Towards Ending AIDS

National HIV/STI Strategic Plan Sri Lanka, 2018–2022





National HIV/STI Strategic Plan Sri Lanka

2018 - 2022

National AIDS/STD Control Programme (NSACP)

October, 2017

Foreword

I am pleased to present the National HIV/STI Strategic Plan Sri Lanka 2018 – 2022 that will be the guiding document for Sri Lanka's response to HIV/ STI over the next five years. This plan takes into consideration the goal of Ending AIDS in 2025 in Sri Lanka and as such has prioritised activities to expand, intensify and diversify the response to be undertaken by both government and non-government sectors with a coordinated and unified approach. Several cross cutting principles have been outlined for the strategy that underlie the programme.

The National HIV/STI Strategic Plan Sri Lanka 2018 – 2022 presents strategic directions similar to that of the National Strategic Plan 2013-2017 with a few modifications. The process of developing the strategy was an inclusive one with inputs obtained from different stakeholders – government, non-government, community based organisations, individual representatives of key populations including people living with HIV and relevant officials of NSACP and from the peripheral clinics, through various meetings and discussions. The plan has relied on these inputs along with the findings of the External Review of the national response to HIV/AIDS/STI over the last five years in relation to the National Strategic Plan 2013-2017 that was conducted in September 2017.

A list of priority activities to be conducted over the next five years and a framework of indicators to guide and monitor the response is provided in this plan. The activities have been costed and budget is shown under each strategic direction and as well as under different cost categories. The Government of Sri Lanka is committed to the plan and to the goal of Ending AIDS in 2025 and it is expected that the required costs will be met through various sources.

Given our history and how far we have come in our response to HIV/AIDS/STIs, I am confident that the NSACP along with its partners will be able to work together to move further ahead and deliver on the actions laid out in this plan.

I acknowledge the contributions of the National Steering Committee that was formed to guide the development of this plan and the financial support from the Global Fund for AIDS, TB and Malaria for developing this plan.

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Acronyms and Abbreviations

AIDS Acquired Immune Deficiency Syndrome

ANC Antenatal Care

ART Antiretroviral Therapy

ARV Antiretroviral BB Beach Boys

BCC Behaviour Change Communication
CBO Community Based Organisation

DBS Dried Blood Spots
DIC Drop in Centre

EID Early Infant Diagnosis

ELISA Enzyme Linked Immunosorbent Assay

EMTCT Elimination of Mother to Child Transmission

EQAS External Quality Assurance Scheme

FGD Focus Group Discussion
FHB Family Health Bureau
FPA Family Planning Association

FSW Female Sex Worker
GAM Global AIDS Monitoring

GFATM Global Fund to Fight AIDS, TB and Malaria

HBV Hepatitis B Virus
HCV Hepatitis C Virus
HCW Health Care Worker

HIV Human Immunodeficiency Virus

HSS HIV Sentinel Surveillance
HTS HIV Testing Services

IBBS Integrated Biological and Behavioural Surveillance Survey

IDH Infectious Disease Hospital

IEC Information, Education and Communication

IPT Isoniazid Preventive Therapy

KP Key Population LFU Loss to Follow Up

LGBT Lesbian Gay Bisexual Transgender

M&E Monitoring and Evaluation
MLT Medical Laboratory Technologist

MoH Ministry of Health

MSM Males who have sex with males NAC National AIDS Committee

NBTS The National Blood Transfusion Service

NGO Non-Government Organisation
NRL National Reference Laboratory

NSACP National STD/AIDS Control Programme

NSP National Strategic Plan
OI Opportunistic Infection
OST Oral Substitution Treatment
PAC Provincial AIDS Committee

PE Peer Educator

PEP Post Exposure Prophylaxis

PHLT Public Health Laboratory Technician

PLHA People Living with HIV and AIDS

PLHIV People Living with HIV

PMTCT Prevention of Mother to Child Transmission

PR Principal Recipient
PreP Pre Exposure Prophylaxis
PWID People Who Inject Drugs
PWN Positive Women's Network
PWUD People Who Use Drugs

RDHS Regional Director of Health Services

RSA Rapid Situation Assessment

SD Strategic Direction

SIM Strategic Information Management
SLBFE Sri Lanka Bureau of Foreign Employment

SRH Sexual And Reproductive Health
STD Sexually Transmitted Disease
STI Sexually Transmitted Infection

TB Tuberculosis
TG Transgender

ToT Training of Trainers

VDRL Venereal Disease Research Laboratory test

VL Viral Load

WHO World Health Organisation

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Executive Summary

The National AIDS/STD Control Programme (NSACP) of Sri Lanka has led the process of developing the National Strategic Plan (NSP) for HIV/STI Response 2018-2022. The NSP will be the guiding document for Sri Lanka's response to HIV/AIDS and sexually transmitted infections (STIs) for the next five years (2018-2022). It has taken into consideration significant global and national contextual changes, and emergence of new evidence and strategies. In addition, it has taken into account the findings and recommendations provided by the external review of the NSP 2013-2017 conducted in September 2017.

The NSP for HIV/STI, 2018-2022 has been developed with technical guidance provided by a National Steering Committee and financial support from the Global Fund for AIDS, TB and Malaria (GFATM). During the process of development, inputs were taken from relevant stakeholders from DGHS, NSACP, officials from peripheral STD clinics, community based organizations (CBOs), nongovernment organizations (NGOs), networks of People Living with HIV (PLHIV) and representatives of key populations (KPs) through various meetings and discussion.

Eight guiding principles underpin the NSP 2018-2022 which are Strategies Based on Evidence; Human Rights and Stigma Reduction; Gender Based Approach; Meaningful Involvement of People Living with HIV; Community Involvement and Engagement; Coordinated Approach; Multi- Sectoral Partnerships; Quality Improvement and Quality Assurance and Broad Political Commitment.

The NSP has defined its vision, mission and goal for the next five years. The vision is to see a "Country free of new HIV infections, discrimination and AIDS related deaths". The mission is to "Prevent new HIV and sexually transmitted infections and provide comprehensive care and treatment services" and the goal is "Ending AIDS by 2025". Five objectives are identified for achieving this goal:

- I. To prevent new infections of HIV/STI among key populations, vulnerable populations and the general population
- II. To provide universal access to HIV/STI diagnosis and treatment, care and support services for those infected and affected by HIV/STI
- III. To strengthen strategic information systems and knowledge management for an evidence based response
- IV. To strengthen health systems at different levels and to ensure an effective multi-sector HIV/AIDS/STI response
- V. To provide a supportive environment for easy access and delivery of HIV prevention, diagnosis, treatment and care services for all

The objectives will be addressed through five strategic directions (SDs) that are similar to the earlier NSP 2013-2017, and each SD has its own sub-strategies. The five SDs are Prevention (for objective I), Diagnosis, Treatment and Care (for objective II), Strategic Information Management System (for objective III), Health System Strengthening (for objective IV) and Supportive Environment (for objective V). Based on the achievements and gaps/barriers identified for each SD over the five years of the last NSP, priority actions to be undertaken have been outlined.

Strategic Direction 1: Prevention

This has four sub-strategies which are Prevention of transmission of HIV/STI among KPs, Prevention of transmission of HIV/STI among vulnerable groups, Prevention of transmission of HIV/STI among the general population including young people (15-29 years) and Prevention of transmission through infected blood. This NSP has included prisoners as a KP in order to align with international practices and norms.

For KPs, several priority actions have been identified. It is important to continue the peer led approach for reaching KPs to provide HIV/AIDS/STI services. For improving reach the actions to be taken include using innovative technologies, such as through mobile phone messages and social media apps, expanding Drop In Centres (DICs) and utilising different approaches for delivering HIV testing services (HTS). Furthermore, enhancing capacity of CBOs by providing technical assistance, forming and strengthening networks of KPs including for PLHIV, reducing stigma and discrimination at service delivery sites and raising awareness and sensitivity regarding KPs among law enforcement will need to be undertaken. In addition, exploring the possibility of introducing pre exposure prophylaxis (PreP) by the NSACP among MSM and TG after reviewing evidence, piloting harm reduction services among PWUD/PWID and creating awareness among KPs of the availability of Post Exposure Prophylaxis (PEP) and means of access to PEP are also planned. For prisoners the priority actions are to increase HIV testing and make available to them all preventive measures that are available for the general population.

For the vulnerable groups, the following is planned: to explore new strategies for effective approaches to encourage voluntary HIV testing among returnee migrants including making available self-testing HIV kits using oral fluid; to continue HIV testing among UN peacekeeping forces on their return to Sri Lanka and to continue advocacy and training with police personnel, armed forces personnel, Sri Lanka Bureau of Foreign Employment and the tourist industry.

For the general population the priority actions are to ensure implementation of the Communication Strategy, increase awareness of HIV/STI among young people through multiple means including social media apps, conduct special awareness programmes on HIV/AIDS/STIs with students of schools and universities, mandate an up-to-date curriculum on age appropriate comprehensive sexual and reproductive health (SRH) including HIV for schools starting from grade 7 and to conduct a national SRH Survey among young people between 15-24 years.

For prevention of transmission through infected blood Sri Lanka will continue testing all blood and blood units for donation and ensure that all blood banks are registered with the National Blood Transfusion Service (NBTS).

Strategic Direction 2: Diagnosis, Treatment and Care

This has five sub-strategies which are HIV testing and counselling (including laboratory aspects of testing), Antiretroviral Therapy (ART) services, Quality and Coverage of STI services, Elimination of Mother to Child Transmission of HIV (EMTCT) and Congenital Syphilis and HIV TB services.

For HIV testing and counselling the priority actions are to decentralise HTS and move towards adopting the rapid test kit algorithm including in private laboratories, upgrade all laboratories to the required standard needed for quality services for HIV and STIs, introduce rapid test kits for HIV and syphilis for community based testing, expand testing to base hospitals, chest clinics, antenatal care

(ANC) clinics, expedite accreditation processes for NRL as it plays a pivotal role in HIV/STI testing services in Sri Lanka and ensure counselling training at all STD clinics.

For ART services the priority actions that need to be undertaken are to expand ART services to all districts, upgrade the Infectious Disease Hospital (IDH) to a Centre of Excellence in HIV care, closely follow up the treatment cascade to better understand and reduce Loss to Follow Up (LFU) and develop and install a good electronic information system that can give instant updates on the status of 90:90:90 at the ART centres as well as at the provincial level. It is also necessary to operationalise new equipment such as GeneXpert and BD FACS provided in districts and expand to other provinces as needed, strengthen capacity to perform pro-viral DNA estimations and HIV drug resistance in Sri Lanka.

For Quality and Coverage of STI services the actions required are to expand STD services to Base Hospital type A level, strengthen STI surveillance, strengthen antimicrobial sensitivity tests for cefixime for *Neisseria gonorrhoea* and to monitor waste management procedures in the laboratory and STD clinics and ensure that the guidelines are followed strictly.

For the Elimination of Mother to Child Transmission of HIV (EMTCT) and Congenital Syphilis the priority actions that need to be undertaken are to make available HTS at ANC clinics to increase coverage of HIV testing especially in difficult situations/settings, collect data from the private sector on all pregnant women testing and delivering in that sector, strengthen Early Infant Diagnosis using DNA PCR in the country and to enhance the process target for EMTCT so that the validation process can be initiated.

For HIV TB services the priority actions include providing HTS at all Chest clinics, training the nurses at the Chest clinics to provide pre-test and post-test counselling and training chest physicians at the Chest clinics in the management of HIV TB coinfection. In addition, actions will need to be undertaken to strengthen the process for cross referral between Chest clinics and STD clinics and improve documentation of these referrals and outcomes. To allow a single point for dispensing Isoniazid Preventive Therapy (IPT) and all other drugs for PLHIV (antiretroviral drugs, STI drugs, drugs for opportunistic infections, Co-trimoxazole Preventive Therapy) it is proposed that IPT be provided from STD/ART sites rather than from Chest clinics. For better diagnosis and management of HIV-TB co-infection all ART sites need to be linked to the 10 sites of the TB programme where GeneXpert is available for ruling out TB at baseline and as required.

Strategic Direction 3: Strategic Information Management System
This has four sub-strategies which are HIV and STI Surveillance, Programme Monitoring and Routine reporting, HIV/AIDS/STI Research and Knowledge Management.

For HIV and STI Surveillance the priority actions are to ensure regular HIV sentinel surveillance (HSS) (every two years) among KPs with strengthening of the system and IBBS every 5-6 years, prioritise surveillance among MSM with wider coverage by location, by sub-typologies and employ innovative methods for recruitment, further strengthen STI surveillance and ensure data is entered electronically and reported regularly, strengthen mortality surveillance, establish drug resistance surveillance for HIV, establish a HIV case based surveillance system and integrate the entire HIV case tracking system from screening to viral suppression into the new electronic database that is being developed.

For Programme Monitoring and Routine reporting the actions needed are to provide regular feedback from the SIM Unit to ART centres regarding LFU and any other relevant findings after analysing quarterly ART returns and Excel databases, analyse programme data on a regular basis, fast track the electronic system for data management through an integrated web-based data system and enhance capacity of NSACP and facility staff to conduct regular analysis of existing data.

For HIV/AIDS/STI Research and Knowledge Management the actions needed are to create an environment that supports research involving relevant research organisations and universities and revitalise the research sub-committee of the National AIDS Committee (NAC), plan special studies and surveys to answer key questions, engage KPs and CBOs in research studies and surveys and develop an overarching Knowledge Management Strategy for NSACP.

Strategic Direction 4: Health System Strengthening

Under this SD several actions have been outlined related to improving infrastructure, human resource deployment and training for delivering services, activating high level committees and improving procurement supply chain mechanisms. Thus improvement of the infrastructure of different facilities ranging from the central STD clinic, NRL to peripheral clinics, filling of vacancies for personnel at all levels and developing an annual training plan taking into account activities from all sectors and developing human resource capacity across the HIV sector for an enhanced response are required. Activation of the National AIDS Council so that it meets at least once a year and that of NAC so that it meets at least once in six months, and the sub-committees of NAC is needed to stimulate discussions and advocate with multiple sectors in guiding the national HIV response. Activation of the Provincial AIDS Committees and formation of District AIDS Committees are also required to enable effective decentralisation. It is also needed to engage different stakeholders through fora to coordinate, review and discuss the HIV response across other ministries and departments and with civil society groups. In order to meet the demands of the increased activities for the goal of Ending AIDS by 2025, the organogram of NSACP needs revision with creation of new units with adequate human resources including administrative support and data management staff. The MoH needs to devise a model of KP intervention to be provided by the government. Action is needed to ensure smooth supply chain management for ARVs and laboratory reagents and to include all relevant agencies in the appropriate committees for this purpose.

Strategic Direction 5: Supportive Environment

Under this SD the actions required are to ensure all training modules address issues on human rights, stigma and discrimination, issue a specific guideline to the education sector for protection of human rights of children affected by and infected with HIV and enhance awareness of laws and policies that promote human rights of all people including of KPs and PLHIV, conduct advocacy activities for an enabling environment for KPs and PLHIV in order to reduce stigma and discrimination and address violence against KPs, develop a policy for ethical reporting on HIV/AIDS/STI by the media and advocate with the media on responsible reporting on HIV/AIDS/STI. It is also necessary to enhance training of law enforcement officers to sensitise them on human rights and fundamental freedom for all which is essential to build a supportive environment, reconstitute the legal and ethical subcommittee of the NAC so that it can advocate with policy makers to strengthen the supportive environment for KPs and PLHIV, revisit and repeal laws that criminalise KPs specifically the vagrancy act and 365a and amend the brothel ordinance. Action also needs to be undertaken to build the capacity of PLHIV networks so that they can participate more

effectively in HIV prevention, care and treatment activities and consider building a half way home for PLHIV.

In addition to the activities outlined above, the NSP includes an indicator framework linked to each strategic direction which will allow measuring progress against the activities. The indicator framework provides a list of impact, outcome and output indicators to enable tracking of the national response to HIV/STI and AIDS.

A costed implementation plan for 2018-2022 accompanies the NSP for HIV/STI response 2018-2022. The plan envisages an expenditure of LKR 9,166,133,797.18 (USD 59,909,371.22) over the five years of the period of the NSP.

1. Introduction

1.1. BACKGROUND

The National STD/AIDS Control Programme (NSACP) within the Ministry of Health (MoH) is the government entity with direct responsibility to lead Sri Lanka's National Response for sexually transmitted infections (STI) and HIV. The NSACP has been guided by the National Strategic Plan (NSP) 2013-2017 [1] for the last five years. The NSP for HIV/STI Response 2018-2022 will be the guiding document for Sri Lanka's response for the next five years by providing an indicator framework to follow-up on progress against set targets. This will facilitate future responses from both government and non-government sectors by focusing on common goals and a shared commitment to the country's goal of Ending AIDS in 2025.

The NSP 2018-2022 has taken into consideration significant global and national contextual changes, and emergence of new evidence and strategies, which have significant bearing on the HIV response. It is based on the findings and recommendations provided by the external review conducted in September 2017. It is also aligned with the global targets of UNAIDS/WHO for achieving 90-90-90 [2] and nationally with the Road Map Towards Ending AIDS in Sri Lanka [3]. The objectives and strategies included in this plan are formulated to guide implementation of services to prevent new HIV/STI infections, enhance HIV/STI diagnosis, provide universal access to treatment, care and support services for people infected and affected by HIV, continue and strengthen STI services, strengthen the coordination mechanisms and management capacity at different levels to ensure an effective multi-sector HIV/AIDS and STI response, strengthen the strategic information system including knowledge management for an evidence-based response and for provision of a supportive environment enabling access and delivery of all the required services.

1.2. THE PROCESS

The process of developing the NSP for HIV/STI, 2018-2022 was led by the NSACP with financial support from the Global Fund for AIDS, TB and Malaria (GFATM) and two consultants, an international and a national (for costing), were engaged by NSACP for this purpose. Technical guidance was provided by a National Steering Committee (annexe 1) formed by NSACP. Several meetings were held for inputs on the future NSP with relevant staff of NSACP and officials from peripheral clinics, other government sector representatives, non-government organisations (NGOs), community based organisations (CBOs) and Key Populations (KPs). Further discussions were held with key stakeholders from DGHS, NSACP, networks of People Living with HIV (PLHIV) and KPs. In addition, feedback was taken for this purpose from these various stakeholders during the external review process of the NSP 2013-2017. Finally, a presentation was made on the draft NSP for obtaining feedback and consensus.

2. Epidemic Situation, Response and Challenges

2.1. EPIDEMIC SITUATION

Sri Lanka continues to be a low prevalence country for HIV although the numbers of HIV positive cases have been slowly rising over the years [4]. The estimated numbers of adults living with HIV as of 2016 is 4000 and new infections were less than 1000 [4]. Sri Lanka has identified female sex workers (FSW), males having sex with males (MSM), transgender (TG) persons, beach boys (BBs), people who use drugs (PWUD) and people who inject drugs (PWID) as key populations (KPs). For this NSP, to align with international practices, prisoners have also been considered as a KP. Armed forces and police personnel, returnee migrants and tourist industry workers, are considered as vulnerable population groups. The general population and more specifically, young people (15-29 years) are also taken into consideration in the HIV/STI response.

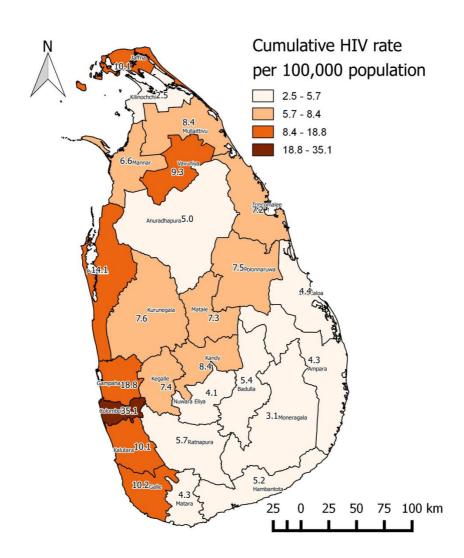
The data on HIV prevalence is available from HIV sentinel surveys (HSS) of which 22 rounds have been conducted till 2016. More recently, in 2014, an Integrated Biological and Behavioural Surveillance System (IBBS) [5] was conducted. The overall prevalence of HIV among KPs is <1% but among MSM prevalence is at 1.5% [4]. Moreover, among the reported cases, the numbers of MSM have also slowly been rising with close to half of those positive reporting male to male sex [4]. The other population group where HIV has been consistently documented are returnee migrant workers and where the number of cases detected has been rising over the years [4]. In all other population groups, only a few cases have been detected. Active syphilis rates in all these population groups have been low (<3%) and it has been highest among MSM with 1.8% positive in Colombo. A size estimation of KPs was conducted in 2013 [6] and the estimated numbers of KPs are shown in Table 1. A fresh estimation exercise will be conducted in 2017 and if significant differences are observed it will provide the basis for evidence driven adjustments in programme coverage and design.

Table 1. Estimated numbers of KPs in 2013

Key population groups	Median estimates in 2013		
Female Sex Workers	15935		
Males who have Sex with Males	8554		
People Who Inject Drugs	516		
People Who Use Drugs	19542		
Beach Boys	1486		

Geographically the highest numbers of KPs (except for BBs and prisoners) [6] and the highest numbers of HIV positive cases are in Colombo. When considering cumulative rates of infection from 1987-2016, Colombo had the highest rate of 35.1 per 100,000 population and Gampaha, Galle, Kalutara, Puttalam and Vavuniya districts had higher prevalence rates than other districts (Fig. 1) [4].

Fig. 1. Cumulative rate of HIV cases reported 1987-2016



Prisoners have been tested for HIV since 2012 through 30 mobile clinics visiting prisons each month. The number of inmates undergoing HIV testing in 2014, 2015 and 2016 were 13,803, 11,382 and 12,776 respectively [4, 7, 8] and the sero-positivity rate was between 0.03 and 0.05%.

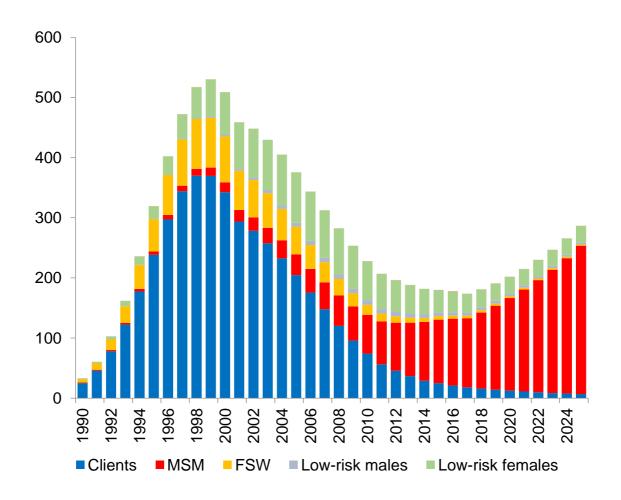
STIs have been diagnosed using an aetiological approach and the 31 STD clinics spread across the country have been providing STI prevention and treatment services for many decades [9]. It is these STD clinics that have provided the platform for HIV services in Sri Lanka by integrating HIV into its mandate. Over the years bacterial STIs have declined but viral STIs have increased and in 2016, 9,129 new STI episodes were reported to the NSACP of which 31% were due to genital herpes infection [4].

Information on risk behaviours among KPs was obtained through IBBS first conducted in 2014 [5]. This showed that condom use at last sex with clients in FSW was high at 93%. In Colombo and in Galle using condom during last sex with non-paying partners was also high at 90% and 88% respectively. Among MSM 57.9% used a condom during last anal sex with a male partner and 50.5% of BBs said they used a condom with their last paying partner. Sterile injecting equipment in the last

year was used while injecting drugs by just over half (50.7%) of PWID. Overlapping risks with a few FSW/MSM/BBs using drugs, PWID having unprotected sex, MSM being married were also documented.

Data from different sources is received by the NSACP where it is triangulated and published in the Annual Report of the NSACP. Recently an exercise has been conducted to model the HIV epidemic using the AIDS Epidemic Model (AEM). Preliminary data suggest that the main population group that is likely to contribute to the highest number of infections is MSM, unless this group is adequately addressed by HIV prevention programmes. (Fig 2).

Fig. 2. Estimated annual New HIV Infections: by Risk Population, 1990-2025



2.2. RESPONSE

Sri Lanka has made commendable strides in the last five years in its national response to HIV/AIDS/STI. Programmes on HIV/STI prevention especially for the general population, are being funded primarily by the Government of Sri Lanka. The other major source of funds is the Global Fund for AIDS, TB and Malaria (GFATM) who in the last five years supported the introduction of the peer led model for reaching out to KPs through its Principal Recipient (PR) Family Planning Association (FPA) and its sub-recipients and sub-sub recipients of NGOs and CBOs. For all KPs a uniform package

of services is provided including awareness raising and knowledge of HIV transmission and prevention, condom demonstration and distribution and escorted referrals for HIV/STI testing at STD clinics. KPs through the CBOs and NGOs have been actively engaged in providing services without whom it would not have been possible to carry out the peer led interventions. In addition, GFATM also supported provision of antiretroviral therapy (ART) to all eligible PLHIV till the end of 2015 when the government took over the procurement of antiretroviral (ARV) drugs.

In prisons so far the HIV prevention activities that have been undertaken include advocacy, skill building sessions for welfare officers and medical staff on sexual health promotion and training of prison inmates as PEs who take a leadership role to prevent HIV/STIs with Information, Education and Communication (IEC). HIV testing services (HTS) are provided using rapid testing through mobile clinics.

Diagnosis, management and treatment of HIV and STI is carried out primarily through the 31 STD clinics across the different provinces. The "treat all" policy of WHO [10] was adopted in 2016 and the government provides free ART to all PLHIV along with diagnosis and management of opportunistic infections (OIs). Prevention of Mother to Child Transmission (PMTCT) of HIV has also been a success story [4] and Sri Lanka is aiming towards elimination of mother to child transmission (EMTCT) and congenital syphilis. The progress of EMTCT is on track with the annual rate of mother to child transmission (MTCT) of HIV at 0.6 per 100,000 live births and that of congenital syphilis at 2.5 per 100,000 live births [4]. Since 2004 there are no reported HIV cases following blood transfusions [4].

Other vulnerable population groups such as migrants, armed forces, police personnel and tourist industry workers receive training and education regarding transmission and prevention of HIV and STIs as well as HTS. Efforts at providing some of the same services to general population youth have also been undertaken.

Several supportive policies and guidelines have been developed for different sectors in the government for creating awareness and reducing stigma and discrimination. Furthermore, a Communication Strategy has been developed that will be launched during the World AIDS Day 2017. This is designed to enhance awareness and spread information using different means to a wide audience.

2.3. CHALLENGES

An external review of the NSP 2013-2017 conducted in September 2017 revealed several challenges. Accessibility to KPs is limited as they are hidden, marginalised, and stigmatized and there is also limited understanding of their social networks. Furthermore, the legal, social and cultural environment is not conducive to making KPs more accessible. A lack of awareness and sensitivities regarding their special needs is prevalent and fear of law enforcement and negative societal attitudes drives KPs underground. Data from the PE led intervention programme of FPA showed that up to September 2017 only 10.5%, 20.1% and 22.6% of the estimated numbers of FSW, MSM/TG and PWID respectively were reached with the package of preventive services for HIV/STIs. Among

the vulnerable population groups, the migrants among whom the number of cases have been steadily rising, are difficult to reach for HIV testing once they return home.

Achieving the first 90 of the 90-90-90 targets has been a challenge for Sri Lanka as only 53% of the estimated number of PLHIV have been tested [4]. Among the KPs, variable percentages of each KP had been tested for HIV in the last year and knew their result depending on the city that they were sampled from; 58.5-79.3% of FSW, 9.8-71.6% of MSM, 45.8% of BBs and only 8.3% of PWID had been tested and knew the result with highest percentages in Colombo (for FSW and MSM) [5]. HIV testing must become accessible to more people and relying mainly on tests delivered through STD clinics which are technically demanding and require sending samples to the National Reference Laboratory (NRL) in Colombo for confirmation of a positive result is not ideal. There is a need for decentralization and simplification of testing services.

For Sri Lanka to achieve the goal of Ending AIDS by 2025, intensification of the programme will be required in all its different aspects and some special measures will have to be undertaken. Establishing a strong electronic database will empower NSACP to triangulate data from the many diverse sources and enable it to understand gaps and to use the data to act on those gaps. It is essential to have a real time monitoring and alert response system that includes KP intervention programmes where testing is also carried out. The structure of the NSACP will need to be revisited so that the number of units and qualified and technical personnel at the NSACP are increased and capacitated. It is important to mobilise all the high level committees including the National AIDS Council and obtain support from His Excellency the President. Advocacy efforts with media and policy makers need to be enhanced as well as efforts at engaging high level officials to further reduce stigma and discrimination. It needs to be understood that it is the responsibility of all people from all sectors – government, NGOs, CBOs, KPs, PLHIV - to work together in a coordinated way to ensure an effective response to HIV/AIDS/STI.

3. National Strategic Plan 2018-2022

3.1 GUIDING PRINCIPLES

Several guiding principles underpin the NSP 2018-2022. The principles underlying the strategy are intended to provide a framework through which HIV/STI prevention, treatment, care and support programs will be undertaken. They apply to each strategic direction, and affect national planning and service delivery equally, as cross-cutting concerns.

The principles are:

Strategies based on evidence

Evidence is crucial in guiding the response to HIV/AIDS and STI, prioritization of strategies and approaches, as well as monitoring of the program. In order to achieve "Ending AIDS by 2025" in Sri Lanka, it is imperative that all funding, interventions and activities are aligned with "90-90-90" targets through cost efficient tested models.

2. Human rights and stigma reduction

The Sri Lankan constitution includes the principles of universal human rights and dignity of all Sri Lankans, including their sexual and reproductive rights. The adverse impacts of stigma and discrimination are among the key barriers to an effective response to HIV and AIDS. The National HIV/AIDS Policy emphasises commitment to stigma reduction. Human rights approaches reduce the vulnerabilities to the HIV/AIDS epidemic, and include various rights such as access to health care, information, confidentiality and privacy, legal rights and gender equity.

3. Gender based approach

Gender equity is a cornerstone for effective HIV responses as inequity places women and sexual minorities at higher vulnerability. Zero stigma, discrimination and violence based on gender identity is an essential aspect of a robust HIV response.

4. Meaningful involvement of people living with HIV

People living with HIV should be meaningfully engaged in the planning, designing, implementation and monitoring of the HIV response. The active involvement PLHIV and their organizations in increasing testing and case management is an essential aspect of a robust HIV response. Community involvement also creates a sense of ownership and responsibility for HIV programmes and initiatives.

5. Community involvement and engagement

Active participation of CBOs and networks of KPs in the overall HIV response will complement the efforts of the public health sector. The peer led model that engages KPs is crucial and organizations of KPs is key to a robust HIV response. Engagement of representatives from civil society in decision making bodies of the HIV response and platforms will enable coordination and enhance ownership and responsibility.

6. Coordinated approach

Harmonization of efforts across programmes and between all partners including government and non-government sectors, implementing agencies, donors and technical agencies is fundamental to maximizing the success of this strategy.

7. Multi- sectoral partnerships

As HIV/STI is not just a health issue, engagement of different sectors beyond health is necessary for ensuring a holistic and multi-dimensional response. Partnerships between the government and key government ministries, civil society and the private sector is essential. Effective coordination and integration between different departments and relevant service providers is also required for management of co-infections such as TB, hepatitis, etc.

8. Quality improvement and quality assurance

Quality programs are essential for generating impact as well as creating and ensuring high demand for services. Quality assurance is a continuous process and measurement of quality is therefore of utmost importance.

9. Broad political commitment

The goal of Ending AIDS by 2025, will require strong leadership, commitment from all levels and concrete actions.

3.2 VISION, MISSION, GOAL AND OBJECTIVES

Vision: Country free of new HIV infections, discrimination and AIDS related deaths

Mission: Prevent new HIV and sexually transmitted infections and provide comprehensive care and treatment services

Goal: Ending AIDS by 2025

Objectives: Five objectives will help achieve the goal of Ending AIDS by 2025. These are:

- I. To prevent new infections of HIV/STI among key populations, vulnerable populations and the general population
- II. To provide universal access to HIV/STI diagnosis and treatment, care and support services for those infected and affected by HIV/STI
- III. To strengthen strategic information systems and knowledge management for an evidence based response
- IV. To strengthen health systems at different levels and to ensure an effective multi-sector HIV/AIDS/STI response
- V. To provide a supportive environment for easy access and delivery of HIV prevention, diagnosis, treatment and care services for all

3.3 STRATEGY FRAMEWORK

3.3.1 Strategic Directions

In order to achieve the goal and its objectives five strategic directions (SDs) are identified similar to the earlier NSP 2013-2017, and aligned to each of the five objectives. Each SD has its own substrategies and is described with achievements, gaps and priority actions to be undertaken. These are based on the recent external review of the NSP 2013-2017 and the further discussions held specifically on the development of the NSP 2018-2022. The SDs and their sub-strategies against each objective are shown in Table 2.

Table 2: Objectives and Strategic Directions with sub-strategies

Objectives	Strategic Directions (SDs)	Sub-strategies of SDs		
I. To prevent new	SD 1. Prevention	SD1.1. Prevention of		
infections of HIV/STI among key		transmission of HIV/STI among		
populations, vulnerable		KPs – the KPs include FSW,		
populations and the general		MSM, TG, BBs, PWUD/PWID		
population		and prisoners		
		SD 1.2. Prevention of		
		transmission of HIV/STI among		
		vulnerable groups - the groups		
		include returnee migrant		
		workers, armed forces and		
		police personnel, tourist		
		industry workers		
		SD 1.3. Prevention of		
		transmission of HIV/STI among		
		general population including		
		young people		
		SD 1.4. Prevention of		
		transmission through infected		
		blood		
II. To provide universal	SD 2. Diagnosis, Treatment	SD 2.1. HIV testing and		
access to HIV/STI diagnosis and	and Care	counselling (including		
treatment, care and support		laboratory aspects of testing)		
services for those infected and		SD 2.2. ART services		
affected by HIV/STI		SD 2.3. Quality and Coverage		
		of STI services		
		SD 2.4. Elimination of Mother		
		to Child Transmission of HIV		
		(EMTCT) and Congenital		
		Syphilis		
		SD 2.5. HIV TB services		
III. To strengthen strategic	SD 3. Strategic Information	3.1. HIV and STI Surveillance		
information systems and	Management System (SIM)			

Objectives	Strategic Directions (SDs)	Sub-strategies of SDs		
knowledge management for an		3.2. Programme Monitoring		
evidence based response		and Routine Reporting		
		3.3. HIV/AIDS/STI Research		
		3.4. Knowledge Management		
IV. To strengthen health	SD 4. Health Systems			
systems at different levels and to	Strengthening (HSS)			
ensure an effective multi-sector				
HIV/AIDS/STI response				
V. To provide a supportive	SD 5. Supportive Environment			
environment for easy access and				
delivery of HIV prevention,				
diagnosis, treatment and care				
services for all				

Each SD is described below:

STRATEGIC DIRECTION (SD)1: PREVENTION

There are four sub-strategies under Prevention:

- SD1.1. Prevention of transmission of HIV/STI among KPs the KPs include FSW, MSM, TG, BBs, PWUD/PWID and prisoners
- SD 1.2. Prevention of transmission of HIV/STI among vulnerable groups the groups include returnee migrant workers, prisoners, armed forces and police personnel, tourist industry workers
- SD 1.3. Prevention of transmission of HIV/STI among general population including young people
- SD 1.4. Prevention of transmission through infected blood

SD1.1. Prevention of transmission of HIV/STI among KPs:

For KPs, the major achievement in the last five years has been the implementation of the PE model for providing HIV/STI prevention services.

For FSW, MSM, TG, BBs, PWUD/PWID the services have expanded over the years reaching more KPs in more districts although there are still many who remain hidden and unreachable. More KPs are aware of HIV/STIs and more access condoms although access to lubricants has been less easy. More KPs are also accessing HIV/STI testing services and the STD clinics have become more sensitive to their needs. The Drop In Centres (DICs) for the KPs in Colombo are much liked and used, especially the availability of community based HTS at these sites which the KPs want expanded. The major challenges/barriers identified were broadly related to three issues - lack of an enabling environment; lack of capacity; and the method of delivery of HIV/STI testing using escorted visits. An enabling environment is compromised because of the legal, social and cultural barriers that exist and pose a major constraint to reaching KPs and providing HIV/STI prevention services. Capacity building for KP services is an ongoing challenge with rapid turnover of PEs. Moreover, a system needs to be designed that will allow KPs and/or CBOs to be engaged to provide services through the government mechanism. The present HTS approach using escorted visits to STD clinics which require two visits is

not liked by PEs and KPs as it is time consuming and can require long travel hours. It is therefore important to enhance access to KPs by reducing stigma and discrimination, strengthening the PE model, expanding DICs, enhancing capacity of CBOs and KP networks and incorporating novel methods of reaching hidden people. HIV testing among KPs also needs to be increased by making available a range of testing options. Post Exposure Prophylaxis (PEP) is available in the country following a risk calculation which needs revisiting; KPs need to be made aware of this so that they can access it when needed. The possibility of introducing pre-exposure prophylaxis (PreP) needs to be explored by the NSACP among MSM and TG after reviewing evidence. In addition, harm reduction among PWUD/PWID needs piloting.

Advocacy efforts in prisons for both prisoners and prison staff including the medical staff on sexual health promotion and HIV/STI prevention is an ongoing activity but needs strengthening with more training events, better and modern equipment and up-to-date information. Although HIV testing is conducted in prisons the numbers of HIV test kits provided are inadequate. Risky behaviours through unsafe sex and drug consumption is prevalent in prisons but condoms are not available and the HIV and drug prevention training programmes are not co-ordinated. Therefore, more HIV test kits are required with more frequent testing and access to all preventive measures that are available for the general population.

Priority actions that need to be undertaken include:

- Continue peer led approach for reaching KPs, use innovative technologies for improving reach and expand DICs
- Enhance capacity of CBOs by providing technical assistance
- Form and strengthen networks of KPs including for PLHIV
- Increase testing among KPs using different approaches including enhancing adoption of community based testing, decentralisation of testing using rapid test kits, mobile clinics, introduction of oral fluid tests and self-tests
- Reduce stigma and discrimination at service delivery sites and raise awareness and sensitivity regarding KPs among law enforcement
- Make special efforts to reach hidden MSM by better understanding their networks and ways to reach out by conducting special studies
- Introduce other means of reaching KPs such as through mobile phone messages, social media apps
- Explore the possibility of introducing PreP by the NSACP among MSM and TG after reviewing evidence
- Pilot harm reduction services among PWUD/PWID
- Make KPs aware of the availability of PEP so that they can access PEP when needed
- Increase HIV testing among prisoners and make available all preventive measures in prisons that are available for the general population

SD 1.2. Prevention of transmission of HIV/STI among vulnerable groups

Migrants returning home from abroad are considered vulnerable as the numbers detected with HIV on returning home have been rising over the years. Pre-departure training on HIV/STI prevention are provided to migrants through the Sri Lanka Bureau of Foreign Employment (SLBFE) but the

training curriculum has not been evaluated since revision in 2016. Moreover, HTS conducted prior to departure needs to conform to national guidelines and services need to be migrant friendly. The information on testing guidelines and data from tests conducted by the laboratories need to be provided to NSACP. There is no structured service offered to migrants when they return home; HTS along with general health services may be offered through STD clinics and explored through the SLBFE and relevant CBOs as a holistic health package. These services may include spouses and partners as well. Therefore, trainings should be strengthened and new strategies explored for effective approaches to encourage voluntary testing for returning migrants and their spouse/partners. Mass awareness campaigns that will be conducted for raising awareness regarding vulnerabilities of migrants will need to be designed such that they do not further stigmatise and discriminate against returnee migrants.

Armed Forces and police personnel receive training on HIV/STI prevention, HIV tests are provided and conducted by the armed forces medical team and low HIV prevalence has been noted. Support from NSACP for HIV for Armed Forces has declined over the years. It is recommended to continue advocacy and provide condom vending machines. A survey may be conducted among different categories of armed forces to assess extent of vulnerability and HIV/STI prevalence that will further guide future programmes. However, the UN peacekeepers who travel to countries with higher HIV prevalence require continued efforts for HIV prevention including HTS. Police require continued support for ensuring an enabling environment for KPs and for HIV prevention efforts to be carried out smoothly.

Intervention with tourist industry workers is new. A training curriculum has been developed based on a HIV prevention needs assessment among new recruits attending the tourist training institutes of the Sri Lanka Tourism Development Authority. Data from another small scale preventive needs assessment among tourist guides is presently being analysed.

The priority actions that need to be undertaken include:

- Explore new strategies for effective approaches to encourage voluntary HIV testing among returnee migrants including making available self-testing HIV kits
- Ensure all testing data from aspiring migrants from laboratories that conduct tests are provided to NSACP
- Continue HIV testing among UN peacekeeping forces on their return to Sri Lanka and report data to NSACP so that it is included in the national database
- Continue advocacy and training with police personnel, armed forces personnel, SFLBE, tourist industry

SD 1.3. Prevention of transmission of HIV among general population including young people (15-29 vears)

A Communication Strategy will soon be launched which is designed to enhance awareness on HIV/AIDS/STI among the general population using different means. Knowledge on HIV/AIDS among young people in Sri Lanka as measured by the Demographic Health Survey of 2016 [11] among married girls between 15-24 years was low (24%). Young people are not reached effectively through schools and other outlets for youth. The NSACP needs to consider restarting special training sessions to raise awareness among students of schools and universities on HIV/STIs. Young people between

16-28 years, who dropped out of school, are provided information and education on HIV/AIDS and STIs and among whom HIV testing is encouraged and conducted through the Youth Corp. However, for more effective outcomes, more trainers and refresher trainings are required, more HIV test kits are needed and students showing promise may be used as social mobilisers. Reaching out to the larger community of young people requires use of other means such as social media apps. The positive experience of the Youth Corp needs to be used as a model to expand to other institutions and agencies. An up-to-date curriculum on age appropriate comprehensive sexual and reproductive health (SRH) needs to be mandated for school children starting from grade 7.

The priority actions that need to be undertaken include:

- Ensure implementation of the Communication Strategy
- Increase awareness of HIV/STI among young people through multiple means including social media apps
- Conduct special awareness programmes on HIV/AIDS/STIs with students of schools and universities
- Mandate an up-to-date curriculum on age appropriate comprehensive SRH including HIV for schools starting from grade 7
- Conduct a national SRH Survey among young people between 15-24 years to better understand their current sexual behaviours, drug taking behaviours, gender based violence and knowledge of HIV/STI transmission and prevention

SD 1.4. Prevention of transmission through infected blood

The National Blood Transfusion Service (NBTS) is the sole supplier of blood and blood products to all state hospitals and some private hospitals registered with them for supply of blood and blood products. All blood donations are from volunteer and non-remunerated donors and all donor units are tested for HIV, syphilis, Hepatitis B and C using standard tests with an External Quality Assurance System (EQAS) in place. The rate of confirmed HIV seropositivity in blood donors is low. However, not all the blood banks of private hospitals in Sri Lanka are registered with the NBTS so that information from these blood banks are not available. These blood banks must be registered which will provide a complete picture of blood safety in the country.

The priority actions that need to be undertaken include:

- Ensure that all blood banks are registered with the NBTS
- Continue testing all blood and blood units for donation throughout Sri Lanka

STRATEGIC DIRECTION 2 (SD2): DIAGNOSIS, TREATMENT AND CARE

Five sub-strategies have been identified:

- 2.1 HIV testing and counselling (including laboratory aspects of testing)
- 2.2 ART services
- 2.3 Quality and Coverage of STI services
- 2.4 Elimination of Mother to Child Transmission of HIV (EMTCT) and Congenital Syphilis
- 2.5 HIV TB services

SD 2.1. HIV Testing and Counselling (including laboratory aspects of testing):

The National HIV testing guideline for 2016 [12] is currently under further revision. HIV screening tests are routinely offered to all persons seeking care in the government STD clinics (free of charge). Community level HIV testing (using rapid tests) is being done for PWUD, MSM and FSW and is also promoted for other groups under special circumstances, e.g. for prisoners, armed forces personnel, factory workers, during special occasions such as World AIDS Day, etc. Confirmation of HIV screening tests (fourth generation ELISA and rapid tests) is done at the NRL by Western Blot. The present algorithm of testing that is being used leads to a protracted turnaround time to confirmation of HIV positives. Testing results take one week or more and at least two visits are required for a confirmed HIV result. This can hinder reaching the testing target of at least 90% by 2020. Therefore, HIV testing needs to be decentralised using rapid test kits at all sites. The rapid testing kits provided for community based testing does not include syphilis which is a missed opportunity especially for those KPs who want to be tested for syphilis but are unwilling to attend STD clinics.

The NRL carries out all testing for HIV and STIs and it is working towards accreditation of the laboratory. However, many peripheral laboratories in the peripheral STD clinics are not up to the required standard and the quality of testing in some of these laboratories is substandard. They have inadequate facilities in terms of infrastructure, equipment and personnel. Upgradation of all laboratories to the required standard is essential.

Counselling training is provided to medical officers and nurses of the STD clinics but this needs strengthening, it needs to be regular and to be decentralised.

The priority actions that need to be undertaken include:

- Decentralise HIV testing and move towards adopting the rapid test kit algorithm especially in situations and places where access to STD clinics is difficult
- Ensure the algorithm is provided to private laboratories for adoption of rapid test kits for diagnosis
- Upgrade all STD laboratories to the required standard needed for quality services for HIV and STIs
- Introduce rapid test kits for HIV and syphilis for community based testing
- Expand testing to base hospitals, chest clinics, ANC clinics
- Expedite accreditation processes for NRL as it plays a pivotal role in HIV/STI testing services in Sri Lanka
- Ensure counselling training at all STD clinics

SD 2.2. ART Services

There are 21 ART facilities located in 17 districts and the remaining districts are covered by nearby ART centres. The Government of Sri Lanka procures all ARV drugs which are provided free of cost to patients. This shows strong commitment and ownership of the programme and will provide long term sustainability. The Infectious Disease Hospital (IDH) has a standalone ART centre and has excellent facilities for care and hospitalization of complicated cases. In 2016 of those who needed ART, only 27% were covered and only 21% of all PLHIV were virally suppressed. In 2016 only 72% among those diagnosed were initiated in to ART despite adoption of the "treat all" policy. There is a need to examine and understand reasons for Loss to Follow Up (LFU) by using the detailed

information of each patient available at NSACP. A mechanism is needed for tracking LFU by examining the treatment cascade at different levels to gain a better insight into the process and to prevent LFU. M&E tools at the ART/STD centres are not computerised and revised tools developed although simpler, are all paper based. In order to be more efficient it is important to develop and install an electronic information system that can give instant updates on the status of 90:90:90 at the ART centres as well as at provincial level. There is no drug resistance surveillance being conducted in Sri Lanka and samples are sent to India in cases when drug resistance is suspected.

Equipment for CD4 and viral load (VL) measurement including BD FACS and GeneXpert have been provided to some STD clinics but these have not been commissioned yet. The reasons are related to lack of provision of reagents and kits.

The priority actions that need to be undertaken include:

- Expand ART services to all districts
- Consider upgrading the IDH to a Centre of Excellence in HIV care
- Closely follow up the treatment cascade to better understand and reduce LFU
- Develop and install an electronic information system that can give instant updates on the status of 90:90:90 at the ART centres as well as at the provincial level
- Operationalise new equipment such as GeneXpert and BD FACS for VL and CD4 count measurements provided in districts and expand to other provinces as needed
- Strengthen capacity to perform pro-viral DNA estimations and HIV drug resistance in Sri Lanka to ensure sustainability

SD 2.3. Quality and Coverage of STI services

The attendance at STD clinics island-wide has been high and data show that in 2013, 2014, 2015 and 2016 the total number of attendance was 202,892, 220,159, 220,911 and 198,592 respectively. In order to expand services further and reach out to people in more remote areas it is important to expand STD clinics to Base Hospitals Type A level.

For STIs, diagnosis and management is aetiological. Over the years bacterial STIs have shown a gradual decline while an increasing trend has been observed among viral STIs such as genital herpes and genital warts [4]. In 2016, 9,129 new infection episodes were reported to the NSACP of which 31% were due to genital herpes infection [4]. The NRL performs all the STI tests but additionally performs antimicrobial susceptibility testing for gonococci. However, cefixime antimicrobial susceptibility profiles for *Neisseria gonorrhoea* are still being strengthened. Syphilis testing increased significantly over the last five years among the different population groups. Standardization of chlamydia and herpes simplex PCRs is underway. EQAS for syphilis serology (USA) and gonococcal antimicrobial resistance (Australia) is carried out. However, several laboratories in peripheral STD clinics are not adequately capacitated so that STI testing is not up to the required standard for the same reasons as discussed for HIV testing. Upgradation of all laboratories to the required standard is essential. Strengthening of STI surveillance is required and a special STI surveillance study among KPs in Colombo may be considered.

Although a waste management guideline has been developed it is not followed strictly in the STD clinics and the laboratories.

The priority actions that need to be undertaken include:

- Expand STD services to Base Hospital type A level
- Strengthen STI surveillance
- Strengthen antimicrobial sensitivity tests for cefixime for *Neisseria gonorrhoea*
- Monitor waste management procedures in the laboratory and STD clinics and ensure that the guidelines are followed strictly

SD 2.4. Elimination of Mother to Child Transmission of HIV (EMTCT) and Congenital Syphilis

Sri Lanka has a very low prevalence of HIV among pregnant women (0.01%) and is aiming for the EMTCT. Among the estimated number of pregnant women in 2016, 92% were registered for antenatal care (ANC) in government hospitals while the remaining 8% were in the private sector. According to the data on live births in 2016 available at Family Health Bureau (FHB), 99.9% antenatal women had a VDRL test done and 89.6% were tested for HIV. The guidelines for prevention of transmission from mother to child (PMTCT) have been revised and option B Plus was introduced in 2014 and is practiced across the country. Although normal vaginal delivery is recommended in the policy, caesarean section is usually practiced. All HIV exposed infants undergo Early Infant Diagnosis (EID) and none were found to be HIV positive in 2016 but for this dried blood spots (DBS) samples are sent to India as local capacity has not been developed in the NRL.

The fast track activities that need to be undertaken include:

- Make available rapid HIV testing services at ANC clinics to increase coverage of HIV testing especially in difficult situations/settings
- Collect data from the private sector on all pregnant women testing and delivering in that sector. This will allow comprehensive assessment of PMTCT in Sri Lanka which will be required for the validation of the EMTCT process
- Strengthen EID using DNA PCR in the country. This will prevent delays in diagnosis and also build in-country capacity
- Enhance the process target for EMTCT so that the validation process can be initiated

SD 2.5. HIV TB services

Blood samples of all TB patients are sent to the STD clinic for HIV testing as per national guidelines. In order to ensure that all TB patients are tested for HIV, HTS needs to be available at all Chest clinics. Centralized data of percentage of TB patients tested for HIV is not available and therefore the process for cross referral between Chest clinic and STD clinics needs to be strengthened and documentation improved of these referrals and outcomes. PLHIV are provided with Co-trimoxazole Preventive Therapy (CPT) but the Isoniazid Preventive Therapy (IPT) is provided only at Chest clinics. Hence the uptake of IPT is low. It is important to provide IPT from STD/ART sites rather than from Chest clinics which will allow a single point for dispensing of ARVs, STI drugs, OI drugs, CPT and IPT. Also, it is needed to link all ART sites to the 10 sites of the TB programme where GeneXpert is available for ruling out TB at baseline and as required.

The priority actions that need to be undertaken include:

Provide HTS at all Chest clinics

- Train the nurses at the Chest clinic to provide the pre-test and post-test counselling
- Train the chest physician at the Chest clinic in the management of HIV TB coinfection
- Strengthen the process for cross referral between Chest clinic and STD clinics and improve documentation of these referrals and outcomes
- Provide IPT from STD/ART sites rather than from Chest clinics which will allow a single point for dispensing of ARVs, STI drugs, OI drugs, CPT and IPT
- Link all ART sites to the 10 sites of the TB programme where GeneXpert is available for ruling out TB at baseline and as required

STRATEGIC DIRECTION 3 (SD3): STRATEGIC INFORMATION MANAGEMENT SYSTEM (SIM)

Four sub-strategies for SIM have been identified:

- 3.1. HIV and STI Surveillance
- 3.2. Programme Monitoring and Routine Reporting
- 3.3. HIV/AIDS/STI Research
- 3.4. Knowledge Management

SD 3.1. HIV and STI Surveillance

This section considers six aspects which are - HIV Sentinel Surveillance (HSS), HIV Case Reporting, HIV Estimations, Size Estimations and IBBS among KPs, Understanding HIV Transmission Dynamics, Other components of 2nd generation surveillance (STI Surveillance; Incidence & Mortality Surveillance; Drug Resistance Surveillance).

Till 2016, 22 rounds of HSS have been conducted. The groups sampled and the sampling strategies have changed over time and given changes in the programme directions and response further changes are needed such as adhering to KPs and possibly shifting sampling sites from STD clinics to KP intervention sites, with an effort on random sampling of the registered KPs, and to maintain consistency in sampling over the years to allow for trend analysis. HSS needs to consider the Western Province as a separate unit for sampling as it has the highest numbers of KPs and the highest rates of HIV infection. For HIV case reporting, currently a new case reporting format has been introduced and is being widely used. However, the case tracking system is divided between the Epidemiology and SIM units of NSACP. The reporting system is entirely paper-based which is inefficient and creates delays in the chain of patient processing and impedes effective central monitoring. Therefore, the entire HIV case tracking system from screening till viral suppression needs integration into the new electronic data management system that is being developed. A strong case-based surveillance system needs to be considered which is more appropriate to a low prevalence setting such as Sri Lanka. However, till a case-based surveillance system is established HSS among KPs and selected vulnerable groups needs to be continued till the routine HIV testing coverage among them goes beyond 80% consistently, and number of new HIV cases detected every year stabilises over time. A strong alert response system that will immediately alert the facility staff as well as the concerned higher authorities on occurrence of LFU will also help in tracking cases. A real time, electronic reporting of confirmed cases from NRL to STD clinics and Epidemiology unit will also be required.

HIV estimations in Sri Lanka was carried out using the Spectrum software and the last round of HIV estimation carried out in 2016 had some deficiencies in the inputs. More recently, however, AEM has been conducted using relevant inputs. For size estimations of KPs, this was conducted in 2013 and the IBBS in 2014. The next round of size estimation and IBBS are planned to be conducted together in 2017 and the process is underway. It is recommended that IBBS be conducted every 5-6 years provided HSS is strengthened.

Understanding HIV transmission dynamics and identifying the drivers of epidemic is very important. For this capacities of NSACP staff as well as facility staff in epidemiological analysis of existing data need to be enhanced. District Epidemiological Profiling will also be helpful by involving the facility staff from districts to analyse all the available data from the district to understand the local situation. Other components of the 2nd Generation Surveillance system including STI surveillance, incidence surveillance, mortality surveillance and drug resistance surveillance need to be considered. STI surveillance is strong in Sri Lanka but data entry needs to be electronic and analysed regularly. Questions on external migration need to be added to better understand the role of migration in STI infections. Mortality surveillance needs to be strengthened and drug resistance surveillance needs to be established.

The priority actions that need to be undertaken include:

- Ensure regular HSS every two years among KPs and strengthen the system, conduct IBBS every 5-6 years and coordinate and integrate the two systems
- Prioritise surveillance among MSM with wider coverage by location, by sub-typologies and employ innovative methods for recruitment
- Further strengthen STI surveillance and ensure data is entered electronically and reported regularly
- Strengthen mortality surveillance
- Establish drug resistance surveillance for HIV
- Establish a strong HIV case based surveillance system
- Integrate the entire HIV case tracking system from screening to viral suppression into the new electronic database that is being developed

SD 3.2. Programme Monitoring and Routine Reporting

The SIM Unit of NSACP monitors, verifies, compiles and reports data from STD and ART clinics every quarter and publishes the data in the Annual Report. The data from the centres are captured using standardised formats which are generally comprehensive and provide rich information. However, staff shortages and inadequate monitoring and supervision can compromise the system. The data on KP prevention programmes received every quarter from FPA needs to be further reviewed and analysed regularly at NSACP. Finally, the M&E system which is being converted from a paper-based reporting to an electronic system through an integrated web-based data management system needs to be fast tracked.

The priority actions that need to be undertaken include:

 Provide regular feedback from the SIM Unit to ART centres regarding LFU and any other relevant findings after analysing quarterly ART returns and Excel databases

- Analyse programme data on a regular basis
- Fast track the electronic system for data management through an integrated web-based data system
- Enhance capacity of NSACP and facility staff to conduct regular analysis of existing data

SD 3.3. HIV/AIDS/STI Research

In order to better understand the epidemic and its dynamics, it is important not just to rely on routine data collection systems but also to conduct special research studies that will provide indepth understanding in areas where there is a knowledge gap. Some small surveys have been conducted and some are currently ongoing. Sri Lanka College of Sexual Health and HIV Medicine publishes a journal "Sri Lanka Journal of Sexual Health and HIV Medicine (Sri Lanka JoSHHM)" where several articles on HIV and STDs have been published by NSACP. However, research is not prioritised and most surveys and surveillance activities are contracted out to companies and international experts with very little effort of developing local expertise. In order to take research agenda forward it will not be realistic to mandate NSACP staff on this rather a technical working group bringing together experienced social scientists, epidemiologists, laboratory scientists and clinicians needs to be formed to brainstorm on gaps in information and how research can be designed to address those gaps. This will require fostering institutional collaboration with academic institutions, medical colleges, social sciences institutions, research institutes and other private research organisations. Research activities need to be well resourced and funding needs to be available.

The priority actions that need to be undertaken include:

- Create an environment that supports research involving relevant research organisations and universities and revitalise the research sub-committee of NAC
- Plan special studies and surveys to answer key questions
- Engage KPs, and CBOs as relevant in research studies and surveys

SD 3.4. Knowledge Management Strategy

A knowledge management strategy for NSACP will strengthen evidence based programming. For this a unit at NSACP will need to be created combining the activities of the Epidemiological and SIM Units and it will encompass four components:

- a. Knowledge creation Regular, Systematic analysis of data and bringing out knowledge products such as reports, bulletins, articles and scientific papers
- b. Knowledge collection and storage Electronic capture and recording of knowledge products in a systematic manner for easy reference and use
- c. Knowledge sharing Dissemination and communication of knowledge products to stakeholders from time to time
- d. Knowledge translation Use of data for programmatic actions and decision making

The priority action that needs to be undertaken includes:

Develop an overarching Knowledge Management Strategy for NSACP

STRATEGIC DIRECTION 4 (SD4): HEALTH SYSTEMS STRENGTHENING (HSS)

The Government of Sri Lanka provides the response to HIV/AIDS/STIs in Sri Lanka through the NSACP as the central technical expert and programme coordinator along with a network of 31 STD clinics under the Regional Directors of Health Services (RDHS). In addition, NGOs and CBOs provide services especially to KPs.

Several STD clinics, the NRL and IDH are all constrained in terms of space, human resources and other facilities. Although there has been an effort to ensure providing designated staff to all sites, shortcomings persist and often a mismatch between needs and placements are observed and in several locations positions have not been filled. Lack of administrative staff in some of the programmatic areas of NSACP and lack of data management staff in STD clinics hamper efficient functioning. In order to be able to manage the work load efficiently, staffing requirements and gaps need to be looked into and filled. Moreover, in order to ensure quality of services it is important to streamline and strengthen supervision and monitoring with representation from all programme coordinators and should occur according to an annual plan.

Delays in delivery of kits and reagents for the laboratories occur and there is a lag period of about two years between placing an order and receiving supplies. Stock outs for ARVs also occur. It is essential to expedite the procurement process by analysing the supply chain process to identify reasons for delays and ways to overcome them. Careful forecasting exercises to prevent shortages of supplies along with requests to suppliers for a longer shelf life of kits and reagents is also required. NSACP has a technical subcommittee on care and treatment and also a drug estimation and quantification committee but the latter committee does not have all the bodies involved with ARV procurement represented. STI drugs are procured through government systems and are run efficiently. Consumables such as condoms, lubricants and HIV rapid diagnostic kits are procured using GFATM funds and the procurement is coordinated by the GFATM coordination unit of the NSACP. Storage facilities for drugs at the Central STD clinic pharmacy and at many peripheral clinics are inadequate.

Training on HIV/STI is provided to all staff on appointment but this has not been consistent across all peripheral clinics and some staff did not receive training. Refresher training is required but is not conducted regularly and there are shortcomings in training for counselling. Trainings are held in Colombo but need to be decentralised to the district level. Staff motivation in the peripheral clinics is generally high and they take pride in being part of the NSACP and to improve this further a system to recognise and reward well performing staff may be considered.

To provide high-level political support to the NSACP, a National AIDS Council was formed under the chairmanship of His Excellency the President of Sri Lanka. A National AIDS Committee (NAC), led by the Secretary of the MoH provides a platform for multi-sectoral engagement and discussion on all activities related to HIV/AIDS/STI. At the provincial level, Provincial AIDS Committees (PACs) have been formed with the representation of provincial level governmental organizations, NGOs, KPs, PLHIV and health sector representatives. Unfortunately, the National AIDS Council has not been functional for several years now, NAC has not met regularly and the functioning of PAC is variable across the provinces. Given the goal of Ending AIDS in 2025 it is essential to obtain commitment at all levels and therefore it is necessary to revive the National AIDS Council under the chairmanship of

His Excellency the President, regularise meetings of NAC and activate its subcommittees, strengthen PACs and form District AIDS committees under the leadership of the RDHS.

The funding support provided by the Government of Sri Lanka for NSACP has increased over the years and in 2015 about 60% of the programme cost was borne by the government. Such commitment to the HIV/STI programme will ensure its future sustainability. However, preparedness of the government to fund the entire curative and preventive programme for the national response to HIV/AIDS in future is a challenge. The sustainability of the NGO based peer-led KP interventions at the end of GFATM support requires an interim plan before complete closure of the GFATM grant and the next grant should include a process of social contracting of KPs/CBOs. The NSACP will need to consider programming based on the HIV burden in the country so that high burden areas will receive the entire gamut of prevention services through NGOs/CBOs while low burden areas may be provided basic HIV prevention services through KPs working through STD clinics.

The priority actions that need to be undertaken include:

- Improve the infrastructure of the different facilities ranging from the central STD clinic, NRL to peripheral clinics
- Fill up vacancies for personnel at all levels
- Activate the National AIDS Council so that it meets at least once a year
- Activate NAC so that it meets at least once in six months
- Activate the sub-committees of NAC to stimulate discussions and advocacy with multiple sectors in guiding the national HIV response
- Active PAC and form District AIDS Committees to enable effective decentralisation
- Revise the organogram of NSACP creating new units with adequate human resources
- Ensure NSACP has adequate administrative support and data management staff
- Conduct stakeholder fora to coordinate, review and discuss the HIV response across other ministries and departments and with civil society groups
- Devise a model of KP intervention to be provided by the government taking into consideration the HIV burden in different parts of the country
- Ensure smooth supply chain management for ARVs and reagents and include all relevant agencies in the committees for this purpose
- Develop an annual training plan taking into account activities from all sectors
- Develop human resource capacity across the HIV sector for an enhanced response

STRATEGIC DIRECTION 5 (SD5): SUPPORTIVE ENVIRONMENT

Legal, social and cultural barriers are a major constraint to KPs who still feel stigma and discrimination in different spheres of their lives. In STD clinics this has generally improved compared to previous years and compared to other health care settings. However, many KPs have been discriminated against by minor staff at those health centres. Newly appointed medical graduates at the STD clinics are not as well aware and sensitive as experienced medical officers and often discriminate against KPs. It is therefore important that all staff who provide services to KPs and PLHIV are trained and the training material needs to adequately address issues on stigma and discrimination. The recent stigma report shows a high degree of internal stigma among PLHIV [13]

indicating the need for comprehensive counselling. Stigma is experienced by PLHIV visiting other laboratories and hospitals where they are referred to and it is therefore important that staff at those referral sites are trained and sensitised to the needs and issues of PLHIV and KPs. Training of health care workers (HCWs) of private hospitals is also required.

All training modules for different categories of HCWs needs to include issues on law and Human Rights, ethical professional practice, special issues of KPs including sexual orientation and gender identity and expression. Inclusion of KPs/PLHIV at some of these training sessions will help to sensitise trainees.

A strong momentum needs to be built at the political and policy level for inclusion of HIV in sectoral policies. The National Communication Strategy on control and prevention of STI/HIV/AIDS which will soon be launched by NSACP is an important initiative for advocacy and community empowerment. The media are not properly trained and sensitised to KP and PLHIV issues so that there is negative reporting in electronic, print, social media and there is therefore an urgent need to enhance and strengthen media awareness and advocacy.

There are three PLHIV networks in Sri Lanka - Lanka Plus, Positive Women's Network (PWN) and Positive Hopes Alliance and PLHIV can join (or not join) any one of these organisations. The DIC of PWN provides a short stay option for PLHIV travelling from outside as well as for relatives of PLHIV admitted in the hospital. However, they are not fully engaged in tracing LFU but when they are, difficulties are faced in meeting travel expenses especially when visiting remote areas for LFU tracing. PLHIV feel that a half way home would assist them in providing better support to PLHIV who are unwell and need temporary residence.

A Condom Strategy was developed by the NSACP following a situation assessment of condom programming in 2015 [14]. The main aim of the national Condom Strategy is to ensure the availability of quality condoms of choice, either free of charge or at an affordable price, through an effective and responsive service delivery system but lubricants have not adequately been addressed in this strategy. Despite the availability of the Condom Strategy, FSW still fear carrying condoms although this is not illegal. To allay these misinformation, it is important to widely disseminate the Condom Strategy and make all aware of the legal status of condoms. Recently, a circular has been provided to all police stations clarifying that condoms are a medical device.

In Sri Lanka the constitution along with a number of supportive laws, policies, regulations, strategies and programmes provide a supportive and conducive environment for PLHIV, KPs and other people who seek sexual health services. Favourable legal decisions have also been made which help to create conducive environment for PLHIV. However, stigma is pervasive and children affected by and infected with HIV continue to face problems in schools. Therefore, issuing a specific guideline to the education sector for protection of human rights of children affected by and infected with HIV and enhancing awareness of laws and policies that promote human rights of all people including of KPs and PLHIV is needed. Although the numbers of laws that may make it difficult for KPs to access services are limited to a few they are severe and include the vagrancy ordinance, the brothel ordinance and the Penal codes 365 and 365a. The vagrancy and brothel ordinances are used against FSWs while the two Penal codes criminalize same sex relations and create a barrier to MSM and TG accessing HIV/STI services. In order to prevent HIV among these groups it will be important to

advocate for revisiting laws that impede service uptake by KPs. An active role should be taken by the legal and ethical subcommittee under the NAC in this regard. This committee needs to be reconstituted and activated.

The priority actions that need to be undertaken include:

- Ensure all training modules address issues on human rights, stigma and discrimination
- Issue a specific guideline to the education sector for protection of human rights of children affected by and infected with HIV and enhance awareness of laws and policies that promote human rights of all people including of KPs and PLHIV
- Conduct advocacy activities for an enabling environment for KPs and PLHIV in order to reduce stigma and discrimination and address violence against KPs
- Develop a policy for ethical reporting on HIV/AIDS/STI by the media
- Advocate with the media on responsible reporting on HIV/AIDS/STI
- Enhance training of law enforcement officers to sensitise them on human rights and fundamental freedom for all which is essential for building a supportive environment
- Reconstitute the legal and ethical subcommittee of the NAC so that it can advocate with policy makers to strengthen the supportive environment for KPs and PLHIV
- Revisit and repeal laws that criminalise KPs specifically the vagrancy act and 365a and amend the brothel ordinance
- Build the capacity of PLHIV networks so that they can participate more effectively in HIV prevention, care and treatment activities
- Consider building a half way home for PLHIV

3.3.2. The Indicator Framework

The indicator framework consists of impact, outcome and output indicators for each strategic direction against which the progress of the NSP 2018-2022 can be monitored and measured. Impact, outcome and output indicators are shown in Tables 3, 4 and 5 respectively.

Table 3. IMPACT INDICATORS:

SI	Strategic direction	Indicator	Value		Indicator			Format /source of	Frequency
			Baseline (source, year)	Target	reference/source	Numerator	Denominator	data/information	of collection
1	SD1	% sex workers who are living with HIV (entire country)	0.8, 0 (IBBS, 2014 and HSS 2016)	<1%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
2	SD1	% MSM who are living with HIV (entire country)	0.9%, 1.5% (IBBS 2014 and HSS, 2016)	<5%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
3	SD1	% TG who are living with HIV (entire country)	Not available	<1%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
4	SD1	% BBs who are living with HIV (entire country)	0 (IBBS, 2014)	<1%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
5	SD1	% PWID who are living with HIV (entire country)	0 (HSS, 2014)	<1%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
6	SD1	% sex workers who are living with HIV (Western Province)	1% (IBBS, 2014)	<1%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
7	SD1	% MSM who are	1.2%	<5%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly

C!	Strategic direction	Indicator	Value		Indicator			Format /source of	Frequency
SI			Baseline (source, year)	Target	reference/source	Numerator	Denominator	data/information	of collection
		living with HIV (Western Province)	(IBBS, 2014)						
8	SD1	% TG who are living with HIV (Western Province)	Not Available	<1%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
9	SD1	% PWID who are living with HIV (Western province)	0 (HSS, 2016)	<1%	GAM	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
10	SD1	% of prisoners who are living with HIV (entire country)	0.05%	<1%	GAM	Total no. positive	Total No. tested	Routine HIV testing data of NSACP	Annually
11	SD1	% sex workers who have active syphilis (entire country)	0 (HSS, 2016)	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
12	SD1	% MSM who have active syphilis (entire country)	0.9% (HSS, 2016)	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
13	SD1	% TG who have active syphilis	Not available	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly

	Strategic		Val	ue	Indicator			Format /source of	Frequency
SI	direction	Indicator	Baseline (source, year)	Target	reference/source	Numerator	Denominator	data/information	of collection
		(entire country)							
14	SD1	% BBs who have active syphilis (entire country)	0 (IBBS 2014)	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
15	SD1	% PWID who have active syphilis (entire country)	0 (HSS, 2016)	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
16	SD1	% sex workers who have active syphilis (Western Province)	1.2% (IBBS 2014)	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
17	SD1	% MSM who have active syphilis (Western Province)	1.8% (IBBS 2014)	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
18	SD1	% TG who have active syphilis (Western Province)	Not available	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
19	SD1	% PWID who have active syphilis (Western Province)	0 (IBBS 2014)	<3%	WHO	Total no. positive	Total No. tested	HSS, IBBS	2-5 yearly
20	SD1	Gonorrhoea rate	3.1/100,000	<2.5/100,000	WHO/GAM	Number of cases of	Number of adult	N=SIMU	Annually

	Strategic		Valu	e	Indicator		_	Format /source of	Frequency
SI	direction	Indicator	Baseline (source, year)	Target	reference/source	Numerator	Denominator	data/information	of collection
		among adult males (>15 years)				gonorrhoea reported among adult males within the past 12 months	males (>15 years)	D=Dept. of Census and Statistics	
21	SD2	Annual rate of reported cases of congenital syphilis per100,000 live births	2.5 (Annual Report, 2016)	<50	EMTCT Guidelines	Number of reported cases of congenital syphilis (including still births) within past 12 months	Estimated number of live births in the same calendar year	PMTCT register, FHB	Annually
22	SD2	Annual rate of reported cases of MTCT of HIV per 100,000 live births	0.6 (Annual Report, 2016)	<50	EMTCT Guidelines	Number of children born in a defined calendar year to mothers living with HIV, who were diagnosed as positive	Estimated number of live births in the same calendar year	PMTCT register, FHB	Annually
23	SD2	Percentage of infants born to mothers living with HIV, who tested positive for HIV (MTCT rate)	6.25% (PMTCT register and Paediatric HIV Register, 2016)	<2%	EMTCT Guidelines	Number of infants born to HIV- positive mothers, in a defined calendar year, who	Reported number of infants born to HIV-positive mothers within a defined calendar	PMTCT register of NSACP	Annually

	Strategic	Indicator	Value		Indicator			Format /source of	Frequency
SI dir	direction		Baseline (source, year)	Target	reference/source	Numerator	Denominator	data/information	of collection
						were diagnosed as	year, with		
						positive	definitive		
							diagnosis (HIV		
							positive and		
							negative)		

Table 4. OUTCOME INDICATORS:

	Strategic		Value		Indicator			Format /source	Frequency
SI	direction	Indicator	Baseline (source, year)	Target	reference/source	Numerator	Denominator	of data/information	of collection
1	SD1	Percentage of	93%	>90%	GAM	Number who	Number had	IBBS	5-6 years
		female sex workers	(IBBS, 2014)			reported that a	commercial sex		
		reporting the use of				condom was used	in the last 12		
		a condom with their				with their last	months		
		most recent client				client			
2	SD1	Percentage of men	57.9%	>80%	GAM	Number who	Number who	IBBS	5-6 years
		reporting use of a	(IBBS, 2014)			reported that a	reported having		
		condom the last				condom was used	anal sex with a		
		time they had anal				last time they had	male in last 12		
		sex with a male				anal sex	months		
		partner							
3	SD1	Percentage of TG	Not available	>80%	GAM	Number who	Number who	IBBS	5-6 years
		reporting use of a				reported that a	reported having		
		condom the last				condom was used	anal sex with a		
		time they had anal				last time they had	male in last 12		
		sex with a male				anal sex	months		
		partner							
4	SD1	Percentage of beach	50.5%	>80%	Programme	Number who	Number who	IBBS	5-6 years
		boys reporting the	(IBBS, 2014)			reported that a	reported having		
		use of a condom at				condom was used	paying sex		
		last sexual				last time they had	partners in the		
		intercourse with					last 12 months		

	Strategic		Value		Indicator			Format /source	Frequency
SI	direction	Indicator	Baseline (source, year)	Target	reference/source	Numerator	Denominator	of data/information	of collection
		paying partners				sex with their			
						paying partner			
5	SD1	Percentage of	50.7% (last	>80%	GAM	Number of PWID	Number who	IBBS	5-6 years
		people who inject	year), IBBS			who reported using	reported		
		drugs reporting	2014)			sterile injecting	injecting drugs in		
		using sterile				equipment the last	the last		
		injecting equipment				time they injected	month/year		
		the last time they				drugs			
		injected in the last							
		month/year							
		(disaggregated)							
6	SD1	Percentage of	24%	>60%		Number of young	Number of	National SRH	Once in 5
		young people 15-24	(DHS amongst			people who can	young people in	survey	years
		years who know the	ever married			identify correct	the country aged		
		correct ways of HIV	girls and			ways of HIV	15-24 years		
		prevention	women, 2016)			prevention			
7	SD1	Percentage of	53%	>90%	GAM	Number of people	Number of	HIV case	Ongoing
		estimated PLHIV	(Annual Report,			who have been	estimated PLHIV	reporting and HIV	
		who have been	2016)			diagnosed with HIV		estimates	
		tested for HIV, i.e.				and know their			
		who know their				result			
		status							
8	SD2	Percentage of adults	87%	>90%	GAM	Number of PLHIV	Number of PLHIV	ART cohort data	Ongoing
		and children with	Annual report,			started on ART up	started on ART		
		HIV known to be on	2016)			to 12 months prior	up to 12 months		

	Strategic		Value		Indicator			Format /source	Frequency
SI	direction	Indicator	Baseline (source, year)	Target	reference/source	Numerator	Denominator	of data/information	of collection
		treatment 12				to the reporting	prior to the		
		months after				period who remain	reporting period		
		initiation of ART				on treatment 12			
						months after			
						initiation (adults			
						and children)			
9	SD2	Percentage of	78%	>90%	WHO	Number of people	Number of PLHIV	ART register and	Ongoing
		people living with				living with HIV and	who are	SIM database	
		HIV and on ART who				on ART who have a	currently		
		are virologically				suppressed viral	receiving ART		
		suppressed				load (<1000			
						copies/ml)			
10	SD3	Percentage of ART	100% using	100%	WHO	Number of ART	Number of	An electronic	Ongoing
		sites implementing	Excel (2016, SIM	using		sites implementing	health facilities	case based	
		a standard protocol	Unit)	EMIS		a standard	dispensing ARVs	surveillance	
		for tracking ART				functioning patient	in the last 12	system	
		patients				tracking system	months		
11	SD3	Percentage of	Not measured	>80%	M&E	Number of	Number of	SIM Unit	Annual
		research studies				research studies	research studies		
		and special surveys				and special surveys	and special		
		conducted				conducted	surveys planned		
12	SD4	Percentage of HIV	60%	>80%	National Health	Amount of HIV	Total amount of	National Health	Annually
		response financed			Accounts	response financed	HIV response	Accounts	
		domestically					financed		

	Strategic		Value		Indicator			Format /source	Frequency
SI	direction	Indicator	Baseline (source, year)	Target	reference/source	Numerator	Denominator	of data/information	of collection
						from domestic			
						sources			
13	SD5	Percentage of KPs	Not Available	<20%	GAM	Number of KPs	Number of KPs	Stigma Index	5 years
		who avoided				who reported	who reported	amongst KPs	
		seeking HIV testing				having avoided	never having		
		because of fear of				seeking HIV testing	tested for HIV		
		stigma, fear or				due to at least one			
		experienced				of the following:			
		violence, and/or				fear of stigma, fear			
		fear or experienced				or experienced			
		police harassment				violence, fear or			
		or arrest				experienced police			
						harassment or			
						arrest			
14	SD5	Percentage of KPs	20%	<20%	GAM	Number of KPs	Number of KPs	Stigma Index	5 years
		with HIV who	Stigma index for			living with HIV who	who reported		
		avoided receiving	PLHIV, 2017)			reported never	living with HIV		
		HIV medical care				having received or	and never having		
		because of fear of				having stopped	received or		
		stigma, fear or				receiving HIV	having stopped		
		experienced				medical care due	receiving HIV		
		violence, and/or				to at least one of	medical care		
		fear or experienced				the following: fear			
		police harassment				of stigma, fear or			
		or arrest				experienced			

	Strategic direction	Indicator	Value		Indicator			Format /source	Frequency
SI			Baseline (source, year)	Target	reference/source	Numerator	Denominator	of data/information	of collection
						violence, fear or			
						experienced police			
						harassment or			
						arrest because of			
						their HIV status			

Table 5. OUTPUT INDICATORS

S. No	Strategic direction	Indicator and Target	Indicator reference/source	Numerator	Denominator	Format /source of data/information	Frequency of collection
1	SD1	Percentage of FSW reached with HIV prevention programmes Target: 90%	Programme data	Number of FSW reached with a defined package of services	Size estimation of FSW	Programme M&E data	Six monthly
2	SD1	Percentage of FSW who have received an HIV test in past 12 months and know results Target: 90%	Programme data	Number of FSW who have been tested for HIV during the last 12 months and who know the results,	Size estimation of FSW	Programme M&E data	Six monthly r
3	SD1	Percentage of MSM reached with HIV prevention programmes Target: 90%	Programme data	Number of MSM reached with a defined package of services	Size estimation of MSM	Programme M&E data	Six monthly
4	SD1	Percentage of MSM who have received an HIV test in past 12 months and know results Target: 90%	Programme data	Number of MSM who have been tested for HIV during the last 12 months and who know the results	Size estimation of MSM	Programme M&E data	Six monthly
5	SD1	Percentage of Beach Boys reached with HIV prevention	Programme data	Number of Beach Boys reached with a defined	Size estimation of beach boys	Programme M&E data	Six monthly re

S. No	Strategic direction	Indicator and Target	Indicator reference/source	Numerator	Denominator	Format /source of data/information	Frequency of collection
		programmes Target: 90%		package of services			
6	SD1	Percentage of Beach Boys who have received an HIV test in past 12 months and know results Target: 90%	Programme data	Number of Beach Boys who have been tested for HIV during the last 12 months and who know the results,	Size estimation of Beach Boys	Programme M&E data	Six monthly
7	SD1	Percentage of PWUD/PWID reached with HIV prevention programmes Target: 90%	Programme data	Number of PWUD/PWID reached with a defined package of services	Size estimation of PWUD/PWID	Programme M&E data	Six monthly
8	SD1	Percentage of PWUD/PWID who have received an HIV test in past 12 months and know results (disaggregated) Target: 90%	Programme data	Number who have been tested for HIV during the last 12 months and who know the results, (disaggregated by PWUD and PWID)	Size estimation of PWUD/PWID	Programme M&E data	Six monthly
9	SD2	Percentage of pregnant women attended antenatal	EMTCT guidelines	Number of mothers who reported to have received	Estimated number of	FHB	Annually

S. No	Strategic direction	Indicator and Target	Indicator reference/source	Numerator	Denominator	Format /source of data/information	Frequency of collection
		care service Target: >95 %		ANC	pregnant women		
10	SD2	Percentage of pregnant women tested for HIV in last 12 months Target: >95 %	EMTCT guidelines	Number of pregnant women who have been screened for HIV in last 12 months	Number of pregnant women seen at ANC services in the last 12 months	FHB and SIM Unit	Annually
11	SD2	Percentage of pregnant women tested for syphilis in last 12 months Target: >95 %	EMTCT guidelines	Number of pregnant women who have been screened for syphilis in last 12 months	Number of pregnant women seen at ANC services in the last 12 months	FHB and SIM Unit	Annually
12	SD2	Percentage of HIV positive pregnant women receiving ART Target: >95 %	EMTCT guidelines	Number of HIV positive pregnant women on ART and delivered in a year	Number of HIV positive women who delivered during that year	PMTCT register	Annually
13	SD2	Percentage of syphilis sero- positive pregnant women who were appropriately treated Target: >95 %	EMTCT guidelines	Number of syphilis positive pregnant women who were treated for syphilis in a year	Number of syphilis positive pregnant women diagnosed in a given year	ANC syphilis register	Annually

S. No	Strategic direction	Indicator and Target	Indicator reference/source	Numerator	Denominator	Format /source of data/information	Frequency of collection
14	SD2	Percentage of adults and children currently receiving ART among all adults and children living with HIV Target: >90%	GAM	Number receiving ART	Estimated number of PLHIV	ART register	Ongoing
16	SD2	Percentage adults and children living with HIV and who have been diagnosed who are currently receiving antiretroviral therapy Target: 95%	WHO	Number of adults and children living with HIV who have been diagnosed and are currently receiving antiretroviral therapy	Number of adults and children living with HIV who have been diagnosed	ART register, HIV case reporting	Ongoing
17	SD2	Percentage of people living with HIV that initiated ART with CD4 count of <200 cells/mm3 Target:<15%	GAM	Number of HIV positive adults initiating ART within the past 12 months with a baseline CD4 count =<200 cell/mm3	Number of HIV positive adults initiating ART within the past 12 months	ART register	Ongoing
18	SD2	Number and percentage of newly diagnosed HIV positive people newly enrolled in and receiving care Target: >90%	GAM	Number of people newly (diagnosed and) enrolled in HIV care and received clinical HIV care services in the past 12 months	Number of people newly diagnosed with HIV within the past 12 months	Pre-ART and ART registers	Ongoing

S. No	Strategic direction	Indicator and Target	Indicator reference/source	Numerator	Denominator	Format /source of data/information	Frequency of collection
19	SD2	Percentage of HIV exposed infants born within the past 12 months who received a virological HIV test within two months of birth Target: 100%	WHO	Number of HIV exposed infants born within the past 12 months who received a virological HIV test within two months of birth	Number of HIV positive women who delivered within the past 12 months	Paedaitric HIV register and PMTCT register	Annually
20	SD3	EMIS established	SIM Unit	Not applicable	Not applicable	SIM Unit	Within one year
21	SD3	Establishment of case based surveillance system	SIM Unit	Not applicable	Not applicable	SIM Unit	Within two years
22	SD3	% of nationally defined indicators on HIV/AIDS/STIs for which information is available Target: 100%	WHO	Number of indicators for which information is available	Number of nationally defined indicators on HIV/AIDS/STIs	SIM Unit	Annually
23	SD4	Percentage of districts with government facilities providing ART Target: 100%	NSACP	Number of districts with at least one government ART facility	Total number of districts	NSACP co- orindator	Annually
24	SD4	STD clinics expanded to base hospitals (type A)	NSACP	Number of base hospitals (type A) have STD clinics	Number of Base hospitals (type A)	NSACP co- orindator	Five years

S. No	Strategic direction	Indicator and Target	Indicator reference/source	Numerator	Denominator	Format /source of data/information	Frequency of collection
		Target: 90%					
25	SD4	Training programmes conducted according to a comprehensive training plan developed annually Target:100%	M&E Plan	Number of training programmes conducted (Govt and NGOs)	Number of training events planned	NSACP data base	Annually
26	SD4	Initial training of all staff delivering STI care at government STD clinic received within 6 months of appointment Target: 90%	M&E Plan	Number of staff received training within 6 months of appointment	Number of staff newly appointed in the STD clinics (within 6 months)	NSACP database	Annually
27	SD4	Percentage of ART sites with at least one supportive supervision visit in the last 12 months Target: 100%	M&E plan	Number of ART sites with at least one supervision visits in the last 12 months	Number of ART sites dispensing ARVs in the last 12 months	SIM Unit	Annually
28	SD4	Percentage of units established in NSACP according to a new organogram designed to reach the goal of Ending AIDS by	M&E plan	Number of units established in the NSACP	Number of units proposed in the new organogram	Director/NSACP	Annually

S. No	Strategic direction	Indicator and Target	Indicator reference/source	Numerator	Denominator	Format /source of data/information	Frequency of collection
		2025 Target: 100%					
29	SD4	Percentage of job positions vacant Target <5%	WHO	Number of vacant job positions	Number of job positions	NSACP	Annually
30	SD4	Percentage of meetings of National AIDS council Target – meetings held at least once/year	M&E plan	Number of meetings held	Number of meetings planned	Director/NSACP	Annually
31	SD4	Percentage of meetings of National AIDS Committee and its subcommittees Target – meetings of NAC and PAC held least every 6 months, and subcommittees every quarter	M&E plan	Number of meetings held	Number of meetings planned	Director/NSACP	Annually
32	SD5	Vagrancy ordinance and Penal code 365a reviewed and repealed	M&E plan	Not Applicable	Not Applicable	Director/NSACP	By end of five years
33	SD5	Brothel Ordinance amended	M&E plan	Not Applicable	Not Applicable	Director/NSACP	By end of five years

4. The Costed Work Plan

The overall costed plan for each year over the five years of the NSP 2018-2022 is shown in LKR and USD in Table 6. A breakdown of costs against the strategic directions and cost categories in LKR and USD are shown in Table ,7,8, 9 and 10.

Table 6. Estimated costs in USD and LKR over the years

Year	Amount LKR	Amount USD
2018	1,979,607,169.79	12,938,608.95
2019	1,693,278,009.73	11,067,176.53
2020	1,788,613,599.03	11,690,284.96
2021	1,914,879,295.38	12,515,550.95
2022	1,789,755,723.24	11,697,749.83
Total	9,166,133,797.18	59,909,371.22

Table 7. Estimated costs for each Strategic Direction per year in LKR

Strategic Directions	Year 1	Year 2	Year 3	Year 4	Year 5	Years 1-5
1. Prevention	563,666,164.63	368,983,398.51	427,597,862.70	465,925,830.40	305,722,543.25	2,131,895,799.49
2. Diagnosis, Treatment and care	579,137,565.71	521,150,871.81	530,577,078.87	564,444,573.85	505,539,295.38	2,700,849,385.62
Strategic Information Management Systems	119,503,474.40	81,582,999.40	69,679,199.78	82,148,228.72	141,482,708.41	494,396,610.70
4. Health Systems Strengthening	683,430,419.72	687,163,916.69	726,239,302.67	766,629,211.81	809,972,515.50	3,673,435,366.39
5. Supportive environment	33,869,545.33	34,396,823.33	34,520,155.01	35,731,450.59	27,038,660.71	165,556,634.98
Grand Total	1,979,607,169.79	1,693,278,009.73	1,788,613,599.03	1,914,879,295.38	1,789,755,723.24	9,166,133,797.18

Table 8. Estimated costs for each Strategic Direction per year in USD

Strategic Directions	Year 1	Year 2	Year 3	Year 4	Year 5	Years 1-5
1. Prevention	3,684,092.58	2,411,656.20	2,794,757.27	3,045,266.87	1,998,186.56	13,933,959.47
2. Diagnosis, Treatment and care	3,785,212.85	3,406,214.85	3,467,824.04	3,689,180.22	3,304,178.40	17,652,610.36
3. Strategic Information Management Systems	781,068.46	533,222.22	455,419.61	536,916.53	924,723.58	3,231,350.40
4. Health Systems Strengthening	4,466,865.49	4,491,267.43	4,746,662.11	5,010,648.44	5,293,938.01	24,009,381.48
5. Supportive environment	221,369.58	224,815.84	225,621.93	233,538.89	176,723.27	1,082,069.51
Grand Total	12,938,608.95	11,067,176.53	11,690,284.96	12,515,550.95	11,697,749.83	59,909,371.22

Table 9. Estimated costs for each cost category per year in LKR

Cost Categories	Year 1	Year 2	Year 3	Year 4	Year 5	Years 1-5
Acquisition of Capital Assets	245,142,030.67	84,306,439.31	80,621,561.67	108,075,591.36	92,725,862.85	610,871,485.85
Capacity Building	96,038,375.00	102,775,378.00	108,551,250.05	112,678,077.70	107,475,117.51	527,518,198.25
Maintenance Expenditure	5,590,000.00	6,158,000.00	6,208,880.00	7,512,812.80	5,999,981.57	31,469,674.37
Other Capital Expenditure	54,833,891.05	43,913,256.05	32,545,890.26	48,708,478.04	99,948,787.73	279,950,303.12
Personal Emoluments	844,810,814.72	690,696,695.61	763,154,890.62	823,869,239.01	693,773,994.21	3,816,305,634.17
Rehabilitation and Improvement of Capital Assets	1,000,000.00	-	-	-	-	1,000,000.00
Services	115,829,415.04	124,977,993.60	134,152,521.87	139,719,168.84	117,653,644.72	632,332,744.08
Supplies	612,612,109.99	637,086,901.84	659,895,678.50	670,706,246.02	668,434,292.14	3,248,735,228.48
Traveling Expenses	3,750,533.33	3,363,345.33	3,482,926.05	3,609,681.62	3,744,042.51	17,950,528.85
Grand Total	1,979,607,169.79	1,693,278,009.73	1,788,613,599.03	1,914,879,295.38	1,789,755,723.24	9,166,133,797.18

Table 10. Estimated costs for each cost category per year in USD

Cost Categories	Year 1	Year 2	Year 3	Year 4	Year 5	Years 1-5
Acquisition of Capital Assets	1,602,235.49	551,022.48	526,938.31	706,376.41	606,051.39	3,992,624.09
Capacity Building	627,701.80	671,734.50	709,485.29	736,458.02	702,451.75	3,447,831.36
Maintenance Expenditure	36,535.95	40,248.37	40,580.92	49,103.35	39,215.57	205,684.15
Other Capital Expenditure	358,391.44	287,014.75	212,718.24	318,356.07	653,260.05	1,829,740.54
Personal Emoluments	5,521,639.31	4,514,357.49	4,987,940.46	5,384,766.27	4,534,470.55	24,943,174.08
Rehabilitation and	6,535.95					6,535.95
Improvement of Capital Assets	0,333.33	-	-	-	-	
Services	757,055.00	816,849.63	876,813.87	913,197.18	768,978.07	4,132,893.75
Supplies	4,004,000.72	4,163,966.68	4,313,043.65	4,383,700.95	4,368,851.58	21,233,563.58
Traveling Expenses	24,513.29	21,982.65	22,764.22	23,592.69	24,470.87	117,323.72
Grand Total	12,938,608.95	11,067,176.53	11,690,284.96	12,515,550.95	11,697,749.83	59,909,371.22

5. References

- 1. National STD/AIDS Control Programme, *National HIV Strategic Plan 2013-2017*. 2013, MInistry of Health Sri Lanka.
- 2. UNAIDS, Ending AIDS: progress towards the 90–90–90 targets. 2017.
- 3. Sri Lanka Medical Association and National AIDS/STD Control Programme, *Towards Ending AIDS in Sri Lanka: A road map.* 2016.
- 4. National STD/AIDS Control Programme, *Annual Report 2016*. 2016, Ministry of Health, Sri Lanka: Colombo, Sri Lanka.
- 5. National STD/AIDS Control Programme, Management Frontiers (PVT) Ltd, and R.T.I. (KIT), Integrated biological and behavioural surveillance (IBBS) survey among key populations at higher risk of HIV in Sri Lanka. 2015: Sri Lanka.
- 6. National STD/AIDS Control Programme, *National Size estimation of Most At Risk Populations* (MARPS) for HIV in Sri Lanka. 2013, Ministry of Health Sri Lanka.
- 7. National STD/AIDS Control Programme, *Annual Report 2014*. 2014, Ministry of Health, Sri Lanka: Colombo, Sri Lanka.
- 8. National STD/AIDS Control Programme, *Annual Report 2015*. 2015, Ministry of Health, Sri Lanka: Colombo, Sri Lanka.
- 9. Azim, T. and L. Rajapaksee, *Maintaining low levels of HIV for three decades: case studies from Bangladesh and Sri Lanka*, in *Three decades of HIV and AIDS in Asia*, J.P. Narain, Editor. 2012, Sage Publications India Pvt Ltd: New Delhi.
- 10. World Health Organization, Guideline on when to start antiretroviral therapy and on preexposure prophylaxis for HIV, in Guideline on when to start antiretroviral therapy and on preexposure prophylaxis for HIV. 2015.
- 11. Dept. of Census and Statistics and Health Sector Development Project, *Demographic and Health Survey 2016*. 2017, MInistry of Health.
- 12. National STD/AIDS Control Programme, *National HIV Testing Guidelines-2016*. 2016, Ministry of Health, Sri Lanka: Colombo, Sri Lanka.
- 13. National STD/AIDS Control Programme, *Draft Report: Stigma Assessment of People Living with HIV in Sri Lanka 2017.* 2017.
- 14. National STD/AIDS Control Programme, *National Condom Strategy Sri Lanka 2016- 2020* 2016.

6. Annexe

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