Introduction
Maldives has a low prevalence of HIV, with high risk for potential concentrated epidemic. Through 2013, 19 HIV positive cases had been reported among Maldivians (16 male, 3 female) and around 300 or more cases among expatriates. 18 out of 19 cases have been identified through case reporting, one case was identified through 1st BBS, and majority of infections were reportedly acquired through Heterosexual transmission. Twelve of 18 HIV positive Maldivians died of AIDS. Until recently, Maldives, HIV infections were imported, however most recent infections were local. HIV among Key Populations was reported in 2011 and 2012; they are from MSM and IDU communities.

Before 2008, the only data on HIV in the Maldives was available in the form of case reporting. In 2008, the first Bio-Behavioral survey was conducted in the Maldives. A total of 1971 serological samples were taken across five groups: Female sex workers (FSW), Men who have sex with men (MSM), injecting drug users (IDU), Occupational cohorts of Men, (OCM- including seafarers, construction workers and resort workers) and youth, across Male’, Addu and Laamu atolls. In 2010, a Risk behavior Mapping was conducted at selected island and atolls.

National Policy on HIV/AIDS

The government continues to take HIV/AIDS as a serious public health concern in the country and directs efforts to reduce risk behaviors and prevention of HIV spread in the country, as evidenced by the review of the National strategic plan 2007-2011. Guided by the National AIDS Council, the HIV program will adopt a multi sector approach with UN agencies, NGOs and government bodies as stakeholders. And the National AIDS Control Program, Centre for Community Health and Disease Control, will be the main coordinating body responsible for all related nation-wide activities. To sustain Maldives as a low HIV prevalent country priority will be given for prevention mechanisms. This targets prevention methods directed towards different segments of population, the general population, vulnerable groups and Key affected populations and three different target populations requiring different levels and types of intervention.

The government recognizes the right to prevention and treatment where everyone in the Maldives is able to access the service of testing, counseling and free ARV treatment once diagnosed with HIV/AIDS including expatriate migrant workers with a valid work permit.

To increase the uptake of HIV testing services, the policy of HIV testing will be moved from solely voluntary counseling and testing (VCT) to provider-initiated and client-initiated counseling and testing (PICT and CICT)

- Build and strengthen capacity and commitment to lead, coordinate and provide a comprehensive response to the epidemic.
- Strengthen the strategic information system for HIV.
- Integration of HIV into existing health services, and making it part of other information channels (i.e. via the workplace, education system, religious sermons, media, et cetera) should continue.
• Promote convergence of HIV and sexual/reproductive health services, as well as integration of HIV into the wider health system.

• A ‘Memorandum of Understanding’ between public health agencies and law enforcement agencies, allowing for HIV prevention interventions focusing on ‘vulnerable women’ (sex work) and ‘vulnerable men’ (including men who have sex with men) to occur without fear for police intervention.

• Focus on taboo, denial and stigma of risk behaviors and people living with HIV in the next wave of advocacy, information and education activities. Continue media communications activities, including message development to create awareness about HIV risk behaviors and to strengthen support in the population for targeted interventions and reduce stigma and discrimination of those most at risk.

• It is recommended that a phased program focusing on improving male sexual health is designed based on the findings of the BBS, the upcoming size estimation and risk behavior mapping study, taking into account what is feasible within the socio-cultural context.

• Ensure regular supply and utilization of HIV, Hep B, Syphilis, Hep C test kits in regional hospitals and health centers by instituting a logistic supply chain and monitoring system.

• Key populations at higher risk, youth and other vulnerable groups have access to harm reduction interventions and rehabilitation services.
The Risk Behavior Mapping Survey (2010) shows that number of key affected population (IDU, FSW and MSM) spread across the Atolls. The survey was done in 12 islands across Maldives and it has been estimated that there are 545 to 625 FSW, 577 to 792 MSM and 410 IDU in these 12 islands. The data has been extrapolated to calculate the national estimates of 1139 FSW, 1199 MSM and 793 IDU with high percentage of the population in Male alone: FSW 37%, MSM 48% and IDU 53%. In addition to male, there are some other areas Gnaviyani, Addu, Thaa, Dhaal and Haa which has relatively larger percentage of the key population. This thin spread across the key population across other island places a huge challenge to achieve the universal coverage with HIV program interventions.

The Risk Behavior Mapping Survey from 2008 shows Female sex workers and injecting drug users both report very low consistent condom use1, while a substantial percentage of men who had sex with men reported they had also had sex with women within the past 12 months2. IDU and MSM have a wide ranging sexual network. Nearly a third (31%) of IDU in Male’ and nearly a quarter in Addu reported sharing an unsterilized needle at the last time of injection 86% of IDU in Male’ had been in jail. Two thirds (64%) of them used drugs while in prison and a third (32%) reported injecting drugs while in jail.

Apart from the key affected population IDU, FSW and MSM, Maldives have other vulnerable population like Migrants, Youths and Adolescents. There were 70,259 non-Maldivian migrant workers in the Maldives in 2009 of whom only 8% were women.

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1 BBS (2008)
2 BBS (2008)
These above data suggests that there is potential risk of low epidemic of Maldives becoming concentrated epidemic if interventions are not effectively planned. The program approaches needs to target more to on identifying the risk population, reaching them with HIV prevention programs and getting them to HIV testing.

**Program Coverage**

**Targeted interventions**

Efforts have been put in to implement targeted intervention in Maldives and most of the interventions are located in Male only. A few numbers of Non-Governmental organizations are delivering the HIV AIDS prevention and some components of harm Reduction services. These interventions till date have mainly focused for Injecting drug Users, Migrants population and some interventions for Female Sex workers. There are no or very negligible interventions targeting the MSM population.

There are 2 Drop in Center (DIC) for injecting drug users in Male. These have HIV counseling and blood collection services available within their facilities in addition to DIC facilities. The DIC services are linked with peer educators and community mobilisers behavioral change interventions where this servers as a linkage between the HIV testing and counseling center and Behavioral change program.

The IDU targeted DIC center are closely linked with the Opioid Substitution Therapy (OST) service centers. The OST services are being delivered as a special program though national drug authority (NDA). The IDU that come to the center needs to go through a formal registration process for getting enrolled in the OST care. There are only xx IDUs currently enrolled in OST and the coverage is very low comparing the number of estimated injecting drug users. The challenges exist for reaching and registering the clients for OST services.

Drug rehabilitation centers are also present and are linked to the NDA programs. The programs do have linkages to the skill building and income generation initiatives. There is a need for linkages between the OST and the other programs linked with National Drug Agency services.

In regards to the interventions to the FSW, a couple of reproductive health service centers run by NGOs are delivering the services. The STI diagnosis and treatment and HIV testing and counseling are being offered through these centers to the FSW population. These services however have minimal linkages with community base service. These also cover migrant population with similar service packages.

TI services for IDU, FSW and Migrants link with Indira Gandhi Memorial Hospital (IGMH) for confirmatory HIV diagnosis and continuum of care for PHIV.
**HIV testing and counselling**

In Maldives, every HIV positive result (screening test) will be notified to the National programme, for confirmatory testing and linking to treatment and care. An HIV is available from all the hospital and health centers; anyone can access to these services free of charge. In addition there are 8 centers designated to promote and offer free testing and counselling. Two VCT centers have been established outside the public health system, within NGOs that offer targeted services for key populations, youth and migrant workers. Maldives has national guidelines for HIV testing and counselling endorsed in April 2009.

In 2014, nearly 25,000 HIV tests were carried out; in 2013, 35,754 tests were done. During this reporting round, there were under reporting from many reporting sites.

According to national testing guidelines, pregnant women should be offered an HIV test, allowing them to opt out; also, pre- and post-test counseling should be provided and written informed consent should be obtained prior to testing. However, contrary to these guidelines, all pregnant women are still screened for HIV along with VDRL and hepatitis B, and pre- and post-test counseling is not available.

Written informed consent is obtained prior to HIV testing and there is a procedure for pregnant women to opt out, if they wish. 3704 women were tested in 2014.

The expatriate workers applying for a work permit is required to undergo a medical screening process, which includes selected communicable diseases, and HIV is one of them. In 2014, 7242 expatriates were tested and 6 among them were tested positive for HIV, who were not granted permit to stay.

**Treatment Care and Support**

Antiretroviral services are being delivered from one center, Indira Gandhi Memorial Hospital in Male. People who get positive for HIV are immediately enrolled in the national treatment programme, a treating physician will be assigned to every client, who will look after the client, ensuring regular checkups, dispensing the ARV drugs and follow-up. National programme facilitates psychosocial support, and if required legal support as well. Patients on treatment, who are living away from the ART center, are asked to identify a family member who will collect the drugs from the ART center and deliver the drugs to the client. This practice has been there, and functional ever since the ARV programme was established.
**Surveillance**
In the Maldives, surveillance include HIV and STIs consist of universal syndromic STI case reporting, sentinel etiological STI case reporting and a cross-sectional community-based STI survey repeated every 3-5 years (the most recent round in 2008, the next BBS is scheduled for 2015). Reporting is still weak, and remains a challenge. Besides from HIV, 10 2014, the following was reported;

Male urethral discharge – 4  
Female urethral discharge – 952  
Male genital ulcers - 6  
Female genital ulcers - 20

**Programme coverage**
The service coverage data indicates the need for further scale up and provision of prevention activities at the community level. The geographical challenge and thin spread of the population makes it very challenging to reach the universal health coverage targets. Below table from National Strategic plan for prevention and control of HIV and AIDS Strategy shows the coverage that can be achieved through program intervention in different Atolls for FSW, MSM and IDU. The HIV interventions in these selected areas needs to have more than 95% coverage to meet the National target of 80%.

<table>
<thead>
<tr>
<th>Risk behaviour</th>
<th>National estimate</th>
<th>80% prevention coverage achieved through quality outreach covering</th>
</tr>
</thead>
<tbody>
<tr>
<td>People injecting drugs</td>
<td>793</td>
<td>Kaatu/Male, Gnawayani</td>
</tr>
<tr>
<td>Female sex workers</td>
<td>1139</td>
<td>Kaaf/Male, Gnawayani, Addu, Thaa, Haa, Dhaal and Haa Atoll</td>
</tr>
<tr>
<td>Male-to-male sex</td>
<td>1199</td>
<td>Kaatu/Male, Gnawayani, Addu and Thaa Atoll</td>
</tr>
</tbody>
</table>

Moreover, the treatment and care services needs to be further scale up and expanded for better accessibility.

National strategic plan express the best HIV response scenario for the Republic of the Maldives is to invest in an effective early warning system through more effective HIV surveillance, in particular behavioral surveillance. It also prioritizes to build prevention preparedness, with a focus on effective targeting of prevention efforts for those key-affected population.

This not only limits for a HIV program intervention but also includes addressing critical issues affecting the enabling environment and wider policy environment particularly involving non-health sector stakeholders (education). There is need felt to have a better understanding between the law enforcement and public health agencies for allowing HIV prevention activities focusing the key population and other vulnerable groups.
National Strategic plan for prevention and control of HIV AIDS

The National Strategic plan for prevention and control of HIV AIDS was developed in 2012, and launched in 2015; the plan was developed in close collaboration between government and other public, private and nongovernment entities, and key population representatives. The National AIDS Council will be responsible for coordination of efforts.

With the goal to maintain the low prevalence of HIV in the Maldives and prevent further transmission, the NSP comes with objectives:

- To scale up prevention programmes in the Key Affected Populations
- To improve prevention efforts for general population and special groups including youth and migrants
- To reduce stigma and discrimination
- The National strategy focuses on following Strategic Direction
  - Strengthen HIV prevention, care, treatment and support services
  - Strengthening strategic information systems for HIV programme and research
  - Create an Enabling Environment

National operational plan for HIV and AIDS

The operational plan has been developed based on The National Strategic plan for prevention and control of HIV AIDS. This plan builds on the previous National action plan from 2010 – 2011.

The action plan has been arranged in the framework of the National strategy and tried to address the translation of strategic approaches into account. The plan is developed in consultation with concerned stakeholders and epidemiological context, service coverage and available challenges including current program gaps have been taken into account while outlining the activities.

Strategic Direction of the NSP

- Strengthen HIV prevention, care, treatment and support services
- Focus on specific needs of Key Affected Populations (KAP)
- Strengthening strategic information systems for HIV programme and research
- Create an Enabling Environment
Funding status of the National Programme

Costing of the National Strategic Plan (NSP) for the prevention of control of HIV/AIDS in the Maldives was carried for the first three years of the NSP 2014-2018, as a further review of the plan will be done after the first three years of implementation. Hence the NSP was costed for the years 2014, 2015 and 2016. The costing exercise is done to determine the resources needs for the prevention and control of HIV/AIDS and to identify the funding gap for mobilization of funds from other sources.

Resource Allocations:
Size estimations have shown that HIV cases (cumulative) would increase from 6 cases in 2013 to 82 cases in 2018. Hence, 50% of the resources have been allocated for interventions related to prevention of HIV/AIDS. Curative services take 23% of the cost, while 12% is assigned for other services such as safety of blood, mother to child transmission and voluntary counseling and testing services.

![Figure 1: Resource Allocation for NSP 2014-2016 Maldives](image)

Following the priority towards prevention of services and because of the large proportion of youth in the country, 32% of the funds are directed towards interventions for the young population. MARPs that require other forms of care such as STI services and palliative services takes the second largest portion of the total resources with 19%. Target populations such as sex workers, injecting drug users and men having sex with men take 12%, 14%, and 12% of the resources respectively.
Resource Gap

Resource gap analysis showed that a total of US$2.6 million have been committed by the government of Maldives for NSP implementation. This includes procurement of ARVs, provision of VCT services and for program management of the NSP implementation which accounts for 15% of the total cost. Funds need to be mobilized for the balance 85% from other sources for the successful implementation of the program.

Figure 2: Resource Allocation by target opulation
NSP Maldives 2014-2016

Figure 3: Resource Gap for NSP 2014-2016
Maldives
**ARV guideline**

Early treatment initiation is associated with clinical and HIV prevention benefits, improving survival and reducing the incidence of HIV infection at the community level. The 2013 WHO Guidelines Development Group recommends that national HIV programs provide ART to all people with a confirmed HIV diagnosis with a CD4 count of 500 cells/mm$^3$ or less, giving priority to initiating ART among those with severe/advanced HIV disease or a CD4 count of 350 cells/mm$^3$ or less. It is also recommended to initiate ART in people with active TB disease and HBV confection with severe liver disease, all pregnant and breastfeeding women with HIV, all children younger than five years living with HIV and all individuals with HIV in serodiscordant relationships, regardless of CD4 cell count.

Given the low prevalence of HIV in Maldives is too low and with the vision of treatment as prevention and to avoid loss to follow-up, Maldives will adopt “test and treat” principle and continue delivering treatment and care services, and people are put on treatment as soon as they get positive for HIV.

**Challenges**

Lack of community based organizations, groups, or network of people working with key population groups, and lack of funding/resources to implement targeted interventions.