support while 24% (287,350) got food support. On the other hand, relatives or guardians to 84,118 OVC received startup capital to enhance provision of sustained care and support in the period of child development.

Encouraging coverage of Care and support to PLHIV: SPM II plans to reach 100,000 needy PLHIV with care and support. In EFY 2005, 104,810 PLHIV received food support whereas as 26,416 PLHIV got IGA support including training and seed money to promote self-reliance.

Major challenges/Gaps

- Inadequate mobilization of local resources for care and support.
- Weak documentation of best practices: best practices in providing care and support by communities in different areas, institutions, the private sector, CSOs, and individuals are not adequately captured to be emulated.
- Weak coordination.

1.4.4 Resource for HIV

According to the findings from the recent National AIDS Spending Assessment (NASA 2012), the total spending in Ethiopia on HIV/AIDS in 2011/2012 (EFY 2004) was US$ 405 million, of which 86.4% came from external sources (US$ 350 million), 13.5 % came from public revenue (US$ 55 million) and US$ 680,000 (0.1%) came from the private sector. Of the external sources, PEPFAR and Global Fund were the largest two contributors, forming 59% and 30% respectively. Considering the breakdown of the spending by thematic area in 2011/12, Ethiopia spent 19.5% on prevention, 31% on treatment and care and 30% on national system strengthening and program management. The detail break downs are presented as follows figure 12.

Figure11: HIV /AIDS spending in Ethiopia by broad categories and by sources of fund (Source: NASA 2011/12)
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2 DESIGN PRIORITIES AND PROGRAMS

The responses so far generated remarkable achievements in new HIV infection reduction by 90% and death reduction by over 50%. Like any part of the World, Ethiopia also envisages to ending AIDS by 2030. The post 2015 HIV priorities are expected to be of high impact interventions that dramatically reduce the annual new infection and save many lives which also pave the path to ending AIDS in Ethiopia.

Intensive review of documents, recent study findings, analyzing of existing epidemiological and programmatic data, in-depth discussion with various Technical advisory/working groups organized by MOH and Experts in the area were done to identify program areas and target population for each program. In addition to these, Global knowledge and evidences have been used to identify the priority programs and target populations. The program components are:

- BCC for most at risk population and vulnerable groups; young people and community
- Condom distribution and use
- prevention and control of STI
- HIV testing and counseling
- PMTCT
- ART

The population segments and geographical areas targeted for each of the programs are summarized as below in table 4.
### Table 4: Target population, geographical priority and size of targeted population for the priority programs

<table>
<thead>
<tr>
<th>Program priority</th>
<th>Target population</th>
<th>Geographical target</th>
<th>Size of the targeted population (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCC/STI/condom</td>
<td>FSWs</td>
<td>Hot spot areas, towns, transport corridors, etc</td>
<td>120,000-160,000</td>
</tr>
<tr>
<td></td>
<td>Truck drivers</td>
<td>Transport corridors</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Seasonal/Daily laborers</td>
<td>Mega projects, mechanized farms and other sites</td>
<td>1 Million</td>
</tr>
<tr>
<td></td>
<td>Widowed/divorced women and men</td>
<td>Urban</td>
<td>640,000</td>
</tr>
<tr>
<td></td>
<td>PLHIV</td>
<td>Urban &amp; rural</td>
<td>769,600</td>
</tr>
<tr>
<td></td>
<td>Adult people aged 15+</td>
<td>Urban areas and surrounding communities to the mega project sites and other development schemes</td>
<td>8.8 Million</td>
</tr>
<tr>
<td></td>
<td>Adolescents/young people (10-24)</td>
<td>Primary, secondary and university</td>
<td>13 million</td>
</tr>
<tr>
<td>Testing and counseling</td>
<td>Couple testing: marriage and remarriage</td>
<td>Urban and rural</td>
<td>2.2 Million people</td>
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<td></td>
<td>Pregnant women</td>
<td>Urban &amp; rural</td>
<td>2.9 M</td>
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<tr>
<td></td>
<td>TB patients</td>
<td>Health facilities</td>
<td>159,000</td>
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<tr>
<td></td>
<td>STI cases</td>
<td>Health facilities</td>
<td>180,000</td>
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<tr>
<td></td>
<td>Most at risk population: FSW, truck drivers, daily laborers</td>
<td>Towns, hot areas and development schemes</td>
<td>1,130,000</td>
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<td></td>
<td>Discordant couples</td>
<td>Urban &amp; rural</td>
<td>90,000-140,000</td>
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<td></td>
<td>Sexually active high school and university students</td>
<td>High school and University</td>
<td>65,500</td>
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<tr>
<td></td>
<td>Orphans and vulnerable children (AIDS orphan)</td>
<td>All</td>
<td>800,000 in six years time</td>
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<tr>
<td></td>
<td>HIV Exposed children, children born to women living with HIV</td>
<td>Health facilities</td>
<td>720,000 in six year time</td>
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<tr>
<td></td>
<td>Adults or adolescent with sign &amp; symptoms of HIV</td>
<td>Public and uniformed Health facilities and prison centers.</td>
<td>1.5 Million</td>
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<tr>
<td>PMTCT</td>
<td>Women and men aged 15-49</td>
<td>In all areas</td>
<td></td>
</tr>
<tr>
<td>Care and treatment</td>
<td>Adults (15+)</td>
<td>In all areas</td>
<td>530,900</td>
</tr>
<tr>
<td></td>
<td>Children (0-14)</td>
<td>In all areas</td>
<td>178,500</td>
</tr>
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</table>
### 2.1 Vision, goals and strategic objectives

<table>
<thead>
<tr>
<th>Vision</th>
<th>Ending AIDS by 2030</th>
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<tbody>
<tr>
<td>Guiding principles</td>
<td></td>
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<tr>
<td>- Effectiveness and efficiency</td>
<td></td>
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<tr>
<td>- Balanced approach: prevention and treatment</td>
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<tr>
<td>- Quality of services</td>
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<td>- Multi-sectoral engagement</td>
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<td>- Partnership</td>
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<td>- Sustainability</td>
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<td>- Inclusiveness</td>
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<tr>
<td>Goal</td>
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<tr>
<td>- Prevent 70,000 to 80,000 new HIV infections over the investment period.</td>
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<tr>
<td>- Save 500,000 - 550,000 lives over the investment period.</td>
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<tr>
<td>Strategic Objectives</td>
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<tr>
<td>1. Implement high impact and targeted prevention program</td>
<td></td>
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<tr>
<td>2. Intensify targeted HIV testing and counseling.</td>
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<tr>
<td>3. Attain virtual elimination of MTCT</td>
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<tr>
<td>Targets</td>
<td></td>
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<tr>
<td>Prevention</td>
<td></td>
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<tr>
<td>1. Reach 90% coverage of medium and high risk and vulnerable population (female sex workers, laborers, truck drivers, etc) with comprehensive behavioral and biomedical prevention programs by 2020.</td>
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<tr>
<td>2. Reach 90% people in urban, hot areas and surrounding areas of mega projects/development schemes and new emerging economies with targeted BCC.</td>
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<tr>
<td>3. Distribute 150-200 million pieces of male condom per year, and raise consistent condom use to 80% among sexually active who have sex with non regular partner and casual contact and 95% among female sex workers.</td>
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<tr>
<td>4. Reach to treat 60%-70% of estimated STI cases by 2020.</td>
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<tr>
<td>5. 90% PLHIV know their HIV status through offering targeted HIV testing and counseling and right based testing by 2020.</td>
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<tr>
<td>- Offer targeted HIV testing and counseling to 8.5 M people and repeat test to 400,000 FSWs, discordant couple and other needy annually.</td>
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<tr>
<td>- Offer voluntary counseling and testing to 5 million adult people annually.</td>
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<tr>
<td>- Identify 95% of HIV positive pregnant women and attain 95% enrolment for Option B+ (Both mother &amp; newborn)</td>
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<td>- Test 90% of infants born to HIV mothers by four to six weeks.</td>
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<tr>
<td>Care and treatment</td>
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<tr>
<td>6. Enroll 90% of adult population and 85% children living with HIV for ART by 2020.</td>
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<td>7. Retain 90% of those who are put on treatment and achieve viral suppression in 95% of PLHIV on ART.</td>
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<tr>
<td>8. Reduce deaths due to HIV by 80%.</td>
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<tr>
<td>Critical enablers</td>
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<tr>
<td>1. Strengthen health system with a focus of improving HMIS/M&amp;E, PHPM, laboratory services and program management.</td>
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<tr>
<td>2. Increasing domestic resources</td>
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<tr>
<td>3. Enhance partnership, coordination and leadership.</td>
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<tr>
<td>4. Gender equality and equity</td>
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</table>
2.2 The Strategic Objectives

Based on the set priorities, four strategic objectives and four critical enablers have been formulated so as to achieve the set targets and to contribute significantly to the realization of the post-2015 vision. In order to link the critical enablers to each strategic objective and program component, the critical enabler related actions will be reflected under each respective strategic objective.

2.2.1 Strategic Objective 1: Implement high impact and targeted prevention program

This strategic objective consists of four priority programs namely Behavior change communication, condom distribution and use, prevention and control of sexually transmitted infections, and blood safety.

2.2.1.1 Behavior change communication

This aims to increase knowledge on prevention and control of sexually transmitted infections and HIV/AIDS, preventive sexual behaviors, and adopt safe sexual practice and improve service seeking behavior and utilization particularly STI, testing and counseling, PMTCT, and ART. This will be realized through implementing the following strategies.

A. Intensifying Behavior change communication targeting at risk population and priority geographical areas

This component targets development schemes, hydroelectric dams, mechanized farms, flower plantation, mining areas, urban and hot spot areas, transport corridors, road constructions, prisons, and cross border areas. The population group reached with program included female sex workers, truck drivers, migrant/seasonal/daily laborers, urban and hot spot area dwellers, out of school adolescents, workforces in mega projects and surrounding communities, uniformed forces, prisoners, PLHIV, and sero-discordant couples.

The key interventions will be

- Strengthen the capacities of Lead Public sectors and project offices of development schemes/mega projects, prison administration and private sectors (mechanized farms, flower plantation, mining, construction companies, etc) to develop and implement workplace HIV programs.
- Organize peer education groups among workforces/laborers and conduct peer education tailored to the work environment and local context on a regular basis.
- Develop edutainment materials for daily laborers and workforces in the development schemes/mega projects and broadcast in canteens.
- Build capacities of local administrations and organizations (youth Associations, Women Associations, CSOs, FBOs) to implement combination preventions with focusing behavioral and structural interventions including promotion of gender equality and prevention of gender based violence.
- Strengthening the behavior change communication in Federal and regional prison establishments and uniformed forces.
- Strengthening collaboration and networking among communities, mega projects and local administrations to link and complement services.
- Map out all hot spot areas and towns with high number of female sex workers, migrant laborers and other vulnerable populations and expanding HIV prevention programs targeting female sex workers and clients.
- Scaling up the behavior change communication intervention in to all large, medium and small towns in the country as well as neighboring weredas to mega projects and mechanized farms building on the existing best practices.
- Provide tailored HIV prevention education (on the basis of testing data and risk factors in the area) to communities neighboring mega projects/ development schemes through Health extension workers and Health development army.
- Conduct Mode of transmission studies in each region or alternatively synthesize existing information on a regular base and use as a guide for prioritization of wereda for combination prevention including targeted BCC.
- Support Association of PLHIV to develop and provide IEC and related services to the members of the association and discordant couples.

B. Strengthening School HIV education: sustain the low HIV prevalence among youth in school.

The size of the school population accounts for a quarter of the population of the country. Like for any other developments the Education sector has been the strategic sector for the HIV response. HIV Education is incorporated in to the primary and secondary Education Curriculum based on syllabus and the nature of the subject. Similarly, youth friendly HIV and reproductive health interventions have been implemented in Universities with the support of various partners.

Recent evidences show that HIV prevalence is very low among in-school youth and adolescents but they exhibit high risk behaviors. To sustain the current gains, promote safe and protective sexual behaviors and overall safeguard the generation, school HIV program will be strengthened with refocusing on Institutionalized response and redefining the HIV and reproductive health education component of the co curricular activities.

The key interventions will include

- Evaluate school HIV programs and redefine the operation and content of life skill education in relation to curricular and co- curricular HIV education implementation modalities.
- Develop school HIV program performance measurement and incorporate in to the Education management information system
- Institutionalize the HIV response in the Education sector through ensuring ownership,
building program management and leadership and allocating program output based budget from national resources.

- Improve the availability of youth friendly HIV and reproductive health services (STI, counseling, HIV testing etc) in universities and colleges.

C. **Strengthening community based HIV BCC through health extension and Health development army: Empower communities and sustain the gains.**

Backing up the health extension program, the Health Development army initiative has become the main strategy to create community demand and maximize utilization of primary health services, and enabling communities to produce their own health. Repositioning the HIV prevention component in to the Health development army initiative is critical to address the observed complacency in the community and prevent resurgence of the epidemic. Repositioning the HIV component in to the health development army in the desired level will intensifying the community level BCC and this initiative will serve as one of the main strategies to raise knowledge about HIV/AIDS prevention methods, reduce stigma and discrimination, improve PMTCT uptake and overall to strengthen the community based HIV programs in rural and urban areas. Furthermore, this will be used to promote gender equality and prevent gender based violence as well as to fight any harmful traditional practices in the community. To strengthen the community based HIV BCC through Health extension and Health development army the following interventions will be implemented. These include:

- Repositioning HIV prevention component in to the Health development army/women centered health development army initiatives through building the capacity of groups and networks and developing required communication tools.
- Develop wereda based Epidemiologic synthesis with the use of HTC and PMTCT data and use a guiding evidence to implement community based HIV BCC suited to the local risks and context.
- Support the implementation of the standardized annual integrated refresher training of Health extension workers.
- Supporting Weredas to intensify the rolling out of the HDA led HIV BCC, women centered community movement and tracking BCC results.
- Involving and supporting FBOs and CBOS (youth Association, women’s Association etc) to engage in community mobilization, prevention of gender based violence and fighting harmful traditional practices.

D. **Intensify HIV Behavior change communication-Media programs.**

To complement the outreach and peer education to the population groups identified for targeted BCC, and the efforts of the Health development army to reach the majority of the people, local evidence based HIV BCC media program will be produced and disseminated through national and regional media as well as community radio. This will target

- At risk population particularly divorced, separated, widowed and sero discordant couples that cannot be easily reached through outreach, peer education and group education.
- Risk behaviors such as multiple and concurrent sexual partnership, early sexual debut, premarital sex, extra marital sex and in consistent condom use while having sex with causal and non regular partner.
- Misconception related to HIV and complacency.
- General public with the aim to increase comprehensive knowledge about HIV/AIDS, adopt safe sexual practices and promote health.
- Demand creation and utilization of available HIV services, adherence to medication and edutainment education.

In addition to the aforementioned, tailored Behavior change communication for persons with disabilities will be produced based on the disability focused HIV/AIDS intervention guidelines developed by Federations of Ethiopian National Associations of persons with disabilities. This will be disseminated through the appropriate channels and existing infrastructures in the member associations of the Federation so as to ensure access to HIV education and services among the target groups.

2.2.1.2 Condom distribution and Use

National condom strategy was drafted recently to ensure the sustainable and equitable access to quality condom; and promote correct and consistent use of condom for prevention of HIV/STI and unplanned pregnancies among the sexually active population, with a special emphasis on most at risk population and vulnerable groups. It is in line with the priority of the investment case and will guide the condom programming of the coming years. The main interventions include:

- Enhancing leadership and coordination of condom programming at national and regional level
- Harmonization of the condom program in HIV/AIDS and Family planning.
- Ensuring the availability of quality condom in a sustainable manner
- Expanding and diversifying of condom outlets and modalities
- Targeted provision of condom to high risk and other vulnerable population groups.
- Increasing demand for correct and consistent use of condom through promoting and educating the public using different channels.
- Develop an effective monitoring and evaluation system for free, socially marketed and commercially sold male and female condoms

2.2.1.3 Prevention and control of Sexually Transmitted Infections (STI)

Over the last four years of the SPM-II period, Efforts were made to prevent and control STI through promotion of healthy sexual behaviors, improving availability and use of condom and provision of integrated care in Public and private health facilities. The focus of the next five years is to reduce the incidence of the common sexually transmitted infections among the population, with a special emphasis to
most at risk and vulnerable population groups and intensify appropriate diagnosis and treatment of STI through overhauling Syndromic case management at all service delivery points. The key interventions include

- Improving program management through having required structures and appropriate staffing at national, regional and wereda as part of the overall HIV program coordination.
- Promote healthy sexual behavior, use of condom and treatment seeking behavior through the targeted BCC program
- Evaluate the existing Syndromic case management algorithm and revise the guidelines accordingly.
- Strengthen the capacity of health care providers to appropriately diagnose, treat, provide counseling and report STI cases
- Expand user friendly STIs and reproductive health services to MARPs & other vulnerable population
- Ensure availability of drugs for STI through proper quantification, timely procurement and distribution to health facilities
- Strengthen congenital syphilis prevention through improving routine RPR test in all ANC clinics and appropriate treatment.
- Strengthen follow up of Syndromic STI case management on a regular basis and program monitoring and evaluation.
- Strengthen STI surveillance

2.2.1.4 Blood safety

As blood safety is an integral component of the national HIV response, due focus will also be given during the investment period to support the implementation of the national strategies for blood safety and availability. The support will focus on

- Raising public awareness on the need for voluntary blood donation
- Promoting 100% voluntary non remunerated blood donation from low risk population and counseling
- Ensuring quality-assured testing of all donated blood for HIV.
- Complementing the supplies for universal precaution
2.2.2 Strategic objective 2: Intensify Targeted HIV testing and
counseling services.

Based on the data of enrollment for chronic care we estimated 60-65% of the Ethiopian People living with HIV know their status. According to the available evidences in the country we believe that majority of the new infections are coming from discordant couples, mother to child transmission and most at risk and vulnerable population. Outreach campaigns and indiscriminate provider-initiated testing and counseling will be de-prioritized. Thus, targeted HIV testing and counseling will be intensified aimed at identifying the majority of new infections and linking to care and treatment timely. It is also important to respond to the created high demand for HIV testing among the population as it is the right of citizens to have the HIV testing and know their HIV status as well helps to develop safe sexual behaviors. This will be implemented through Provider initiated testing and counseling (PITC) and voluntary counseling and testing (VCT). The PITC will target:

- Couples who will get married or remarried
- Pregnant women
- Widowed
- Most at risk population: Female sex workers, daily laborers, truck drivers
- TB patients
- STI cases
- Discordant couples
- Orphans and vulnerable children
- Sexually active high school and university students.
- HIV Exposed children/contacts/family index cases
- Adults or adolescent with medical indications or suggestive signs & symptoms of HIV.
- Uniformed forces
- Prisoners

The VCT will address largely the general population and will reach about 10% of adult population per year, particularly the low at risk population. This will be implemented in public and private health facilities through fee basis. Price segmentation will be entertained in the public health facilities whereby clients will cover the cost of test kits and accessories while the remaining part of the service cost will be covered by the government. The key interventions include:

- Support Health facilities, wereda health offices and regional health bureau to have the capacity of analyzing and use of local HIV testing and counseling data for planning, identifying targets of testing and overall implementation of targeted testing.
- Promote targeted testing and counseling through health work forces, women's Association, youth Association, Leading sectors of mega projects and development schemes and local administrations.

- Strengthen family center testing of children through promoting index case testing.

- Design and disseminate appropriate communication messages on targeted HTC

- Cascade testing targets to regions and wereda based on the HIV prevalence and extent of risks in the respective areas.

- Build the knowledge and skills of health care providers on counseling and index case testing, particularly child and adolescent counseling.

- Institutionalize a standardized delivery system for repeat HIV testing and tracking of repeat testers.

- Strengthen linkage and referral of clients to care and treatment.

- Improve the availability of testing and counseling services in clinics of Development schemes and mega projects and link with the public health facilities in the surrounding.

- Ensure uninterrupted supplies of test kits and accessories in all testing and counseling service delivery points.

- Expanding HIV testing and counseling services to all Prison establishments.

- Involve private health facilities to provide counseling and testing to others who have the need to know their status.

- Strengthen the M&E system to capture enrollment by age & sex and consumption of commodities.

### 2.2.3 Strategic Objective 3: Attain virtual elimination of Mother to child Transmission of HIV

Ministry of Health in collaboration of partners developed a three year (2013-2015) plan of elimination of Mother to child transmission of HIV aimed at providing ART for 90% of HIV positive pregnant women; providing ARV prophylaxis for 90% of HIV exposed children and reduce the vertical transmission to less than 5% by 2015. The implementation of the e-MTCT plan is underway focusing on:

- Provision of Continued skill building and training to regional, zonal, wereda and health facility staff on PMTCT program management with focus roll out of Option B+.

- Rolling out Option B+ in a phased approach and prioritizing wereda/ places with high HIV prevalence or burden of HIV and performance of MNCH platform.

- Integrate ART into MNCH services through rolling out the simplified regimen of option B+ for HIV pregnant women.
• Capitalizing on the health extension program and health development army to effectively engage communities and improve the PMTCT service uptake as well as MNCH outcomes.

Building on the current and expected achievements over the remaining period of the elimination plan, the post 2015 objective of PMTCT is to consolidate & sustain the elimination of MTCT and reduce the vertical transmission to less than 2% by 2020. The strategies of the 2013-2015 e-MTCT are still valid to be carried forward for the investment period or post 2015 response to ensure virtual elimination. The main focus will be

• Expand Behavior change communication focusing on Sexual reproductive health and HIV to all 15-49 years people through Health extension, health development army, schools, youth and Women’s Association and CSOs engaged in providing youth friendly HIV services.

• Identification of the unreached HIV positive pregnant women through universal HIV testing of all pregnant women.

• Promote male partner testing

• Addressing missed opportunities through strengthening the integration, linkage and improving tracking system.

• Improving the provision of family planning services to HIV positive women through integrating the Family planning services and PMTCT.

• Improving the adherence and retention in care.

• Ensuring the availability of Early Infant diagnosis supplies and required logistics for MNCH.

• Avail adequate supply of medicines, diagnostics and other essential supplies and commodities for PMTCT.

• Strengthen linkage of ART with PMTCT/RMNCH.

• Continued building capacities of Health Development Army to ensure individual, families and communities involvement and participation in sustaining e-MTCT of HIV.

• Strengthen the involvement of private and FBOs/nongovernmental health facilities in providing PMTCT services.

• Improving the quality of the integrated MNCH services through strengthening the platform and implementing continuous national quality improvement guidance notes

• Strengthen the Monitoring and Evaluation framework for e-MTCT of HIV.

2.2.4 Strategic objective 4: Optimize and sustain quality Care and Treatment

Access to care and treatment was improved significantly; As a result of this over half a million PLHIV have ever enrolled for chronic care and HIV related death was reduced by 50%. However, there are gaps in retention, pediatric enrollment and overall reaching of the universal ART coverage, particularly with initiation of treatment at CD4 500 or less.

Building on the successes registered and lessons learnt care and treatment will be boosted through maximization of utilization of the available services, further expanding the services
to counseling and testing sites with high HIV prevalence, sustaining adherence and improving quality of care to retain clients in care. It aims at achieving 90% ART enrolment (of treatment eligible at CD4 500 or less) and 85-90% retention in care by 2020. This strategic objective includes ART, prophylaxis and management of co morbidities particularly Tuberculosis, and Health system strengthening with the emphasis to improvement of laboratory services and pharmaceutical and health products management across all service delivery points. Accelerated roll out of treatment at CD4 equal or less than 500 and implementation of the recently endorsed ART adherence strategy will be the backbone of the care treatment for the coming years. The broad strategies include

- Increasing HIV testing uptake focusing on identifying PLHIV who do not know their status and linking to care and treatment.
- Early enrollment of all eligible PLHIV for ART through accelerated implementation of the 2013 WHO guidelines and future new developments.
- Rolling out PMTCT option B+
- Strengthen TB-HIV integration
- Improve adherence and retention through expanding the implementation of the adherence framework and involving Association of PLHIV
- Improving laboratory services through maximization of use of available services and introduction of new technologies.
- Strengthening pharmaceutical and health product management system at central, hub and health facility level.
- Improving capacity of treatment failure detection and decentralized to health centers.
- Improving patient and ART Program monitoring system
- Enhance the fight against stigma and discrimination

As this is the first priority of the interventions of the investment case which contributes largely to the achievement of the set goals, it is important to further describe some of the broad strategies described above in order to make the implementation strategy clear.

**A. Increment of enrollment for ART**

At the CD4 cut off 500 or less, 286,000 PLHIV, who are naive, are expected to be enrolled over the coming six years period of the investment. This will be achieved through

- Targeted testing and counseling (e.g TB patients, STI cases, high risk population etc) both in ART and non ART sites.
- Improving linkage of HIV positives diagnosed at non ART health facilities to care and treatment and follow up.
- Improving the availability of early infant diagnostic services, supplies and ART monitoring laboratory equipment.
- Persuading and preparing patients to start ART early, adhere and retain in care.
- Enrolling all HIV positive TB cases, all HIV positive children under 15 and HIV positive pregnant women irrespective of CD4 count by the time of diagnosis.
- Enrolling all adult PLHIV whose CD4 is 500 or less by time of HIV diagnosis.
- Strengthening the existing ART sites to maximize the utilization of the available capacity to enroll and the referral system from non ART sites to ART sites.
- Expanding ART sites based on existing HIV prevalence data or Counseling and testing data in the district.
- Providing ART in all health facilities providing TB diagnosis and treatment
- Ensuring the availability of uninterrupted ARV drugs and related HIV commodities.

**B. Strengthening TB- HIV integration**

The HIV investment case and National TB strategic plan of 2015-2020 complement each other in strengthening the integration of TB-HIV while having TB/HIV collaborative activities as a starting point. The focus here is to reduce TB related HIV mortality through

- testing all TB patients for HIV
- intensifying TB case finding among PLHIV
- Providing preventive therapy (INH) to non TB HIV patients.
- Managing TB and HIV co infection.

The key interventions for the integration include

- Building the capacity of program mangers & coordinators of HIV and TB at the different levels and service providers on integrated TB-HIV program management and service delivery.
- Improving intra and inter health facilities referral system and linkage.
- Making all TB service sites be ART sites.
- Improving diagnostic capacities and use of new technologies.
- Improving drugs and supplies at health facilities.

**C. Improving adherence and retention in care**

In early 2014 Ministry of Health developed strategic framework for improving Adherence and retention in care. The strategies articulated in the framework are being considered as
interventions that will be implemented during the investment case period so as to make the ART effective. These include:

- Provision of education and counseling to patients through one to one or peer supporters.
- Nutrition support
- Build the capacity of PLHIV and Faith based organizations and involve in providing adherence education.
- Strengthen family role in care and treatment.
- Strengthening tracing mechanism
- Improving the availability of OI drugs and management of OI and concomitant illness.

D. Providing ART as prevention

Scaling up the ART to enroll most of the treatment eligible PLHIV will significantly contribute to the achievement of the set target of new infection reduction by 2020. Furthermore, provision of ART to sero-discordant, who is not eligible for ART, will optimize the benefit of the intervention and as a result providing ART as Prevention will be implemented during the investment period.

E. Enhance the fight against stigma and discrimination

Building on the current achievements the fight against stigma and discrimination will be intensified through increasing public awareness and knowledge on the transmission and prevention of HIV, improving access to HIV testing, PMTCT & ART, enforcing the existing anti discriminatory laws of the land and improving the involvement of PLHIV in the service delivery. The relevant interventions to fight stigma and discrimination are included in each program as this will be implemented in an integrated and holistic approach of the prevention and continuum of care.

F. Strengthening Health system for successful care and treatment

An effective and efficient pharmaceutical and health product supply management, laboratory service and HMIS is needed to ensure the achievement of the set targets for ART enrollment and retention in care over the Investment period. These will be enhanced through

- Strengthening the quantification and procurement capacity of Drug and Therapeutic committee in health facilities and PFSA respectively.
- Building the logistics management capacity of regional health bureaus.
- Improving logistic and supply management, particularly storage capacity and stock management in health facilities and Wereda health offices.
- Expanding integrated pharmaceutical and logistic system to all ART, PMTCT and counseling and testing providing health facilities.
- Strengthening Pharmaceutical management information system to generate data on prescription trend, consumption, patient uptake, regimen profile, lost to follow up and adherence levels.

- Improving user level data of HIV commodities such as OI drugs, rapid test kits etc.

- Strengthening rational drug use through adhering to national treatment guidelines and timely correction of irrational prescription trends.

- Monitoring adverse drug reactions through strengthening the passive and active surveillance.

- Developing a standardized ART monitoring Laboratory platform (hematology, CD4 conventional & point of care, viral load testing and other new technologies).

- Maximization of utilization of existing CD4, Early Infant diagnostic services and Viral load testing through sample transfers and SCMS printer.

- Decentralization of laboratory equipment maintenance to regions and outsourcing to others that have capacities.

- Expanding laboratory and diagnostic services focusing on the new technologies such as point of care and gene-xpert machines.

- Increasing access to HIV viral load testing in regions and hospitals with high load of patients on ART and rollout of viral load based ART monitoring.

2.3 Critical enablers

Health system strengthening (HSS), increasing domestic resources, effective partnership and addressing gender related barriers to access services are the critical enablers for the optimum implementation of the prioritized Interventions and achieving the expected return of the investment.

Of the six HSS building blocks, three, namely service delivery focusing on laboratory service, pharmaceutical and health product supply and HMIS are considered as critical enablers that need further improvement to cope with the needs of the program and overall needs of the health sector to provide quality care. The former two are elaborated above and the HSS focus in this section will be only on HMIS.

2.3.1 Health system strengthening: HMIS/M&E

In adequate capacity in analysis, timely generation and information use for decision making at all levels of the health system is among the key challenges of HMIS. This can have a series consequence in the scaling up of the integrated TB and HIV interventions. Drug resistance is imminent if there are no proper ART and TB treatment monitoring. Cognizant of this, the HMIS/ M&E system will be strengthened to avail reliable, timely and complete information; track
progress and measure the achievements of the set targets of the investment; identify challenges encountered during the implementation and make timely decisions to solve the problem. The key interventions include:

- Support health facilities, wereda health offices and Regional health bureau to have the required system and capacity to produce reliable data, analyze data and use of information for decision making at the respective levels.

- Introduce AIDS Indicator Survey as system to evaluate the behavioral and biomedical responses to the epidemic. This needs to be done every three to five years.

- Establish a data ware house for health facility and population based data collected.

- Conduct Periodic Program evaluation and midterm program review.

- Strengthen ANC and drug resistance surveillance system.

- Conduct operational researches that can help to improve services (PMTCT, HIV Testing, ART, TB treatment) and to revise or develop TB and HIV strategies.

2.3.2 Enhance Partnership, Coordination and Leadership

The technical and financial support received from the bilateral, multilateral and International Financing institutions and the existing partnership with all actors (state stakeholders, development partners, CSOs, FBOs, Trade unions, and private for profit) have significantly contributed to the scale up of the HIV/AIDS program and the current achievement registered in the country. To sustain the current gains and achieve the targets set in this investment case, the health sector will further enhance the partnership with all partners through strengthening existing Platforms, broadening participation, increasing alternative service delivery channels, delivering results, strengthening financial management and ensuring transparency and accountability. Public-Private Partnership will be enhanced through the optimal utilization of existing opportunities, capacities of private for profit and nonprofit (CSOs) to deliver services and financial contributions to implement the investment case.

CSOs and FBOs

The CSOs and FBOs will be involved in the implementation of Behavior change communication, condom promotion and distribution, HIV testing & counseling and ART adherence education. Based on the vested comparative advantage, they have a better access and capacity to reach at risk and vulnerable population such as female sex workers, OVC, street children and destitute women (separated/divorced/widowed). Hence, they will be involved in implementation of interventions targeting these groups under each program. More specifically, CSOs/FBOS:

- Map out female sex workers, OVC, street children and destitute women in urban areas for HIV prevention services.
- Develop tailored Behavior change communication programs for the identified groups
- Provide BCC through organizing peer groups and facilitating peer education and outreach education to the target groups.
- Developing and disseminating HIV education/communication to people with disabilities
- Promotion and distribution of condom to at risk population.
- Promotion of targeted testing and counseling and offering of HIV testing in selected sites.
- Provision of sexual and reproductive health services including HIV in youth friendly service delivery sites.
- Provision of ART adherence education and tracing lost to follow up of treatment.
- Strengthening community based support to OVC.

**Private for profit**

Health and non health private sectors have been involved in providing health related HIV services (HTC, PMTCT & ART) and work place HIV interventions during the SPM II period respectively. This will be further enhanced so as to improve service delivery and mobilize local resources for the response. More specifically, the focus will be:

- Supporting private health entities to provide HIV testing, PMTCT and ART.
- Develop effective public-private partnership with private for profit entities (mechanized farms, flower plantation, mining, construction companies and other emerging economic activities) to support mobile and seasonal workers and neighboring communities and resourcing the interventions.
- Supporting non health private for profit entities (with mobile and seasonal workers or work forces at risk to HIV) to develop and implement HIV work place intervention tailored to the local context.
- Supporting to conduct HIV risk assessment in the private entities with huge work forces and to mainstream HIV based on the risk assessment findings.

**Coordination and Leadership**

To ending the AIDS epidemic in the country, effective coordination and leadership is critically required at the national, regional, district and community level. To this effect the federal and regional HIV/AIDS prevention and control offices need to be strengthened through improving the capacity to coordinate and lead the responses, generate national and local evidences and network, mobilize resources for the response, improve efficiency and evaluate the effectiveness. More specifically, the following will be implemented.

- Supporting and guiding regional AIDS coordinating authorities to develop regional HIV strategic plan or HIV Investment case based on the national and local contexts.
Strengthening the different partnership at National, regional and district level and realign with the current thinking to sustain the response for impact and ending AIDS.

Ensuring the prioritized sectors have owned the sector HIV program, allocate resources on program base and incorporate the sector specific HIV indicators in to the sector Management Information system.

Facilitating and conducting annual joint planning both at national and regional level.

Increasing coordination between prevention and treatment programs and broader development initiatives through improving public private partnership, and reinforcing accountability and optimum utilization of the public wing and government structures such as Federal, regional and wereda councils.

Guiding the effective and efficient utilization of resources

Tracking domestic resources allocated and used for the HIV responses

Improving the quality of HIV services and HIV program management through conducting regular assessment and peer reviews and a continuous human resource capacity building and retention mechanisms.

Documentation of good practices and support for dissemination.

Conducting regular joint annual programs reviews, midterm evaluation of the HIV investment case and improve as per the recommendation.

2.3.3 Increase Domestic resources for HIV response

The Government is committed to sustain the HIV response through ensuring a strategic investment of the resources receiving from development partners and increasing domestic resources to finance some of the priority areas and critical enablers. Domestic resources for HIV response will be increased through

- Increased domestic allocation to cover the implementation costs of a component of the priority interventions of the investment case. This includes:
  - Targeted Behavior change communication, prevention and control of STI and HIV testing and counseling in the Mega projects and development schemes. The responsible ministry offices such as Ministry of Water and Energy, Sugar Corporation, Ministry of Mining, Prison administration, Ministry of Transport, Ministry of Urban, housing and construction etc will work with Ministry of Finance and Economic Development to get a program based budget for the HIV response in these sites.
  - School HIV programs. HIV/AIDS is incorporated in to the curriculum of primary and secondary education. This needs to be supported with a strong co curricular activity that engages majority of the students. Ministry of Education, Regional Bureau of Education and Universities are expected to allocate or increase resources for HIV response in schools and higher Education Institutions.
Integrate HIV into health financing. With the vision to strengthen primary health care and improve maternal, newborn and children health, the allocation of government budget to the health sector is expected to increase and through this the HIV response will be benefiting to scale up. These include:

- Community level Health and HIV responses through the Health extension program and Health Development army.
- Infrastructure expansion particularly construction of Hospitals, which will also help to improve the quality of HIV services.
- Human resources for health
- Coordination, Program management and Monitoring and evaluation

**Strengthen public sector HIV mainstreaming.**

Mainstreaming of HIV/AIDS in to sectors has been considered as one component to create enabling environment for HIV response. To this effect, efforts have been exerted to support sectors to mainstream HIV into the business of the sector. Considering the current dynamics of the epidemic and differences in level of risks among the sectors, there is a need to shift from mainstreaming HIV into selected sectors where there is a high potential for occurrence of new HIV infections or which has work relationship with the target population for the different programs of the investment case. In line with this the priority sectors will be:

- Ministry of Education and Regional Bureau of Education
- Ministry of Women, Children and Youth Affairs and Regional counterparts.
- Uniformed forces.
- Ministry of Water Resources and Energy and regional counterparts
- Sugar Corporation
- Ministry of Mining and regional counter parts
- Ministry of Transport and regional counter parts.
- Ministry of urban, housing and construction
- Prison administration
- Ministry of Labor and Social Affairs
- Ministry of Agriculture and regional counterparts
- Privatization and public enterprises supervising Agency.
- National and Regional media
Strengthen Private sector HIV mainstreaming

In addition to the Government sectors there are private entities that need to mainstream HIV to protect the work forces and surrounding communities as well as that can support resourcing goals. These include Flower Plantation, Mechanized farms, mining, Construction companies, emerging economic zones, etc which are vulnerable to HIV because of the risk factors in the areas.

Co sharing of cost of services through introducing of price segmentation for some of the HIV services.

Non targeted HIV testing and counseling will be provided in public and private health facilities based on out of pocket fees. The public health facilities will only charge cost of rapid test kits while the remaining component will be covered by the government. To this effect PFSA will procure the rapid test kits with the revolving fund and will supply to regional health bureaus or public health facilities at reasonable cost like any of the essential medicines.

2.3.4 Gender equality and equity: Address gender related barriers to HIV and SRH needs of girls and boys, and women and men

In addition to the creation of enabling environment for gender equality and equity in the country (policy, legal framework, institutional arrangement and representation of women in decision making process), practical actions have been taken to ensure women empowerment and address the health needs of women. Because of the collective efforts in the past two decades remarkable changes were observed in reduction of Gender based violence, harmful traditional practices, reduction of HIV prevalence among young women and men, and better use of HIV and health services among women.

The gender related barriers to access health services will be addressed through building on the lessons learnt in the past and meeting the strategic needs of girls and boys, and women and men for HIV and SRH. This will be realized through:

- Strengthening women centered health development army
- Intensifying the community movement to fight female genital mutilation and gender and sexual based violence through the joint and the collaborative efforts of community leaders, clan leaders, women’s Association, Religious leaders/FBOs, CSOs and government structures at the different levels.
- Expanding the provision of an integrated HIV and SRH in secondary schools, higher education, youth centers, health facilities and communities.
- Strengthen the integration of PMTCT with MNCH and SRH services.
- Strengthening girls’ club and other clubs in school through providing support to build the capacity and have required materials
- Improving access to mix of contraceptives and dual protection
2.4 Synergies with other Development sectors

Over the period of the implementation of the HIV strategic framework (2001-2005), SPM I & II (2004-2014) a number of development sectors (MOE, MOWCYA, MOLSA, MSEDA & Local administrations) and civil society organizations have been involved in implementing HIV mitigation interventions targeting orphan and vulnerable children and PLHIV. To complement this, HIV Fund has also been used to implement Income Generating activities targeting vulnerable women and sex workers as well as schooling support for OVC. The ongoing efforts to ensure universal primary education, promote social protection to OVC, and engage women and young people in family centered economic strengthening interventions by different sectors reduce the vulnerability to HIV as well as intensify the HIV prevention programs.

The working relationship with these sectors will be strengthened through improving coordination, maximizing the use of existing revolving IGA and OVC grant in synergy with other support and tracking the results jointly. While improving the synergies with development sectors, focus will be given to programs that reduce economic impediments to service access and socio economic impact of HIV in the country.

A. Synergize the support to strengthen community based Orphan support:

As mentioned above HIV fund has been used to implement IGA and supporting OVC. The ongoing projects related to these will continue based on the existing arrangements and agreements between different partners. The OVC care and support will be treated as part of the social protection and broader child welfare and will be handled by Ministry of Women, children and Youth Affairs and regional Women, children and Youth Affairs in collaboration with local NGOs, FBOs etc. The orphan support during the transition period focuses on ensuring continuum of care and creating a sustainable mechanism of support through strengthening the community based support approach. Through this approach about 50% (400,000) of the AIDS orphan will be reached in the first two years of the investment period and since the third year it is assumed to decrease by 25% annually as many will be graduating from the support and also many households will be able to support themselves as overall poverty reduction program and the overall national economic growth. The specific activities will include:

- Conducting of need assessment of orphan and determine the type of services to be provided.
- Conducting resource mapping in the community and partners.
- Strengthening the health, educational, and economic support through the community structures and enhancing the ongoing religious institutions child sponsorship program.

- Strengthening household economic support through providing livelihood training, group establishment, promoting saving and linking with microfinance institutions, and providing matching fund to the needy households.

- Documenting best practices of sustainable orphan support in the different parts of the country and scale up to other areas.

- Improving the coordination and collaboration of the different actors for orphan support at community, district, region and national levels.

B. IGA will be taken over by designated entities.

The IGA to vulnerable women and PLHIV, like any other beneficiary of the program in the country, will be guided by the overall strategy of Micro and Small enterprise Development and will be fully handled by the implementing entities stipulated in the strategy. Though it is not included in the prioritized interventions for the HIV investment case, the implementation of this will continue through the designated entities with their own resources and support received from partners.

2.5 Performance Measurement.

The timely improvement of the implementation of the prioritized interventions and tracking of the results require a strong M&E system. To this effect, the health management information system and the multi-sectoral HIV response information system will be strengthened during the investment period. Most of the issues related to HMIS and ART monitoring are described in the strategic objective four and critical enablers section. The rolling out of the multi-sectoral HIV information system (MRIS) has been started. Considering the priority areas in the six years of the HIV investment case investment and the lessons learnt, the following will be accomplished. These will be:

- Improving or updating the M&E tools and overall the M&E system

- Support the prioritized sectors to include sector specific HIV program indicators in to the respective sector information management system. As most of the sectors are now in the stage of the preparation of the next five years sector strategic plan, this is a good opportunity to incorporate the multi-sectoral HIV response performance indicators to the information management systems of the sectors.

- Strengthen on site data verification and overall data auditing system.

- Promoting and conducting researches that helps to improve program implementation and address challenges, assess effectiveness of interventions and track outcome and impact of the programs by the midterm and end period of the investment case.
The program coverage, outcome and impact targets for the period 2015 to 2020 are presented as follows.

<table>
<thead>
<tr>
<th>Program</th>
<th>Indicators</th>
<th>Base line, June 2014</th>
<th>Targets by year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BCC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCC: Most at risk population</strong></td>
<td>Percentage of FSWs reached with package of HIV prevention programs—individuals and/or small group level interventions.</td>
<td>50%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>BCC: Most at risk population</strong></td>
<td>Percentage of laborers and other work forces in mechanized &amp; extensive farms, development schemes, flower plantation and other projects reached with prevention program—package of services, at least with targeted BCC.</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>BCC: School</strong></td>
<td>Primary and secondary students reached with teacher trained on AIDS</td>
<td>55.8%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>BCC: community</strong></td>
<td>Adult population (15-49) accessed to communication and demand generation</td>
<td>75%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>Adult population (15-49) having two or more sexual partner in the last 12 months.</td>
<td>M=3.7%</td>
<td>F= 0.7% (2011 DHS)</td>
</tr>
<tr>
<td><strong>Condom distribution and use</strong></td>
<td>Number of male condoms distributed/sold (in Millions)</td>
<td>147</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Percentage of Adults age 15-49 years using condom with non regular partner during the last sexual act</td>
<td>33.7% (DHS 2011)</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>Percentage of female sex workers reporting the use of condom with their most recent client</td>
<td>93%, MARPS survey</td>
<td>98%</td>
</tr>
<tr>
<td><strong>STI</strong></td>
<td>Proportion of STI cases diagnosed and treated</td>
<td>34%</td>
<td>45%</td>
</tr>
<tr>
<td>Program</td>
<td>Indicators</td>
<td>Base line, June 2014.</td>
<td>Targets by year</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Number and percentage of pregnant women who were tested for HIV and received results</td>
<td>74%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>Number and percentage of HIV positive pregnant who received ARV prophylaxis (ART or B+ option) to prevent MTCT of HIV</td>
<td>69%</td>
<td>(PEPFAR report)</td>
</tr>
<tr>
<td></td>
<td>Number and percentage of infants born to HIV positive mothers who received the four to six weeks ARV prophylaxis</td>
<td>41%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>Number and percentage of infants born to HIV positive women receiving virological testing for HIV within two months of birth</td>
<td>23%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>Number and percentage of HIV exposed infants (initially negative by 4 to 6 weeks) tested for HIV by 9/18 months and/or by the time of cessation of breast feeding</td>
<td>N/A</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Percentage of infants born to HIV positive women who are HIV infected</td>
<td>12.8%</td>
<td>6.7%</td>
</tr>
<tr>
<td>ART</td>
<td>Number and percentage of adult population (15+) who are currently on ART</td>
<td>54.6%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>Number and percentage of children (0-14) living with HIV who are currently on ART</td>
<td>13.5%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Percentage of adult and pediatric Patients retained on ART</td>
<td>85.6%</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>Percentage of adults and pediatric patients on ART with viral suppression (&lt; 1000 copies/ml)</td>
<td>N/A</td>
<td>95%</td>
</tr>
</tbody>
</table>
### Table 5: Indicators and targets by year (2015-2020)

**Impact**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2017 target</th>
<th>2020 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of young people aged 15-24 who are living with HIV</td>
<td>0.3% (DHS, 2011)</td>
<td>0.17%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Estimated percentage of child HIV infections from HIV positive women</td>
<td>12.8%, program coverage</td>
<td>5.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>AIDS related mortality per 100,000 population</td>
<td>40</td>
<td>22</td>
<td>12</td>
</tr>
</tbody>
</table>
3 DELIVER: HOW TO ADDRESS BOTTLENECKS AND INEFFICIENCIES

3.1 Services Delivery Mechanisms ....................................................................................................... 50
3.2 Demand and Supply Analysis for services delivery and program Implementation........ 51
3.3 How will be the identified bottlenecks and inefficiencies will be addressed? ............. 55
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3 DELIVER: HOW TO ADDRESS BOTTLENECKS AND INEFFICIENCIES

3.1 Services Delivery Mechanisms

The basic programs will be delivered through an integrated approach and different channels. The main delivery channels of each program are summarized in the table below.

<table>
<thead>
<tr>
<th>Programs</th>
<th>Primary delivery channels</th>
<th>Other delivery channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior change communication</td>
<td><strong>Peer education</strong>&lt;br&gt;<strong>Outreach education</strong>&lt;br&gt;<strong>Health extension</strong>&lt;br&gt;<strong>HDA</strong>&lt;br&gt;<strong>Schools</strong>&lt;br&gt;<strong>Media</strong></td>
<td>In the majority of the rural communities the HIV BCC is provided as part of the sixteen packages of the health extension and overall part of the Health development army initiative to generate demand and services utilization</td>
</tr>
<tr>
<td>STI</td>
<td><strong>Public health facilities</strong>&lt;br&gt;<strong>Private clinics</strong>&lt;br&gt;<strong>Clinics of Mega projects and development schemes</strong>&lt;br&gt;<strong>Uniform forces health facilities.</strong></td>
<td>Youth friendly HIV/STI/ reproductive health clinics of family guidance association and outreach services in the drop in Centers linking to private wings</td>
</tr>
<tr>
<td>Condom distribution</td>
<td><strong>Dominantly social marketing</strong>&lt;br&gt;<strong>Health facility based as part of the STI prevention &amp; control, HIV prevention and family planning.</strong>&lt;br&gt;<strong>Mega projects, development schemes and sectors owning huge projects</strong></td>
<td><strong>Youth friendly HIV/STI/ reproductive health clinics of family guidance Association and Community based organizations working with high risk populations.</strong>&lt;br&gt;<strong>Peer groups</strong>&lt;br&gt;<strong>CSOs/CBOs</strong></td>
</tr>
<tr>
<td>HIV testing and counseling</td>
<td><strong>Dominantly Health Facility based testing and counseling (both VCT &amp; PITC).</strong>&lt;br&gt;<strong>Community based testing for laborers in mega projects and development schemes where there is no well functioning clinic in the projects.</strong></td>
<td>In urban areas private health facilities will serve as one service delivery channel for HIV testing and counseling. Furthermore, these will help to serve those who are not able to get it in the public because of the targeted approach.</td>
</tr>
<tr>
<td>PMTCT</td>
<td>The secondary, third and fourth prong of PMTCT will be provided in hospitals and health centers with MNCH services and in Private hospitals and higher clinics</td>
<td>The primary infection prevention component will be implemented in the community, particularly in urban areas, in hot spots and in districts with high HIV prevalence</td>
</tr>
<tr>
<td>Care and treatment</td>
<td><strong>Health facility based: integrated with TB</strong>&lt;br&gt;<strong>Adherence education and retention through Associations of PLHIV</strong></td>
<td>Provision of adherence and retention in care education in holy water through Religious leaders, particularly the Orthodox church.</td>
</tr>
</tbody>
</table>
### 3.2 Demand and Supply Analysis for services delivery and program Implementation

Under the section of the current response most of demand and supply constraints are discussed. Furthermore a bottleneck analysis for the six basic programs prioritized for the investment case was done and summarized as follows.

<table>
<thead>
<tr>
<th>Programs</th>
<th>Major demand side constraints</th>
<th>Major supply side constraints</th>
<th>Major demand and supply side opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior change communication</td>
<td>▪ Comprehensive knowledge on HIV/AIDS is low.</td>
<td>▪ HIV issue is not fully addressed through HDA</td>
<td>▪ Good demand among laborers and other at risk groups to have peer education and other BCC programs.</td>
</tr>
<tr>
<td></td>
<td>▪ High risk behaviors or low risk perception among certain population groups</td>
<td>▪ Inadequate coverage of the BCC programs for the most at risk population and the development schemes.</td>
<td>▪ The availability of CSOs and International partners that are currently implementing targeted BCC.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Inadequate capacity to design and deliver effective BCC messages.</td>
<td>▪ The initiation and readiness of sectors such as sugar corporation, Ministry of Water resources etc to implement such programs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ School HIV program is not well guided and monitored.</td>
<td>▪ Health extension program &amp; HAD.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Weak M&amp;E system to measure BCC performance.</td>
<td>▪ Availability of local media in majority of the regions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▪ Existence of multiple clubs in schools.</td>
</tr>
<tr>
<td>Programs</td>
<td>Major demand side constraints</td>
<td>Major supply side constraints</td>
<td>Major demand and supply side opportunities</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>STI</td>
<td>▪ Low treatment seeking behavior&lt;br&gt;▪ Self or traditional treatment is common.&lt;br&gt;▪ Less partner notification</td>
<td>▪ Inadequate program ownership, Leadership and monitoring.&lt;br&gt;▪ Syndromic case management is not fully implemented in all HFs.&lt;br&gt;▪ Inadequate data on the burden of the different STIs &amp; appropriately diagnosed and treated patients.</td>
<td>▪ The availability of high number of health facilities that can provide an integrated STI services.&lt;br&gt;▪ Partner support to avail adequate supplies of drugs for STI</td>
</tr>
<tr>
<td>Condom distribution</td>
<td>▪ In consistent condom use&lt;br&gt;▪ Lack of trust of partner when asked for condom use</td>
<td>▪ Inadequate coordination&lt;br&gt;▪ Limited knowledge and skill of quantification&lt;br&gt;▪ No mechanism for monitoring the supply and consumption rate for condoms&lt;br&gt;▪ Condom outlets in different sectors are not well defined.</td>
<td>▪ High demand and use for condom among sex workers, truck drivers, uniformed forces and sexually active young people.&lt;br&gt;▪ Existence of established social marketing mechanism for promotion and distribution of condoms.&lt;br&gt;▪ Availability of National condom strategy</td>
</tr>
<tr>
<td>Programs</td>
<td>Major demand side constraints</td>
<td>Major supply side constraints</td>
<td>Major demand and supply side opportunities</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| HIV testing and counseling | ▪ Low partner testing  
▪ Low testing among children     | ▪ Offering PITC for every one coming to HFs.  
▪ Inadequate post test counseling  
▪ Inadequate capacity of health professionals to provide child counseling  
▪ Weak M&E to track consumption and use local HCT data for planning purpose  
▪ No system to track repeat testers and differentiate between tests and people counseled and tested. | ▪ High demand and uptake of HIV testing in urban and rural communities as well as at risk population.  
▪ Accessible and High number of health facilities in all districts that provide HIV testing and counseling. |
| PMTCT             | ▪ Low male involvement  
▪ Low Institutional delivery  
▪ Refusal to get tested for HIV or receive results.  
▪ Stigma and discrimination  
▪ Fear of disclosure | ▪ Inadequate integration of PMTCT option B+ with MNCH services.  
▪ Less quality improvement in PMTCT service.  
▪ PMTCT option B+ service is in limited HFs  
▪ Limited access to and under utilization of facilities for early infant diagnosis and CD4 testing  
▪ High laboratory results turn-around-time  
▪ Supply chain related problems in non ART PMTCT sites. | ▪ Existence of high demand for testing and practices of pre marital testing in the society.  
▪ The existence and experiences of health extension and HAD to generate demand and improve service utilization.  
▪ Availability of high number of Public and private PMTCT service delivery points.  
▪ Use of simplified regimen or test and treat approach for all pregnant women.  
▪ Existing partnership and bilateral and international support to eliminate MTCT |
<table>
<thead>
<tr>
<th>Programs</th>
<th>Major demand side constraints</th>
<th>Major supply side constraints</th>
<th>Major demand and supply side opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care and treatment</td>
<td>• A good proportion of PLHIV do not know their HIV status</td>
<td>• Low in care retention</td>
<td>High demand and uptake of HIV testing.</td>
</tr>
<tr>
<td></td>
<td>• HIV status disclosure to family is low</td>
<td>• Inadequate tracing mechanism for lost to follow up and defaulter</td>
<td>• Decentralized services</td>
</tr>
<tr>
<td></td>
<td>• Adherence and retention is inadequate</td>
<td>• Lack of laboratory equipment maintenance</td>
<td>• Availability of high number of potential health centers, which are currently providing PMTCT services, that can provide ART</td>
</tr>
<tr>
<td></td>
<td>• Discontinuing treatment due to different reasons.</td>
<td>• Inadequate laboratory services</td>
<td>• The existence of Association of PLHIV which have the experience and capacity to provide adherence education.</td>
</tr>
<tr>
<td></td>
<td>• Denial and late care seeking behavior</td>
<td>• Pediatric ART is in limited HFs and capacity of pediatric ART management is inadequate</td>
<td>• The availability of new technologies such as point of care.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inadequate integration of TB and HIV</td>
<td>• The adoption and initiation of implementation of the WHO 2013 consolidate HIV infection treatment guidelines.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Low capacity of treatment failure detection.</td>
<td>• The existing good capacity of quantification and PSM coordination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Low utilization of Viral load tests</td>
<td>• Existence of good capacity of procurement, storage, distribution and logistics management information system.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Existing partnership and bilateral and international support.</td>
</tr>
</tbody>
</table>
3.3 How will be the identified bottlenecks and inefficiencies will be addressed?

As described in each strategic objective and program under the design section, the key interventions for addressing the priority areas are clearly stipulated. These also address the bottlenecks for the different programs. Under this section it reiterates many of these with a view of optimization of use of existing opportunities and focusing on the big blocks of bottlenecks. The identified bottlenecks will be addressed through:

A. BCC

- Building the capacity of BCC program design and message development based on local evidences and socio cultural contexts
- Expanding the Public HIV education and the targeted BCC programs using the available community structures, CSOs, media, scaling up of existing best practices and active involvement of sectors leading the mega projects/ development schemes.
- Improving school HIV programs leadership
- Strengthen the M&E system for tracking progress or performance of BCC interventions at community, priority sectors, mega projects/development schemes, mechanized farms and flower plantations.

B. Condom

- Improved coordination and delineate which groups need to receive free condom.
- Develop a mechanism to know or estimate the correct and consistence use of condom on a regular basis.
- Endorse and implement the National condom strategy.

C. STI

- Improve program ownership and leadership at the different structures of the health sector
- Ensure the implementation of Syndromic STI case management in all HFs through having a revised guidelines, trained service providers and regular follow up.
- Include the relevant STI indicators in the HMIS to monitor service provision and track type of STI diagnosed.

D. HIV testing and counseling

- Improving the quality of counseling, particularly post counseling through having adequate number of counselors and provision of continuous education to counselors.
- Building the capacity of health professionals on child HIV counseling.
- Target the HIV testing and counseling to identify most of the HIV infections and link to care and treatment.
- Improve HIV testing and counseling among children through prompting family disclosure, index case testing and PITC.
- Improve the M&E system for HTC, particularly identification of repeat tests, number of people tested for HIV and received results and use of local test data for planning.

E. PMTCT
- Building on the current lessons, maximize the efforts of Health extension workers and health development army to create demand and use of MNCH services among the community.
- Roll out Option B+ to all PMTCT sites through an integrated approach.
- Avail uninterrupted EID supplies and improve utilization of existing services.
- Harmonize data collection system of PMTCT option B+ and ART.
- Improve the M&E system of PMTCT through having an appropriate design in the HMIS and conducting periodic studies to assess the effectiveness of the program.

F. Care and Treatment
- Improve the laboratory services through building a decentralized maintenance service, use of new technologies and placing a functional laboratory platform.
- Improve adherence and retention in care through providing education and counseling, nutrition support, tracing of lost to follow up/defaulters and involvement of families, association of PLHIV and religious leaders.
- Improve the availability of pediatric ART services and increase enrollment.
- Maximize use of available laboratory services.
- Roll out the implementation of the WHO 2013 guidelines and enroll all the needy PLHIV for ART.
- Improve the capacity of treatment failure detection.
- Strengthen ART monitoring and treatment outcome.
3.4 How will be efficiency improved?

Efficiency will be improved through improving the integration of services, strengthening the pharmaceutical and health products supply management, maximum utilization of available laboratory equipments and service delivery points and effective partnership. Furthermore, the existing opportunities will be used at scale to deliver different HIV prevention, care and treatment services. More specifically, efficiency will be gained through

- Strengthening TB and HIV integration
- Integrating PMTCT with MNCH services as well as PMTCT+ with ART.
- Providing community based HIV counseling and testing to laborers in development schemes
- Strengthening health extension and health development army
- Developing and utilizing of framework contracts over two years for HIV commodities. These contracts will stagger deliveries to reduce the cost of holding inventory and potential for stock expiry, damage and changes in treatment guidelines. It cuts the frequent tendering process and increases certainty of the availability of uninterrupted supplies.
- Strengthening Integrated pharmaceutical and logistics management.
- Ensuring to have the required storage capacity through completion of the construction of the 17 hubs and save money paid for rent.
- Reducing unit cost of services through scaling up programs.

3.5 Resource needs for the delivery of HIV services.

The six year HIV investment case was costed through a combination of model based and ingredient (activity) based costing approach. One health tool, which combines Goals and Resource needs model, was the model used to cost most of the priority programmatic components. The unit cost of service per person reached for the different interventions was established. This was done based on the previous unit costs used for GF HIV proposals, actual prices of pharmaceuticals and health products procured by PFSA recently, review of available costing studies, NASA, expert opinion, detail activity costing and default data.

Based on this costing approach, the overall resource needs for the 2015-2020 HIV investment is estimated to be US$ 1.65 billion. The required resource by the strategic objectives and critical enabler are summarized in the pie chart below.
The annual resource needs for the strategic objectives and critical enabler ranges from US$ 241.5 M to US$ 311 M. The resource needs for each strategic objective by year is presented as below in Table 6.

Table 6: Resource needs by year (2015-2020)

<table>
<thead>
<tr>
<th>Strategic Objectives and critical enablers</th>
<th>Resource needs (in USD) by year (in Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO1. Implement high impact and targeted prevention program</td>
<td>38.9</td>
</tr>
<tr>
<td>SO2. Intensify targeted HIV testing and counseling</td>
<td>16.3</td>
</tr>
<tr>
<td>SO3. Attain MTCT virtual elimination</td>
<td>10.7</td>
</tr>
<tr>
<td>SO4. Optimize and sustain high quality care and treatment</td>
<td>109.4</td>
</tr>
<tr>
<td>Critical enablers</td>
<td>56.2</td>
</tr>
<tr>
<td>Synergies with development sectors</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>241.5</td>
</tr>
</tbody>
</table>

Furthermore, the detail resource needs for each of the strategies in each strategic objective and the critical enablers is worked out and summarized in the tables below.
### Table-7: Resource needs by priority programs and strategies (2015-2020)

<table>
<thead>
<tr>
<th>Priority programs</th>
<th>Resource needs (in USD) by year (in Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior change Communication</td>
<td></td>
</tr>
<tr>
<td>Strategy 1: Intensifying BCC targeting at risk population and priority geographical areas.</td>
<td>14.5</td>
</tr>
<tr>
<td>Strategy 2: Strengthening School HIV education program</td>
<td>5.1</td>
</tr>
<tr>
<td>Strategy 3: strengthening community based HIV BCC through HEP &amp; HDAs</td>
<td>8.2</td>
</tr>
<tr>
<td>Strategy 4: intensifying HIV BCC mass media programs</td>
<td>0.6</td>
</tr>
<tr>
<td>Condom distribution and use</td>
<td>7.9</td>
</tr>
<tr>
<td>STI prevention and control</td>
<td>2</td>
</tr>
<tr>
<td>Blood safety</td>
<td>0.7</td>
</tr>
<tr>
<td>HIV testing and counseling</td>
<td>16.3</td>
</tr>
<tr>
<td>PMTCT</td>
<td>10.7</td>
</tr>
<tr>
<td>ART</td>
<td>80.9</td>
</tr>
<tr>
<td>OI prophylaxis and treatment</td>
<td>9.2</td>
</tr>
<tr>
<td>Nutrition support</td>
<td>0.3</td>
</tr>
<tr>
<td>Care &amp; support: Orphan</td>
<td>10</td>
</tr>
</tbody>
</table>

### Table-8: Resource needs for the components of the critical enablers by year (2015-2020)

<table>
<thead>
<tr>
<th>Critical enablers</th>
<th>Resource needs (in USD) by year (in Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity building</td>
<td>10.8</td>
</tr>
<tr>
<td>Program management</td>
<td>2.5</td>
</tr>
<tr>
<td>Research</td>
<td>2.2</td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>17.1</td>
</tr>
<tr>
<td>Logistics and laboratory equipment</td>
<td>6.6</td>
</tr>
<tr>
<td>Program level - HR</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>56.2</td>
</tr>
</tbody>
</table>
4 SUSTAIN THE RESPONSE

The HIV investment case envisages reducing the new HIV infection rate and deaths due to AIDS significantly through implementing the most effective interventions and scaling up the interventions to reach majority of the people with risk and ART needy people. An analysis using Goals module was done to estimate the impact of the priority programs and effectiveness of these priority areas. The result of the model analysis also confirms the effectiveness of the priority interventions proposed in the investment case. The Model estimate of the impact of the future prevention and treatment intervention are as follows.

Figure 13: New HIV Infections at implementation of priority programs at the set coverage in Table 5 and remaining constant from 2013 onwards (base)

Figure 14: AIDS-related Deaths at implementation of priority programs at the set coverage in Table 5 and remaining constant from 2013 onwards (base)
The AIDS response in the country will be sustained through

- Creating strong ownership of the program among regions, districts and communities.
- Strengthening the health development army and building the capacities of communities to own the primary health care delivery.
- Strengthening the health and community system in the country as well as synergizing the investments made in health and developments.
- Integrating TB and HIV services
- Strengthening the integration of PMTCT and pediatric ART with MNCH services.
- Maintaining a balance of targeted response and ensuring of wider community coverage of programs that significantly reduces the spread of the epidemic.
- Intensifying risk based mainstreaming of HIV in to public and private sectors.
- Raising domestic resources for the response through increasing of public resources allocation and strengthening local resource mobilization.
- Improving partnership with private sectors in country to mobilize resources and financing some of the interventions.
- Improving the use of funds received from international communities and bilateral as well as domestic resources.
- Maximizing the utilization of existing opportunities in countries such as the organized community structures (Youth Association, Women's Association), Religious structures and civil society organizations to implement the community based interventions and support.
- Mobilizing the required resources for the response through intensifying the resource mobilization efforts.
- Strengthening the collaboration with regional entities such as IGAD and intensifying the joint prevention programs in cross border areas.

During the investment period concerted efforts will be exerted to improve efficiency and mobilize resources so as to ensure the financial sustainability. These will include:

- Having effective partnership with all development/donor partners and mobilizing financial and technical supports for the response.
- Tracking of resources allocated to HIV/AIDS programs by the different sectors, private sectors, CBOs and CSOs.
- Mapping out available resources and conducting financial gap analysis on a regular basis.
- Developing robust concept notes to mobilize resources from the Global Fund.
- Strengthening grant management and fund utilization.
- Developing resource mobilization strategy
- Conducting unit cost studies to refine and establish cost of intervention per person reached for all programs.