FUNDING REQUEST APPLICATION FORM
Full Review
June 7 2017 V1. MOZ

SUMMARY INFORMATION			
Applicant	Mecanismo de Coordenação do País Moçambique (Country Coordinating Mechanism, Mozambique)		
Component(s)	TB/HIV		
Principal Recipient(s)	Ministerio de Saude (MOH); Three Civil Society PR(s): FDC, CCS and ECOSIDA		
Envisioned grant(s) start date	January 1, 2018	**Envisioned grant(s) end date**	December 31, 2020
Allocation funding request	**$ 335,011,369** (**HIV** = $258,501,446; **TB** = $ 45,122,235 **RSSH**=$ 31,387,689)	**Prioritized above allocation request**	$ 141,941,877 (ART & RSSH)

IMPORTANT:
To complete this funding request, please:

- Refer to the accompanying ***Funding Request Instructions: Full Review****;*
- Refer to the Information Note for each component as relevant to the funding request, and other guidance available, found on the Global Fund website.
- Ensure that all mandatory attachments have been completed and attached. To assist with this, an application checklist is provided in the Annex of the *Instructions*;
- Ensure consistency across documentation.

Applicants are encouraged to submit a joint funding request for eligible disease components and resilient and sustainable systems for health (RSSH).

Joint TB/HIV submissions are compulsory for a selected number of countries with highest rates of co-infection. See the related guidance for more information.

This funding request includes the following sections:
Section 1: Context related to the funding request
Section 2: Program elements proposed for Global Fund support, including rationale
Section 3: Planned implementation arrangements and risk mitigation measures
Section 4: Funding landscape, co-financing and sustainability
Section 5: Prioritized above allocation request

SECTION 1: CONTEXT

This section should capture in a concise way relevant information on the country context. Attach and refer to key contextual documentation justifying the choice of interventions proposed. To respond, refer to additional guidance provided in the *Instructions*.

1.1 Key reference documents on country context

List contextual documentation for key areas in the table provided below. If key information for effective programming is not available, specify this in the table ("N/A") and explain in Section 1.2 how this was dealt with within the context of the request, including plans, if any, to address such gaps.

Applicant response in table below.

Key area	ANNEX	Applicable reference document(s)	Relevant Section(s) and Page Number	N/A
Resilient and Sustainable Systems for Health (RSSH)				
Health system overview	8	Relatório de Execução Orçamental e Financeira (REO) Sector da Saúde	pp. 6, 13, 19, 38-44	
	9	MOH (2014) Plano Estratégico do Sector da Saúde. PESS 2014-2019) (Health Sector Development Plan)	Pages 5-33,	
	10	WHO (2015) Mozambique WHO Statistical profile	Page 2	
	11	WHO, UNICEF, UNFPA, World Bank Group, and the United Nations Population Division. Trends in Maternal Mortality: 1990 to 2015. Geneva, World Health Organization, 2015	Sheet 1	
	12	National Plan for Health Human Resources Development 2008-2015	pp.1-14	
	13	World Bank Country Profile, http://data.worldbank.org/country/Mozambique	Sheet 1	
Health system strategy	14	WHO (2015) Scaling up community health services to save the lives of children in hard-to-reach areas.	Page 4	
	*9	MOH (2014) Plano Estratégico do Sector da Saúde. PESS 2014-2019 (Health Sector Development Plan #Annex 9	pp. xi, 38-50, 51-110	
	15	Government of Mozambique, (2015) Plano Quinquenal do Governo 2015-2019	p.6	
	16	Estratégia Nacional para a Promoção da Saúde. Maputo, 2015-2019 (National Health Promotion Strategy)	pp.6,13-16	
	17	Plano Nacional De Desenvolvimento De Recursos Humanos Para A Saúde 2016-2025 (National plan for Human Resources Development in the health sector, 2016 – 2025)	pp.49-87	
Human rights and gender considerations (crosscutting)	18	Baseline Assessment of Human Rights Programme in Mozambique 2017	pp. 5-31	
	19	Índice de Estigma de Pessoas Vivendo com HIV/SIDA Moçambique (HIV Stigma Index)	pp.24-30, 41-53	
	20	UNICEF (2014) Situational Analysis on Children in Mozambique	pp.56-79	
	21	Ministerio Do Género, Criança E Acção Social (2016) Perfil De Género De Moçambique. (Gender Profile)	pp.5-35, 38-40	
Disease-specific				
Epidemiological profile (including interventions for key and vulnerable populations as	22	IMASIDA (2015) - Inquérito de Indicadores de Imunização, Malária e HIV/SIDA em Moçambique (AIDS and Malaria Indicator Survey, 2015)	pp. 1-18	
	23	INSIDA (2009), Inquérito Nacional de Prevalência, Riscos Comportamentais e Informação sobre o HIV e SIDA em Moçambique (AIDS indicator survey, 2009)	pp. 4-7, 49-68	

relevant)	24	IBBS (FSW, MSM)		
	25	WHO, 2016. Global TB Report.	p.149	
	26	PNCT: Relatórios das Actividades Desenvolvidas durante o ano 2016. (NTP annual report of activities for 2016)	pp. 8, 16,17, 24-29, 33-39	
	27	Stuckler D, Basu S, McKee M, Lurie M. Mining and risk of tuberculosis in sub-Saharan Africa. American journal of public health. 2011;101(3):524.	p. 524	
	28	Serviço Nacional Penitenciário. Ministério da Justiça. República de Moçambique. Assessment of the Situation of HIV, STI's and TB and Health Needs in Prisons in Mozambique. Final Report. 2013.	p.7	
	29	WHO TB database http://www.who.int/tb/country/data/download/en/.	Sheet 1	
	30	EPP Spectrum Version 5.56, May 2017	MS Excel	
Disease strategy including interventions for key and vulnerable populations, as relevant)	31	PEN IV (2014-2019/20) (HIV Strategic Plan)	pp. 14-24	
	32	Programa Nacional de Controlo da Tuberculose. Plano Estrategico e Operacional 2014 – 2018. With updated targets for 2018 to 2020. (TB Strategic & Op. Plan)	pp.23-24	
	33	Plano de eliminação da transmissão vertical do HIV (2012-2015) - EMTCT Strategy	pp. 6, 8-28	
	34	Directriz Nacional Para Implementação do Aconselhamento e Testagem em Moçambique (National HTC Guidelines)	pp.18-36,42	
	35	World Health Organization. WHO treatment guidelines for drug-resistant tuberculosis: 2016 update. Geneva, Switzerland: World Health Organization; 2016.	pp	
	36	Stop TB Partnership, UNOPS. The Paradigm Shift 2016-2020: Global Plan to End TB. Geneva, 2015.	pp.34-35	
	37	Korenromp EL, Gobet B, Fazito E, Lara J, Bollinger L, Stover J (2015) Impact and Cost of the HIV/AIDS National Strategic Plan for Mozambique, 2015-2019—Projections with the Spectrum/Goals Model. PLoS ONE 10(11): e0142908. doi:10.1371/ Journal. pone.0142908	pp.2-6, 9-18	
	38	Estratégia Nacional de Saúde Escolar e dos Adolescentes e Jovens 2016-2020 (Health Strategy for Adolescents and Young People)	pp.12-20,24-39	
Operational plan, including budgetary framework	39	PEN IV (Plano operational) (National HIV Operational Plan supporting the Strategic Plan)	Requested interventions	
	40	PEPFAR SDS Country Operational Plan 17	pp.6-22,26-68,79	
Program reviews and/or evaluations	41	Mozambique TB profile Epidemiological Review: 2017	pp. 3-21, 15-26	
	42	2016 MISAU HIV/AIDS Annual Report		
	43	MOH HIV Desk Review 2017	pp.8-62	
	44	Global Fund Office of the Inspector General's Report	pp. 11, 15-17	
	45	Mozambique TB Epidemiological Desk Review: 2017	pp: 3-36	
	46	Haumba S, Munemo E. Programmatic Management Of Drug Resistant Tuberculosis Regional Green Light Committee (GLC) Monitoring Report 2015: Mozambique National Tuberculosis Control Programme. GLC 2016.	pp: 13 – 23	
	47	Updated Goals Model, 2017		

1.2 Summary of country context

To complement the reference documents listed in Section 1.1 above, provide a summary of the critical elements within the context that informed the development of the funding request. The brief description of the context should cover disease-specific and RSSH components, as appropriate, as well as human rights and gender-related considerations. As relevant, explain in particular how any gaps in key programming information/reference documentation, specified in Section 1.1 above, were dealt with within the context of the request. In case more updated information than the one referenced above through key reference documents is available, please summarize it here.

(MAX 2 pages per component)

SUMMARY

One of the top ten countries with high HIV and TB burdens, the Republic of Mozambique annually suffers 34000 TB deaths among PLHIV (WHO, 2016), ranking fourth globally. Investments in the health sector have succeeded in reducing maternal mortality from 762 to 489 per 100,000 live births and infant mortality by about 25% (UN Working Group Modeled Estimates 2005- 2015). Recently the Mozambican response halved the number of TB deaths and surpassed both the annual AIDS deaths to treatment and new infections to treatment tipping points which indicate progress towards eventual elimination[1]. HIV incidence reduced by 46%, from 153,869 in 2009 to 83,013 in 2016 and AIDS related deaths to 62,059 while initiating more than 250,000 on ART in 2016. Investments in the current planning period (2015-2020) promise high impact if health system constraints and programmatic gaps are addressed. This $335M allocation request balances high impact HIV and TB prevention, treatment and care interventions (as described in Annexes 29-36) with that of building resilient and sustainable health systems, while complementing government, UN, PEPFAR, and other partners funding. Essential AIDS and TB medicines required from the first semester of 2018 to guarantee continued treatment constitute about 70% of this allocation funding request. Eleven percent is allocated to RSSH and nearly 20% dedicated to preventing infections and removing human rights and gender barriers, with inequitably covered and vulnerable populations such as adolescent girls, young women, and key populations remaining a major focus. The above allocation request prioritizes access to treatment for patients already enrolled.

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DEMOGRAPHIC AND ECONOMIC DRIVERS OF THE EPIDEMIC

Bordering eight high prevalence countries and stretching 2,300 kilometers along the Indian Ocean on her eastern coast, the Republic of Mozambique is a low-income economy 799,380 km² in size. More than half (54.7%) of the estimated 27,128,530 million population lives below the poverty line, with 67.7% living in rural areas with poor infrastructure. Two-thirds of the population is 24 years or younger, mostly unemployed and dependent on the older third. (Instituto Nacional de Estatística [INE] & World Bank 2017). A poorly performing economy, low agricultural yields and the devastating disease burden influence Mozambique's ranking at 180 out of 188 in the UNDP Human Development Index. Life expectancy at birth is 54.4 years (INE 2017) and only 56% of adults are literate. Only three women and 12 men out of two hundred attain secondary education. World Bank growth forecasts of 5.2% for 2017 are promising, but high inflation and the Mozambican Metical's loss of 100% of its value between grant signing in July 2015 and May 2017 have kept disposable income from the poor, further fuelling the epidemics. For example, 30% of people living with HIV (PLHIV) initiated on ART are lost to follow up (LTFU) within 12 months, many for economic reasons. Nearly half of girls are forced into early marriages and

[1] PEPFAR (2013) Illustrative Country Scenarios for Accelerated Progress Towards an AIDS Free Generation; Granich et al. (2015) Trends in AIDS Deaths, Incidence and ART Coverage in the Top 30 Countries with the Highest AIDS Mortality Burden;1990– 2013;

pregnancies; many engage in sex work for economic reasons. Men migrate to South Africa and Swaziland for work, exposed and more vulnerable to TB and HIV infection.

HIV BURDEN, SOURCES OF NEW INFECTIONS AND EPIDEMIOLOGICAL TRENDS

The most recent data from the AIDS and Malaria Indicator Survey (IMASIDA 2015, Annex 22, pp.1-18) shows that an estimated 13.2% of people aged 15-49 live with HIV, including 15.4 % of women and girls and 10.1% for men and boys. Prevalence varies significantly by gender, age and geography. The total population living with HIV is estimated at 1,849,687, out of which 201,132 are children. Females comprise 982,839 (59.6%) of the 1,648,556 adult PLHIV, and males 665,717 (40.4%). (EPP Spectrum V.5.56, Annex 30, estimates based on IMASIDA). Prevalence peaks among women aged 35-39, while incidence is highest among adolescent girls and young women aged 10 to 24. For males, prevalence peaks between ages 35 to 39, while incidence is highest between ages 20 to 29. This implies possible sexual networking among older males and young girls and subsequent spread within marriages and other concurrent relationships, hence the 10% proportion of sero-discordant couples. These underscore the need to integrate interventions and target adolescent girls, young women and their male partners, intensify PMTCT with increased male involvement, and intensify Test and Start and partner follow up as described in section 1.2.

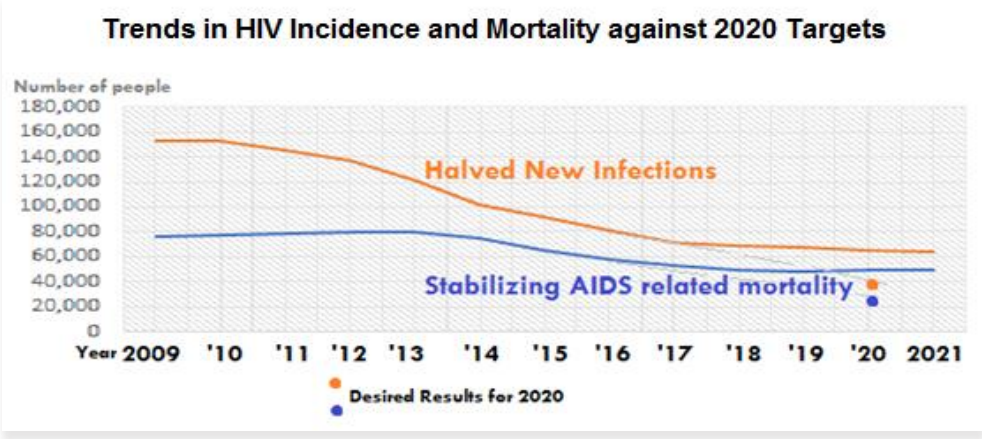


Figure: Trends in AIDS Related Deaths (including TB) and new infections; against desired impact by 2020 (Source: Spectrum 2016; Based on IMASIDA 2015 Data)

The increase in number of PLHIV amidst a drop-in incidence is partly attributed to improving survival rates following quadrupling of ART coverage from 218,000 to 990,000 between 2010 and 2016; and disproportionately high increases in PLHIV within provinces left behind in the response (Cabo Delgado, Inhambane, Niassa and Sofala). The epidemic remains mixed, with pockets of concentration amongst key populations. Current trends in reduction of mortality may miss the PEN 2014-2020 targeted 40% reduction (National AIDS Strategic Plan – Annex 31, p.22). Reasons for this include low retention rates, late discovery of seropositive status, stigma, few voluntary disclosures and others explained in IMASIDA 2015 (Annex 22). Based on disaggregated epidemiological trends the Goals Model (Annex 37) and sector reviews taking into account existing gaps and lessons learned (Annex 2) built an investment case for this funding request combining prevention (modules 1-7) and treatment modules (8,9) to target and intensify high impact interventions. Funding for discordant couples is provided by MOH/PEPFAR and miners through the World Bank.

Key Populations: Key HIV populations include Female Sex Workers, MSM, PWID and prisoners.[2] Prevalence among female sex workers is between 31.2% in Maputo, 23.6% in Beira, and 17.8% in Nampula (INS et al., 2013); about twice that of women in the general population, on average. A Modes of Transmission study conducted in 2013 revealed that 29% of new infections were among sex workers, their clients and men who have sex with

[2] Directriz para integração dos serviços de prevenção, cuidados e tratamento do hiv e sida para a população chave no sector Saúde.

men (MSM). PWID constitute another key population prioritized in this response with prevalence of 50.3% in Maputo and 36.8% in Nampula (INS et al., 2013). Prevalence among prisoners is 24%[3]. Coverage of key populations is inadequate, for each group. Modules 3-6 in this request define comprehensive prevention packages for each, linked to ART and other interventions.

Vulnerable Populations: Vulnerable populations include adolescent girls and young women 10-24[4], sero-discordant couples, miners and their partners, other mobile populations such as truck drivers, migrant populations and PLHIV lost to follow up. Young people aged 15-24 accounted for 28,631, or 34.5% of all new infections in 2016. Females 15-24 alone accounted for 17,603 (21.2% of all new infections). Their predisposing risk factors include behavioral, biological, sociocultural and economic issues (PEN IV, Annex 31, p.24). Again, only 63.5% of young people 20-24 are likely to be on treatment, compared to 89.1% of 45-49 (IMASIDA 2015, Annex 22 p.14). Populations left behind by the response include mobile populations (illegal migrants, foreign FSWs), and those in previously underprioritized provinces such as Cabo Delgado, Inhambane, Sofala and Zambezia. Section 1.2 of this request includes a differentiated HIV testing module targeting each vulnerable population and linking them with prevention and treatment interventions, including ART, STI, SRMCH, PMTCT, and TB. This prioritization however takes into account PEPFAR funding which covers the entire Voluntary Medical Male Circumcision (VMMC) need, and innovations such as PreP pilots for sero-discordant couples and some key populations.

Geographical heterogeneity of the epidemic: In 2015, the country's southern region still registered the highest prevalence, particularly Gaza Province (24.4%), Maputo Province (22.9%), and Maputo City (16.9%), partly explained by circular migration of laborers between these provinces, South Africa and Swaziland. Risk factors in the region include inequality, transactional sex, and casual partnerships. The central region including Sofala (16.3%), Manica (13.5%), Zambezia (15.1%) and Tete (5.2%) remains the second most affected.

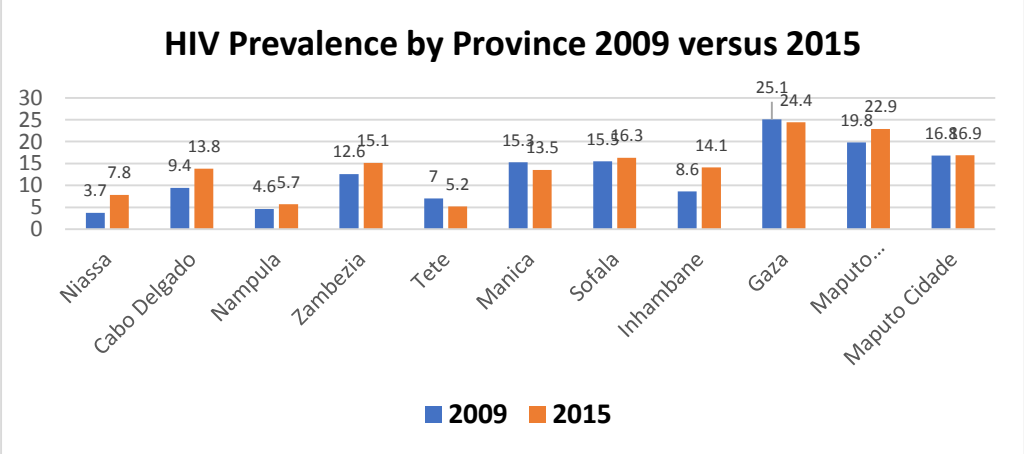


Figure: HIV Prevalence by province 2009-2015

It is a major transport corridor with numerous hotspots. Zambezia accounts for 391,697 PLHIV, representing 21% of the country's PLHIV population, while northern region's lower prevalence is partially explained by higher rates of circumcision. Increased incidence is partially explained by higher rates of multiple concurrent partnerships in Cabo Delgado for instance, at a time when most resources were allocated to other provinces. (IMASIDA 2015 Annex 22; SPECTRUM 2016, v.5.56 Annex 30) explain and illustrate reasons for provincial

[3] Relatório da Avaliação da Situação de HIV, ITS e TB e Necessidades de Saúde nos Ambientes Penitenciários em Moçambique (2013), Ministério da Justiça, INS, UNODC

[4] Given this high incidence and prevalence, low age of girls' sexual debut, direct correlation between bad economic performance and increase in transactional sex, and the modal overlap in age range between females 10-24 and female sex workers in Africa, it would be prudent to consider adolescent girls and young women 10-24 the main priority population in Mozambique.

variance. The above evidence and an analysis of the HIV Strategy's (Annex 31) impact and costs though the GOALS model created a differentiated investment case (Annex 37 pp.11-19). This has been adopted by PEPFAR's Country Operational Plan (Annex 40, pp 26-68). The above evidence, scenario modeling, annexed gap analyses and guidance from each intervention's strategic plan (Annexes 31-38) have informed the scale (coverage), scope (mix) of differentiated intervention packages for locations and populations addressed in Modules 1 to 11 of this funding request, taking into account populations left behind in all settings.

TUBERCULOSIS BURDEN AND EPIDEMIOLOGICAL TRENDS

Mozambique has a high burden for TB, TB/HIV, and MDR-TB with elevated absolute estimates for incident TB cases, incident TB cases among PLHIV, and incident MDR-TB cases. In 2015, WHO estimated 550 new TB cases per 100,000 population[5, 6].

TB and HIV Coinfection: In 2016 44% of patients notified with TB were co-infected with HIV – this percentage has been steadily decreasing in recent years from a high of 62% in 2011 (Mozambique NTP Annual Report for 2016, p. 33). The map in the Figure below shows 2015 TB notification rates and estimated number of people living with HIV by district. Some districts in Gaza, Sofala, Inhambane, and Niassa provinces have low absolute numbers of PLHIV and high TB case notification rates, demonstrating that a growing proportion of new TB cases and in HIV sero-negative patients. The National TB profile Epidemiological Review, (Annex, pp.3-21) and the Mozambique NTP Annual Report for 2016 provide in-depth analysis of TB epidemiological trends. TB/HIV co-infection among TB patients has declined slightly to expansion of HIV testing in TB clinics (increase in denominator) and improvements in testing and screening coverage within the programs. 96% of registered TB patients registered know their HIV status (above the WHO target of ≥90%) and 94% of TB patients living with HIV initiated ART in 2016. Still, challenges have been observed in the screening process with 67% of newly diagnosed HIV patients screened for TB, and only 50% started IPT (Mozambique NTP Annual Report for 2016, p. 34-35).

[5] WHO, 2016. Global TB Report.
[6] WHO TB database http://www.who.int/tb/country/data/download/en/.

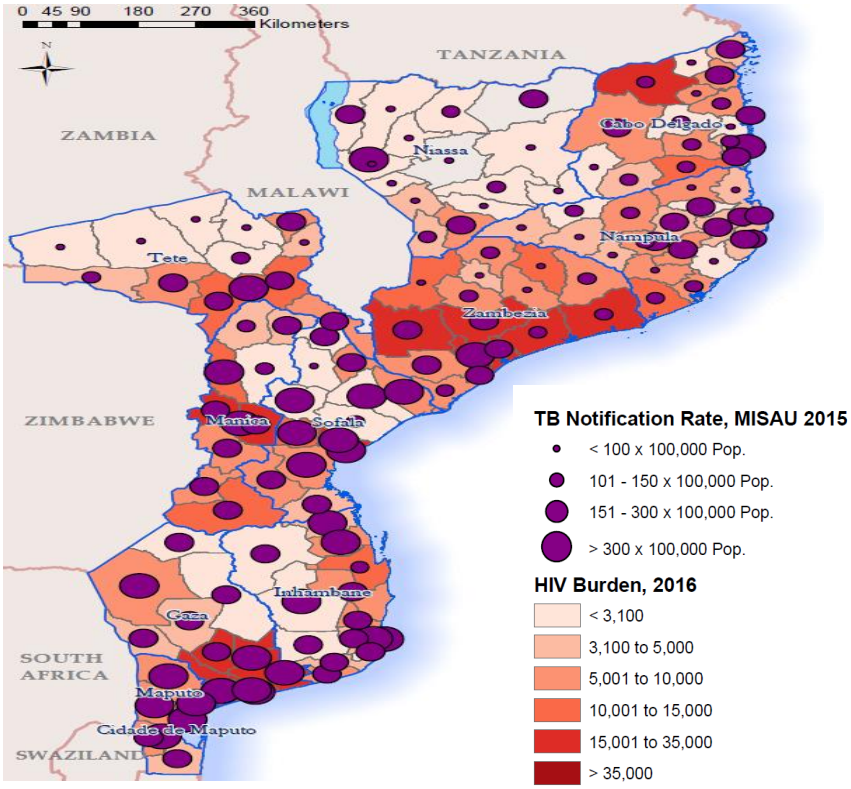


Figure: HIV Burden by District Versus TB Notification Rates (MOH, 2017)

The figure below shows trends between 2009 to 2015, of the proportion of TB cases who had been tested for HIV, the proportion of TB cases tested for HIV that were HIV positive, and the proportion of HIV positive TB cases who had initiated ART.

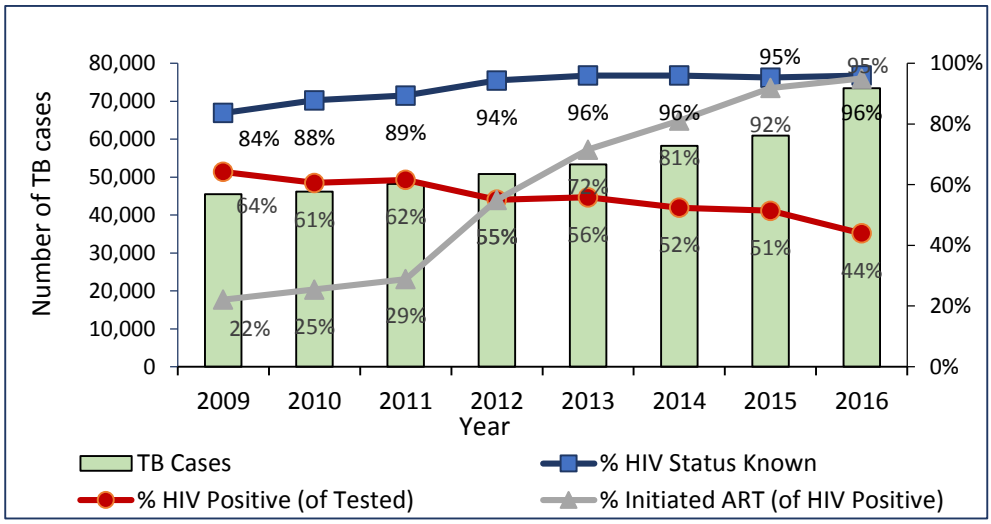


Figure: HIV testing, HIV prevalence, and ART initiation among TB cases, 2010-2016
(Sources: Mozambique TB Epidemiological Desk Review, 2017; and NTP Annual Report for 2016.)

Epidemiological Trends

Mozambique has a high burden of TB, TB/HIV, and MDR-TB with elevated absolute estimates for incident TB cases, incident TB cases among PLHIV, and incident MDR-TB cases. In 2015, the WHO estimated the TB incidence in Mozambique at a rate of 551 per 100,000 population (WHO Global TB Report, p. 149). The National TB Program (NTP) has significantly improved total TB case notification rates from 53,585 in 2013 to 73,470 in 2016 as noted in the figure below, with a sustained 88% treatment success rate in 2016 for DS-TB (close to the 90% target for the cohort initiating treatment in 2018). In 2016, the TB

notification rate in Mozambique was 278 per 100,000, which represents an increase of 17.2% from 2015 (Mozambique NTP Annual Report for 2016, p. 8).

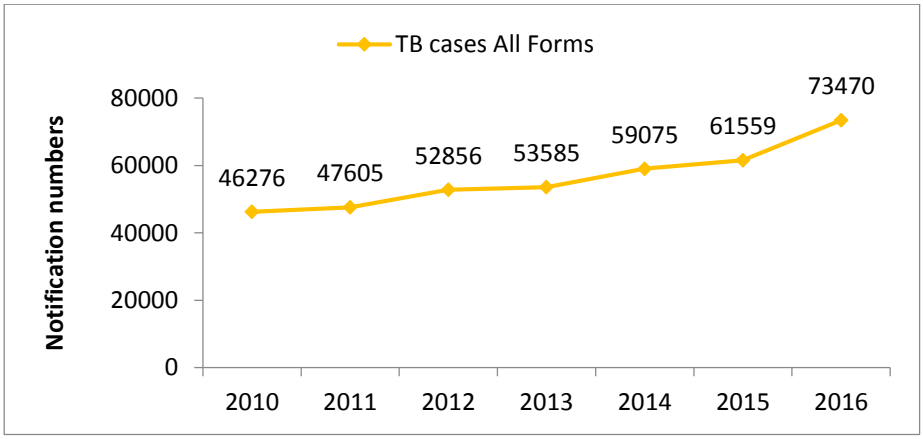
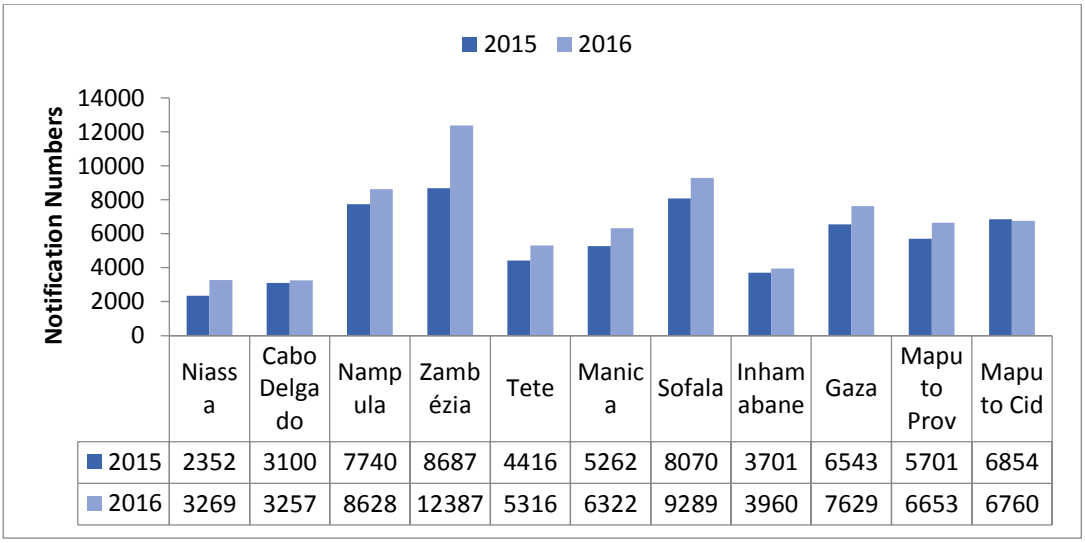


Figure: Trends in National All Forms TB Notification for Mozambique
Source - Mozambique NTP Annual Report for 2016, pp: 17

TB notification rates by province: Five provinces, namely Maputo City, Maputo Province, Gaza, Sofala and Manica are historically responsible for higher notification. Since 2014 the highly populated Zambezia and Nampula, as well as Niassa showed signs of increasing case notification, while Maputo City decreased slightly (Mozambique NTP Annual Report for 2016, p. 16-17).



	Niassa	Cabo Delgado	Nampula	Zambézia	Tete	Manica	Sofala	Inhambane	Gaza	Maputo Prov	Maputo Cid
2015	2352	3100	7740	8687	4416	5262	8070	3701	6543	5701	6854
2016	3269	3257	8628	12387	5316	6322	9289	3960	7629	6653	6760

Figure: Trends in Provincial All Forms TB Notification for Mozambique
Source - Mozambique NTP Annual Report for 2016, pp: 17

Further analysis is required to understand reasons for the decline in Maputo City, and gains seen in Central and Northern Mozambique. A TB prevalence survey co-funded by the 2015-2017 Global Fund grant will be completed in 2018, providing more precise estimates of TB prevalence and regional variation.

Drug Resistant TB: According to estimates based on the 2007 national TB drug resistance survey, 3.7% (2.4-5.0%) of new TB cases and 20% (1.9-37.0%) of previously treated TB cases have MDR/RR. Based on this data, the WHO estimated that in 2015 there were 2,800 (1,700 – 3,900) among notified pulmonary TB cases, new MDR/RR-TB cases for an MDR/RR-TB incidence rate of 26 (15-36) per 100,000 population. Case notification for drug-resistant TB (DR-TB) increased from 313 in 2013 to 911 in 2016. However, treatment success rates for MDR-TB remains low, at 47% for the 2014 cohort (Mozambique NTP Annual Report for 2016, p. 39). While MDR/RR-TB case notification is improving, primarily due to the expansion of GeneXpert and MTB/RIF testing (more than 60,000 cartridges were

used in 2016 in 63 GeneXpert machines), it continues to be substantially below global targets at 12.4% of the total 7,300 estimated MDR-TB cases each year in Mozambique and ~32% estimated MDR TB cases among all notified. An upcoming TB drug resistance survey will provide a better estimate of MDR-TB, particularly in retreatment cases where the confidence intervals from previous studies are very wide due to a small sample size.

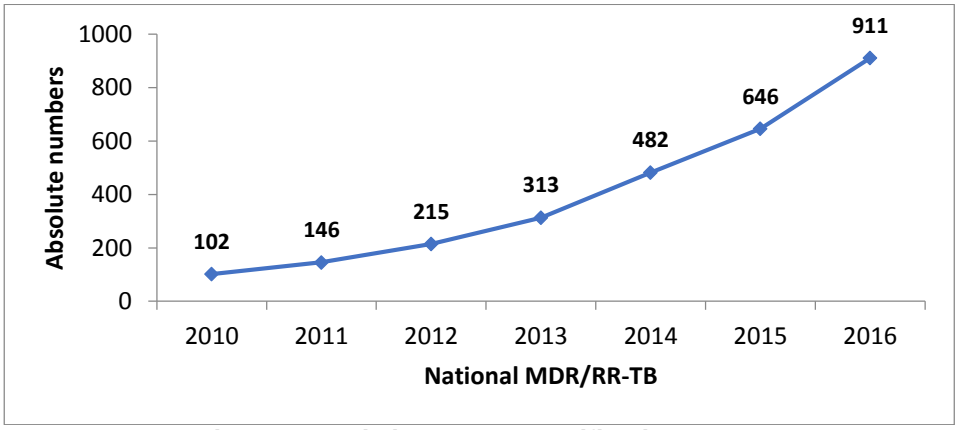


Figure: Trends in MDR-TB Notification Rates
Source - Mozambique NTP Annual Report for 2016, p. 37.

***Paediatric TB**:* The diagnosis of paediatric TB has more than doubled from 3,214 cases in 2011 to 9,254 cases in 2016 and the percentage of total TB cases notified increased from 7% to 13% during this time period (Mozambique NTP Annual Report for 2016, p. 27). This is within the WHO established range. Niassa and Zambezia provinces contribute highest to paediatric TB detection cases. As recommended by the WHO, Mozambique is rolling out the new TB paediatric formulations in 2017.

IPT: The number of children <5 who were contacts of index TB patients that were screened for TB and initiated on IPT has increased from 6,752 in 2010 to 19,635 in 2016 (Mozambique NTP Annual Report for 2016, p. 29). Based on the best data available we estimate that among newly enrolled HIV seropositive patients TB screening rates and IPT initiation rates have been increasing, at 67% and 50% respectively in 2016 (Mozambique NTP Annual Report for 2016, p. 34-5). The TB and HIV programs are working towards improved collaboration and joint reviews for TB screening and IPT in PLHIV.

Key Populations for TB: TB Key populations include miners and their partners; prisoners, and health care workers. **Mozambican Miners** comprise 36,121 workers who migrate annually to South Africa's industries. TB incidence in this population is estimated as high as 4-5% per year (Stuckler et al.). Gaza Province is home to many of these miners, their families, and one of the highest HIV prevalence rates in the country. Partners and sexual clients of miners have been estimated to number close to 300,000 within Mozambique. The World Bank is supporting a 5-year $40m USD (for Mozambique) Southern African Development Community (SADC) regional project on TB in the mining sector, offering TB screening and medical care in partnership with the MOH/NTP, legal landscape analysis of working conditions, occupational health. The 2013 assessment (pp: 7) indicated that 1.5% of **prison population** were diagnosed and reported with TB - a notification rate of 1,665/100,000, more than eight times greater than the general population. In 2016 during TB screening campaigns in the provinces 7,778 patients were identified as having presumptive TB, and 610 were notified with TB, 259 of which were sputum smear positive. There is significantly variability with regards to the percentage of prisoners that are screened for TB by province (Mozambique NTP Annual Report for 2016, p. 24-5). The number of **Health Care Workers** diagnosed with TB increased from 182/44,081 in 2014 to 376/53,670 in 2016 Consistent routine screening of all health care workers is improving, but is not fully implemented (Mozambique NTP Annual Report for 2016, p. 26).

RESILIENT AND SUSTAINABLE SYSTEMS FOR HEALTH:

The National Health System is decentralized across 11 provinces, 30 municipalities and 158 districts. District hospitals are overseen by the Provincial Health Directorate, while health facilities are overseen by districts. The Ministry of Health (Ministerio de Saude, or MISAU) is in charge of sector strategy and policymaking, while the TB and HIV programs develop disease-specific strategies and guidelines. Challenges in the health system include limited funding, insufficient infrastructure, an overstretched supply chain management system, and a critical shortage of human resources. Nine of ten Mozambicans live are underserved; with their nearest primary health care area more than one hour away. Overall, the ratio of beds to population is 1 to 1,038 persons, with substantial variation across the country.[7]

Human Resources for Health: Between 2006 and 2015, the country registered an increase of 86% in the health sector human resources (physicians, midwives, and nurses) from 25,683 in 2006 to 47,833 in 2015 (National Plan for Human Resources Development in the Health Sector, 2016 – 2025); with 7.8 doctors, 26.8 nurses, and a total of 100.2 health care workers (HCW) per 100,000 people. Still, human resources for health remain some of the most severely constrained in the world, with 1.74 health workers per 1,000 against the 2.5/1000 WHO recommended minimum.[8]. Together with uneven geographic distribution and limited supervision, there are an inadequate number of trained and competent HCW in all cadres.

The ratio of community or household level health workers to people ever initiated on ARVs is close to 1:400, making it difficult to trace a vast number of people on AIDS and TB treatment. Ratios in other countries range from 1:15 to 1:50. It is immensely difficult to routinely track patients and forestall LTFU under such critical conditions. The National Health Promotion Strategy (ENPS II, Annex 16 pp.13-15) now prioritizes community engagement as a core strategy in health service promotion.

Health Information Systems and monitoring and evaluation (M&E) are for the most part supported by external funding and find it challenging to provide consistent, timely, accurate and disaggregated health data due to inadequate knowledge of the use and improvement of electronic systems, especially at the district level; data quality shortfalls, duplication of patient data (different implementers use different electronic systems) between implementing and development partners; and little coordination with the Community Health Information System.

Supply chain and commodities management is fragile, hence PEPFAR provides substantial technical assistance (TA). The laboratory network to support HIV care and treatment requires significant investment to expand diagnostic capacity; at present less than 25% of health units have laboratories. Weak linkages between the health sector and community systems are constraining acceleration and impact.

Health Financing: Per capita health expenditure still stands at $42, which is the lowest in the region, and far below the WHO recommended minimum of $60. Challenges include absorption of non-commodity and non-RSSH funding, untimely reporting, and slow implementation of the decentralization strategy.

HUMAN RIGHTS AND GENDER RELATED BARRIERS TO ACCESS

The Global Fund supported a baseline assessment of human rights related barriers to access, uptake and retention in HIV and TB services in Mozambique (Annex 18 pp. 5-33),

[7] MISAU/MOH – DRH. Relatório Anual dos Recursos Humanos. Maputo, Abril 2014
[8] MOH/MISAU, 2016. WHO (2006) estimates 230 medical professionals per 100,000 people as a minimum threshold necessary to provide essential health interventions.

while the Ministry of Gender and Child Welfare has provided a gender profile of Mozambique in a study supported by the EU (Annex 21, pp.5-35). Gender issues were also part of a UN thematic review. Findings summarized here are addressed within the prevention and human rights modules. Catalytic funding has been ring-fenced to further amplify the human rights response. Despite progress, human rights and gender barriers prevail for key and vulnerable populations, including PLHIV, gay men and other MSM, transgender people, FSW and their clients, PWID, prisoners, miners and other mobile populations (including long-distance truck drivers), adolescent girls and young women, orphans and other vulnerable children. Duty bearers and right holders do not have adequate knowledge and capacity to alleviate them. These barriers include persisting stigma, discrimination, low access to health services; harmful laws, policies and practices; harmful cultural norms and practices related to gender, exploitation and unsafe working conditions.

Stigma, discrimination and access to health services: Deeply entrenched prejudice and discriminatory attitudes towards PLHIV, MSM, FSW and other key and vulnerable populations within health facilities, families and social settings make them fear accessing health services due to breach of confidentiality. Limited interventions have been implemented among healthcare workers. Awareness on PWID is very low in the health sector, and among CSOs. No harm reduction interventions are available for PWID resulting in routinely negative interactions with health care providers who consider them either criminals or mentally ill. Negative social attitudes persist among PLHIV, including instances of discrimination in employment, education and housing. The right to privacy cannot always be guaranteed due to weak facility infrastructure. Current data on TB-related stigma and discrimination lacks.

Harmful laws, policies and practices: Except for PWID, the legal and policy environment for key and vulnerable populations has improved, through a new HIV Law protecting PLHIV. The revised Penal Code no longer criminalizes the individual act of selling sex or same-sex sexual contact. Still, most PLHIV, sex workers and duty bearers including police are aware of the law or sensitized on human rights. They continue to harass, abuse and extort key populations. Drug use remains illegal with harsh penalties and imprisonment for drug users. Lack a public health or harm reduction policy makes it difficult to address PWID needs.

Legal literacy and access to legal services: Majority of Mozambicans are unaware of their rights and unable to identify rights violations; neither do they know where to seek redress. Some FSW still perceive their work as illegal, avoiding police even when victimized. Access to legal services for key populations remains insufficient. National human rights mechanisms, including the Ombudsman (Provedor de Justiça) and National Human Rights Commission, struggle to respond to concerns amidst internal capacity challenges. CSOs are not adequately funded to fill these gaps and operate in an unsafe environment for human rights defenders. Only 19 of the 84 prisons in the country have an internal health post, with few offering comprehensive HIV and TB services. Prison conditions do not meet minimum standards for the health rights of prisoners. Despite efforts, duty bearers do not sufficiently adhere to national and international standards and commitments for prisoners' health. TB screening is mandatory on entry to prison facilities, but data on the experience of prisoners with TB within facilities not offering treatment is not available.

Gender inequality, harmful cultural norms and practices related to gender: Economic inequity and disparities, low levels of empowerment and inadequate access to reproductive health services rank Mozambique a low 135 out of 155 countries in the Gender Inequality Index. Forty percent of Mozambican women give birth before the age of 20, while DHS 2011 indicated the rate of child marriages at 48%. Only three out of 200 women attain secondary education, a quarter the proportion of men. Communication strategies often require redesign in response to these gender disparities. Laws addressing gender-based violence, protecting property rights and the strategy to combat child marriage are still mired in conflict between statutory and customary law and are not well known by community

leaders, women and girls. Socio-cultural gender norms and beliefs regarding masculinity and femininity fuel stigma, discrimination and violence, compelling FSW and MSM to conceal their sexual behaviors and identities- and dissuading them from accessing HIV prevention and treatment services.

Unsafe working conditions and exploitation: The country has a sizeable population of migrant workers comprised mostly of miners working in neighboring South Africa. Their high rates of HIV and TB indicate challenging working conditions, poor health and safety. Women, children and adolescent girls including from neighboring Zimbabwe engage in sex work with little knowledge of their rights and no power to negotiate their own safety and health protection. Allocation and matching funds have been ringfenced to address human rights barriers to access, and their use described in section 2.1.

1.3 Past implementation and lessons-learned from Global Fund and other donor investments

a) List recent disease-specific Global Fund grants from the 2014-16 allocation period and summarize key lessons learned from their implementation.
b) Include lessons-learned from specific HSS grants or any HSS investments embedded in the disease-specific grant(s) from the 2014-16 allocation period as applicable.
c) Outline lessons learned from investments by other donors as applicable.

For each of the above, explain how these lessons learned are taken into account in this funding request.

(maximum 1 page per component)

[*Applicant response*]

The Global Fund's HIV and TB grants for the July 2015 to December 2017 allocation period were managed by dual track PRs: MISAU (MOH) and FDC on behalf of Civil Society.

- MOH signed two grants:
  - TB – Signed $ 40,618,490, of which $ 26,386,171was committed, and $ 13,928,353, representing 53% of the grant had been disbursed by December 2016.
  - HIV – Signed $ 280,341,620, of which $ 256,125,695 was committed, and $ 170,804,043 representing 67% of the grant had been disbursed by December 2016.
- Civil Society PR (FDC) signed a grant amounting to $ 22,026,026; out of which $ 13,893,976 was committed, and $ 9,329,861, representing 67% of the committed amount, had been disbursed by December 2016.
- The 2015-2017 MOH grants were heavily commoditized- approximately 84% of grants procure medicines and health products through the pooled procurement mechanism. The Global Fund is the major financing mechanism for key HIV/AIDS commodities including ARVs, CD4 and RTKs.

Main Achievements, Challenges and Lessons from HIV Grants:

The MOH HIV Grant performed well programmatically, meeting an average of 100% of grant-related targets, and was rated A2 by June 2016. It is well complemented by PEPFAR, GRM and other funding.

- **ART:** Coverage of ART has surpassed the Global Fund grant target for adults and children. However total coverage represents only 54% of PLHIV nationally. More than 990,000 people are currently on ARVs, and enrolments have quadrupled from 280,000 before the addition of Global Fund support. The Global Fund procures about 75% of ARVs. However, retention rates are the lowest in the Southern Africa region, and this is thought to be mainly due to the quality of services (OIG, Global Fund Report, 2017) and

high loss to follow up. A retention workshop in March 2017 emerged with recommendations to strengthen retention, and are included in PEPFAR's COP (Annex 40 pp. 55,56,63). This funding request seeks to increase community- and household-level adherence support interventions.

- **PMTCT**: Performance was good for PMTCT indicators. The programme surpassed targets for the percentage of pregnant women who knew their HIV status, with more than the targeted HIV-positive pregnant women receiving option B+ treatment. Though slightly improved from 64% in 2015, to 66% in 2016, the proportion of infants of HIV-positive mothers receiving a virological test for HIV within two months of birth was still moderate. Conventional PCR is widely available but faces challenges in turnaround time, linkage to care and commodity availability. EID POC is in the process of national roll-out with 130 machines pledged for procurement by PEPFAR and UNITAID in the current fiscal year.
- **Key and vulnerable populations:** The FDC grant provided prevention packages to more than 1200 MSM; and provided HTC to over 20000 sex workers with over 40,000 follow up contacts. The grant has also reached over 22,000 adolescent girls 15-19, including over 300,000 follow up contacts; 18,000 truck drivers and a further 18,000 miners. However, coverage of key populations has been below target, denoting need for intensification and funding. Modules 3-6 address challenges in providing them comprehensive packages.
- ***Resilient and Sustainable Systems for Health:*** From the embedded Round 8 RSSH grant, the main lesson was that low capacity of CMAM, laboratories, bureaucratic procurement processes, critical shortages in human resources as well as the weak information system are major risks to the grant. These and availing community health workers to ensure retention are a major preoccupation of the RSSH community module.
- **HTC:** Global Fund and PEPFAR support provided for about 7 million tests annually. More than 40% of test kits and reagents were purchased by the Global Fund, and differentiated guidelines developed. Challenges exist in HTC uptake, testing rates, coordination with the tuberculosis program, funds absorption and technical support to sub-recipients. These are addressed in module 1 of this funding request, and complemented by other partners.
- **HIV Prevention Strategy:** Results from IMASIDA and Spectrum estimates 2016 reveal a slower decrease in incidence within provinces previously not prioritized by some partner prevention programmes. There is need to cover the entire country with different intensity based on location and target population as described in section 1.2, under "geographical heterogeneity of the epidemic."

Programme Delivery and Management:

- ***Funds Absorption:*** Commoditization of the grants and procurement through PPM, while availing services and accelerating expenditure, have not improved grant absorption for the non-commoditized portion. Supervision visits, training, data quality assurance, procurements, and technical assistance. There is need to accelerate and decentralize systems and procedures.
- ***Quality-*** Related to the above, the quality of service has been a major risk to the grant as highlighted in section 3 on risks and mitigation measures, and addressed in RSSH module.
- Sub-recipient capacity on Global Fund grant management, principles, financial management and performance reporting is a risk and should be strengthened.
- ***Accountability:*** Strengthening and decentralizing financial management systems at PR level is required.
- **Implementation arrangements:** A single Civil Society implementer is incapable of managing the community services portfolio, hence the dual track financing mechanism

should be expanded, PR coordination and CCM oversight capacity strengthened. Two new CSO PRs have been added in the implementation arrangement.

- **Interventions funded by other donors:** The HIV response is 94% donor funded. PEPFAR contributes more than 60% of the funding for HIV/AIDS including the entire VMMC and viral load, and nearly all of OVC responses. Government funding primarily supports salaries, infrastructure, supply chain management and recurrent expenditure. The Supply Chain Management System (SCMS) is also funded by PEPFAR, UNITAID, GRM and others. In general, the HIV Program Desk Review (Annex 43 pp8-62) found that:

ART has had an impact and deaths have been reducing steadily since 2016. However, retention, as reported from sites with electronic patient tracking systems (EPTS) remains a challenge. Data quality needs improvement. The number and distribution of ART sites is inadequate.

For paediatric ART there is no broader use of LPV/r based regimens due to an inefficient logistic cold chain for LPV/r syrups; Current formulations are not paediatric friendly hence cold chain equipment should be procured. Other key lessons and recommendations responded to in this request are included in Annex 43 pages 8-62.

Systemic and Programme Management Issues: Gaps in the supply chain include storage, distribution and logistics management systems; funding has been sought to strengthen storage, distribution, and logistics management systems under the PSM module. In addition, high fluctuations in the Metical value to the US Dollar, the exchange rate risk-mitigation measures such as forward contracts; and holding funds in multicurrency accounts have been adopted as mitigation measures.

Tuberculosis Grants:

TB/HIV - The NTP and HIV Programs fully integrated TB/HIV care at a policy, district, and service-delivery level through the “One Stop Model”. Ninety-six percent of TB patients are tested for HIV, and 94% of co-infected patients consent to early initiation of ART. Of notified TB patients in 2016, 44% were co-infected with HIV and treatment success rates for drug-sensitive TB, which includes the majority of TB/HIV co-infected patients, are quite good at 88%. Despite these advances, there are still gaps ensuring that all HIV patients who complete their TB treatment are effectively linked to HIV routine treatment to continue ART. (Mozambique NTP Annual Report for 2016, p. 33-34). The percentage of newly diagnosed HIV-positive patients that are screened for TB is currently 67.1%, with significant variability by province. This needs to improve in line with the End TB Strategy of screening 90% of all patients. Isoniazid preventive therapy (IPT) rates among newly diagnosed HIV patients has increased significantly to 50%, but is still below the 90% target (The Paradigm Shift 2016-2020: Global Plan to End TB; and Mozambique NTP Annual Report for 2016, p. 34-35). This proposal will specifically try to address the shortcomings noted above.

MDR TB: The Green Light Committee Report from 2015 listed a of summary recommendations for the NTP and specifically for the MDR-TB program. In response, the NTP sought formal MOH approval for and obtained updated standardized regimens for MDR/RR-TB, XDR-TB and permission to start using STRs, and New Drugs (ND) including bedaquiline, delamanid, clofazamine and linezolid for eligible patients such as those with adverse side effects from injectables, pre-XDR and XDR patients. Subsequently the NTP ordered the new WHO-recommended drugs for short treatment regimens (STRs) for eligible rifampin resistant (RR)/MDR patients and NDs that will be phased into routine care starting in mid-2017. Previously, about 60 patients started STRs as part of a research protocol. Currently the NTP is updating the national PMDT/DR-TB guidelines and implementation plans to reflect these changes. However, treatment success rates for MDR-TB remains quite low, but the NTP anticipate that the introduction of STRs, clear guidelines, and the

provision of a comprehensive psycho-social community support package to MDR-TB patients will start to improve this rate.

Monitoring and Evaluation: The NTP recently implemented new drug-sensitive TB (DS-TB) and drug-resistant TB (DR-TB) registries, and laboratory registries for TB that conform with WHO monitoring and evaluation (M&E) recommendations. Currently, the NTP is also in process of transitioning to reporting facility-level data into DHIS2/SISMA, the new official aggregate data-management solution for the MOH that will provide better analytics and real-time feedback to each level of the health care system for both TB and HIV program management. This will also be the first time that the TB program will have access to facility-level data at the national level (previously only district-level aggregate data was reported to the NTP). These address shortcomings noted in the 2015 Green Light Committee report and from the 2017 Global Fund OIG Report.

Funds Absorption: During 2014-2017 the NTP was granted funds from the Global Fund to TB. This has allowed for the significant expansion of GeneXpert MTB/RIF testing, MDR/RR-TB diagnosis and treatment, and a more integrated approach to HIV/TB care/treatment and M&E systems. This investment resulted in significant overall improvements in TB case notifications. Despite these successes, the NTP did struggle with fund absorption, and executing all the activities planned for the 2014-2017 period (Global Fund OIG Report). Some of the fund absorptions issues were larger managerial challenges and others were related to procurement processes. The NTP is planning to significantly increase the management staff at the central and provincial levels so that we can have more individuals capable of executing the activities outlined in this proposal and the associated administrative tasks. Where appropriate, the NTP will look to sub-contract some of the high-effort activities that don't fall within the NTPs operational expertise to well-positioned partners but with adequate oversight. A recent example is the TB prevalence survey that is moving forward under the direction of the NTP but being supported by TA via KNCV/FHI360 and UCSF.

Infrastructure and Equipment for TB Diagnosis: Currently, 380 laboratories offer testing for TB via smear microscopy – but only a small percentage participate in a EQA system and 18% of those that do don't pass proficiency testing. Rapid expansion of EQA participation and improvements in proficiency testing is a core indicator for this grant. In the previous 3 years, the country has transitioned 320 of these from Zhiel-Neelsen to LED microscopy given the improved sensitivity with this platform. There are now 63 sites with a 4-module GeneXpert machine, those these have been plagued by maintenance/calibration challenges and underutilization (noted in OIG and GLC report). The NTP has significantly strengthened the GeneXpert network by developing service/maintenance contracts with a local company to ensure that machines are calibrated and functioning well. GxAlert, a mHealth remote test-monitoring platform has been expanded to 57 of 63 GeneXpert machines and a national connectivity contract will be finalized in 2017. The testing algorithm for TB was updated in the fall of 2016 to make Xpert MTB/RIF the first line test for all presumptive TB patients at sites with Xpert to encourage increased utilization of this platform and Xpert remains the recommended test for HIV patients, children, diabetics, miners, other immunologically-compromised patients, along with retreatment and other presumptive DR-TB cases. Despite the Xpert standardization and scale-up only an estimated 20-30% of all presumptive TB cases are being tested by Xpert, and in this proposal, the NTP aims to increase that to closer to 70%.

TB Service delivery and availability: 650 health facilities offer TB treatment and have TB registries. While the number of laboratories and clinics continues to grow, these only cover an estimated 45% of the country's population – expanding this coverage and improving the quality/capacity of these laboratories remains a priority for the NTP.

Treatment: The country continues to have low retention rates of patients on multidrug resistant TB treatments, despite increased coverage of interventions. Weak investment and

poor performance of community related interventions and long treatment regimen are partially behind the reasons. Currently, only 70% of HIV patients remain on antiretroviral treatment 12 months after initiation. Similarly, 38% of the cohort of patients initiated on multi-drug resistant TB treatment either die, develop drug reactions or are lost to follow up after 24 months. NTP will conduct systematic screening of all presumptive patients presenting in all health facilities and hospital wards, expand active case finding, improve infection control through infrastructure investments, expand diagnosis capacity; optimize supply of Gene-Xpert machines as primary tool for TB diagnosis; introduce systematic screening of key populations and adopt the shorter regimen for MDR-TB treatment.

Diagnosis of infant TB remains a challenge for the NTP due to low technical capacity for case detection and shortage of diagnosis tools. Pediatric TB notification case only increased from 11% in 2015 (6726) to 13% in 2016 (9254). This is because physicians are primarily responsible for TB diagnosis while RMNCH nurses are poorly involved. Capacity building of nurses is expected to increase infant TB diagnosis in SRMNCH sites.

Laboratory capacity and supply chain: Of the country's 778 labs only 380 offer TB testing using smear microscopy and 63 with GeneXpert. Microscopy and GeneXpert distribution is inadequate and still not aligned to the population size or TB case notification rate (MOH, 2017). Utilization rate for the 63 available GeneXpert machines is only 40% but improving (Global Fund OIG, 2017, p11). Problems include maintenance, communication of information about maintenance issues; human resource capacity; and lab conditions (unstable electricity, lack of air conditioning which is required for GeneXpert) – most of these issues are being actively addressed in a national connectivity and service/maintenance/calibration contract for GeneXpert machines. *Gaps in the supply chain* include storage, distribution and logistics management systems; funding has been sought to strengthen storage, distribution, and logistics management systems under the PSM module.

TB infection control not systematically implemented: The NTP Annual Report (2017: pp 26) indicate an increase on the number of health workers diagnosed with TB, from 182 in 2014 to 231 in 2015 and 376 in 2016. Under the current grant the NTP have planned a set of interventions for infection control at health facilities. However, implementation of the planned interventions has been slow and TB infection control remains inadequately addressed. As per The OIG Report (2017: pp 11), some of the health facilities visited had not undertaken any infection control assessments in 2015 as recommended by existing regulations and guidelines. At the community level, 40% of the community-based TB treatment supporters and activists funded by the grant used inappropriate protective masks for TB activities. Concerted efforts will be made to increase and monitor TB screening among healthcare workers between 2017 and 2020.

Challenges in implementation have delayed implementation of recommendations to strengthen the CCM and MOH. Technical assistance is required to better guide and coordinate all 10 MOH implementing agencies and accelerate implementation by the PMU, especially through this funding request in which two new PRs have been added and technical support of implementers revitalized as a core PR function. Monthly joint coordination and review meetings have now been instituted.

Implementation of community HIV/TB interventions has been suboptimal, non-standardized, and under-resourced, hindering impact, while coordination between MOH and FDC (Civil Society PR) has been inadequate; and will be systematically strengthened through contracts and technical support.

SECTION 2: FUNDING REQUEST (Within Allocation)

This section should describe and provide a rationale for program elements proposed for this funding request. Attach and refer to completed **Programmatic Gap Table(s), Funding Landscape Table(s), Performance Framework and Budget**, and refer to national strategy documents as applicable.

To respond, refer to additional guidance provided in the *Instructions.*

Ensure that the funding request as described in questions 2.1 and/or 2.2 meets the focus of application requirement as outlined in section 2.3.

2.1 Disease-specific funding request

Not applicable if the application is a standalone RSSH request.

Given the context and lessons learned outlined in Section 1,

a) Describe the disease-specific funding request(s), the rationale for prioritizing modules and interventions, and how these choices ensure the highest possible impact with a view to ending the three diseases and removing human rights and gender-related barriers to accessing services. For any priority modules for which gaps are difficult to quantify in the programmatic gap tables, explain here the barriers being addressed, the proposed interventions and the population or groups involved.

b) Explain how the funding request addresses the key funding gaps reflected in the Funding Landscape Table(s) for the disease program(s) in the current allocation cycle, and specify other actions planned to cover remaining gaps.

For funding requests including both HIV and TB components:

c) Describe the coordination of joint TB and HIV strategies, policies and interventions at different levels of the health system, including community systems, and expected impact and efficiencies from the joint programming.

Ensure the answer appropriately reflects the separate disease programs in addition to cross cutting modules where appropriate.

(maximum 4 pages per component)

[*Applicant response*]:

Rationale: Prioritization of modules in this funding request followed a country dialogue process including a broad range of stakeholders within the health, finance, education, governance (security, judiciary) agriculture and other sectors. The Global Fund country teams, WHO, UNAIDS, other UN agencies, PEPFAR, CDC, USAID, World Bank, bilateral agencies, private sector and Civil Society including key populations were engaged in this planning process. International and local technical experts in HIV, TB, M&E, Health Systems, Community/ civil society, and program management provided ongoing guidance to fourteen teams who worked over several months to bring together the application. A documentation of the process by the MCP (CCM) is appended to this application. For this application, critical elements that informed the selection of modules and related interventions include:

- Epidemiological and other key evidence on sources of incidence, geographical, gender, age heterogeneity and optimal allocation models for impact (MOT study, epidemiological and key population surveys, Spectrum (Annex 30) and Goals impact modeling (Annex 37) for Mozambique.
- Programmatic and funding gap analyses to determine unmet disease response need; and constraint analyses to determine RSSH strengthening need;
- Avoiding disrupted funding for medicines that may result in deaths, negative treatment outcomes, lower impact or health system weakening;
- Alignment to national strategies and policies
- Strategic focus on impact and cost-effectiveness of interventions;
- The adoption of differentiated prevention, treatment and care approaches based on global guidance; to determine the scope (variation, mix) and scale (scale up target);

- Complementarity with PEPFAR and other funding as described in the COP 2017 Strategy (Annex 40); additionality, non-duplication and catalysis.
- Addressing findings of latest baseline studies and thematic reviews on human rights and gender related barriers to accessing HIV and TB services; Key considerations for global commitments and national goals and targets set in disease strategies and the national development framework;
- Value for money considerations (economy, equity, efficiency and effectiveness)

Goals: An orientation towards impact underpins investments in this funding request. The AIDS Strategy and Operational Plan (PEN IV 2014-2019/20 – Annex 31, p. 14), TB Strategic Plan (Annex 32) and the UN Political Declaration of 2016, stipulate goals and objectives for the HIV and TB Programs; while the National Health Sector Strategic Plan (Annex 9, p.38) outlines corresponding health system investments. In view of the changing epidemic, these are adapted below:

- Reduce new HIV infections by 40% from approximately 83,000 in 2016 to approximately 50,000 in 2020.
- Reduce HIV-related deaths (including those of TB patients) from approximately 62,000 in 2016 to approximately 37,000 by 2020.
- Reduce the estimated rate of child HIV infections from HIV-positive women delivering in the past 12 months from 11.1% in 2016 to less than 5% in 2020
- Reduce TB incidence from 551 /100,000 in 2015 by 5% annually
- Develop a resilient and decentralized health system that provides quality, accessible essential health services, and reduces maternal and child mortality through reduced health worker to patient ratios.

Table: Summary of Modules included in Mozambique Funding Request

HIV Modules	Total	%
HIV Testing Services	11,205,427	3.34%
PMTCT	7,867,634	2.35%
Comprehensive prevention programs for MSM	2,886,614	0.86%
Comprehensive prevention for sex workers and their clients	5,197,996	1.55%
Comprehensive prevention for PWID	1,998,730	0.60%
Comprehensive programs for people in prisons	2,470,148	0.74%
Prevention for Adolescent Girls and Young Women	5,801,476	1.73%
Treatment, care and support	215,197,973	64.24%
Programs to reduce human rights barriers to HIV services	3,418,964	1.02%
TB Modules	**Total**	**%**
TB/HIV	424,952	0.13%
TB care and prevention	43,176,928	12.89%
MDR-TB	1,520,355	0.45%

RSSH Modules	Total	%
RSSH: Integrated service delivery and quality improvement	11,666,952	3.48%
RSSH: Human resources for health (HRH), including community health workers	2,642,240	0.79%
RSSH: Procurement and supply chain management systems	4,133,823	1.23%
RSSH: Financial management systems	2,689,355	0.80%

RSSH: Community responses and systems	4,041,903	1.21%
RSSH: Health management information systems and M&E	5,586,086	1.67%
RSSH: National health strategies	627,330	0.19%
Program management	2,456,484	0.73%

Matching/ Catalytic Funds

TB Modules		Time of Application
Finding Missing TB cases	$6,000,000	Currently
Adolescent Girls and Young Women	$5,928,788	Currently
reduce human rights barriers to HIV services	$4,700,000	At Grantmaking
Data Quality and Use	$3,000,000	At Grantmaking

Following is a summary of the rationale (justification) for each intervention, level of gaps to be covered under allocation (and above allocation funding where this exists), interventions and highlight of activity implementation approaches. Further details on each module are included in the budget and workplan, while gaps are summarized based on the programmatic gap analysis tables. The M&E framework for the grant is summarized in the Performance Framework accompanying this request.

1. Module: HIV Testing and Counseling $11,205,427

Rationale: As described in section 1.2, the most common cause of adult deaths in Mozambique remains HIV, with an estimated 1.8 PLHIV, and adult (age 15-49) prevalence of 13.2% with incidence increasing in some settings and populations (IMASIDA 2015). Knowledge of HIV status is still low, especially among males, with 30% of men ever reporting being tested, compared to 49% of women. While prevalence among key and vulnerable populations is high, the majority of new infections occur within the general population. The grant will intensify HTC, cascading into a package of integrated and comprehensive prevention treatment and care services that considers vulnerable, key populations and those left behind in the response. HTC will also act as the gateway to prevention programmes while catalyzing treatment uptake [9] In aggregate, about 8 million tests will be administered at all levels annually, with an estimated 30% being repeat tests. PEPFAR will procure at least 60% of test kits. The grant will procure the gap (See attached quantification), strengthen quality of testing, and build community capacity to expand testing. The Directriz Nacional Para Implementação do Aconselhamento e Testagem em Moçambique (National HTC Guidelines, Annex 34 pp. 18-33,42) outline protocols and approaches for differentiated testing targeting different populations and settings. The table below summarizes HTC differentiation in response to age, gender, data, geography and modes of transmission.

Interventions:

Differentiated HIV testing services at health facilities and communities: About 8 million differentiated HIV tests will be administered annually, with funding from different sources.

The grant will support the purchase of required Rapid Test Kits and related commodities - lancets, cotton, thermo-accumulators, alcohol, capillary tubes. MISAU will lead quality assurance efforts and be responsible for facility based testing, including outreach to sites near facilities, during immunization campaigns in high burden areas and provider/ client initiated voluntary testing and retesting based on informed consent. Three civil society Principal Recipients will intensify testing among key and vulnerable populations, and the

[9] WHO, Global Fund ATM, UNAIDS, and PEPFAR (2013), Treatment 2015.

other among the general population. Self-testing will be piloted by CDC and Vanderbilt University in Zambezia Province, beginning at pharmacies from October 2017 and will be scaled up if outcomes are supportive.

Table: Annual Estimated Numbers of Tests for Different Populations and Settings

Population Group	Number of tests/ year (millions)	Regions/ Places to be prioritized	Testing Methods	Responsible for implementation
In and out patients in high burden areas	1	Health facility	PITC	MOH
PMTCT (first test)	0.9	Health facility;	PITC (due to persisting quality reasons, and high ANC 1 coverage, testing at community level is limited for PMTCT)	MOH
Partners of expectant mothers	0.7	Health facility; community	PITC and Index Case testing at community/ home	MOH, CNCS, CSO
Adolescent girls and young women	2.5	Communities, frequented areas and facilities	PITC, Community testing	CSO, MOH, MOE
STI cases	0.3	Facilities	PITC	MOH, CSO
Discordant couples	0.05	4 priority regions	Community index case testing; PITC	CNCS/ CSO
FSW and men in communities around hotspots (multiple tests)	1	FSW hotspots in high prevalence towns	Community; Index case; PITC	CNCS/ CSO
Non-paying male partners of FSW	0.1	"	Community	MOH/ CSO
TB Patients	0.1	Facilities: All TB sites	PITC	MOH/ CSO
Prisoners	0.14	Prison facilities	Community, PITC	Prisons / CSO
MSM, PWID	0.05	Hotspots, Safe zones, MOH	Community; Index for partners, PWID	Civil Society
Others within general population	1	Pharmacies (pilot)	Self-testing at pharmacies; Community	CSO
Aggregate	7.84 Million			

Activities: The National HTC Guidelines (Aconselhamento e Testagem em Moçambique, Annex 34) including Test and Start have been developed with a view to improving quality and standardizing approaches. The grant will purchase support scale up of the quality assurance system and intensify community-based testing while strengthening the service delivery network.

Scale up quality assurance system: MOH will also improve the quality of testing by expanding proficiency testing. The Ministry will monitor implementation of this QA roll out. MOH will provide 33 software-installed tablets for mobile submission of standardized, traceable, timely and quality-assured testing data by the provinces through the dedicated MOH computer server. A desktop computer will be dedicated to HTC results processing and analysis in real time.

Intensify community-based testing: Civil society PRs and sub recipients will be responsible for community-based testing (including partner / couple testing, community outreaches, mobile and home-based. Civil Society PRs will recruit and build the capacity of at least 1000 additional lay counselors on differentiated testing and referral. Lay counsellors will refer and link patients to STI testing, diagnosis and treatment services, obtain feedback from facilities; and ensure patient tacking cards are completed correctly. They will refer youth and key populations to receive services from providers trained to be non-discriminating and to respect privacy. They will also provide refresher trainings to PLHIV, community leaders, religious leaders, PMT, godmothers, midwives and godparents during initiation rites. Those lay counselors will provide psychosocial counseling to clients testing HIV positive at the community level.

Strengthen community level services delivery network: As part of Community Systems Strengthening, MOH continues to define a minimum package of health services and messages to be delivered in the community setting (Guião de Bolso), and will expand and strengthen health, co-management and humanitarian committees in support of HTC and expansion of community based health services (family planning, HTC, GBV prevention, condom distribution and BCC) costed under the community systems strengthening module for RSSH. (Annex 16. Estratégia Nacional para a Promoção da Saúde, p6)

Expected Impact: Differentiated testing integrated with BCC, condom provision, ART and referral to other interventions will intensify prevention efforts; increase comprehensive prevention knowledge; connect more PLHIV to community level caregivers; contribute to increasing proportion of expectant mothers who know their HIV status from 93% in 2013 to 97% in 2020. These will contribute to the above incidence reduction goal.

2. Module: Prevention of Mother to Child Transmission of HIV (PMTCT) - Allocation: $7,867,634

Rationale: In recent years, Mozambique has achieved substantial progress in PMTCT. The program is currently extending the EMTCT plan 2012–2015 to 2020; with plans to offer more effective ARV regimens to 90% of HIV+ pregnant women and to reduce MTCT to <5%. The program has significantly expanded access to PMTCT—1450 facilities offered PMTCT in 2016 compared to 1213 in 2013. The number of facilities offering Option B+ increased from 534 in 2013 to 1148 in 2016, contributing to an increase in the proportion of HIV+ pregnant women receiving ART--50% in 2013 compared to 88% in 2016. The program has concurrently expanded access to early infant diagnosis (EID). 1344 health facilities offered EID in 2016 compared to 752 facilities in 2013. The estimated percentage of HIV-exposed children tested for HIV via PCR before 8 weeks of life rose from 19% in 2013 to 45% in 2016. The program is currently spearheading the national roll-out of EID POC with plans to have 130 POC EID machines in place across the country by the end of 2017. Other innovations have also supported achievement of PMTCT targets, including integration of family planning services in MCH, follow-up of HIV+ women in child-at-risk (CCR) clinics and implementation of universal treatment for sero-discordant couples (HIV+ partners of HIV negative pregnant and breastfeeding women).

Despite this, vertical transmission remains a major avenue for incidence HIV transmission, accounting for an estimated 11,262 infections or over 13% of all new HIV infections in 2016 (EPP Spectrum v.5.56, 2016). PMTCT coverage among the estimated expectant mothers living with HIV is estimated at 80.4% of the 119,169 mothers in need of PMTCT. While this is a significant improvement from 71.5% in 2013, near universal coverage is required to minimize transmission to newborns, which stands at 11.1% currently.

The MOH program review (Annex 43) identifies a number of core challenges to EMTCT in Mozambique including poor retention in care of HIV positive women, low rates of viral load suppression in pregnancy, and sub-optimal EID coverage and linkage to treatment. Other challenges include insufficient human resources, weak implementation of interventions targeting adolescent girls, delayed presentation to MCH services by mother-infant pairs, low retention within the MCH care cascade, low levels of partner/family involvement and weak community interventions. To address these challenges, integrated interventions are needed at the facility and community level. Community level actors (community and religious leaders, APEs, traditional medicine practitioners and traditional birth attendants) must be engaged to increase “penetration” of the program into the community and increase demand for and retention in PMTCT services. PEPFAR has invested heavily in Mozambique’s PMTCT program and through COP17 will invest $16,537,428, more than 60% of 2018 funding needs, to support the PMTCT program. These funds are in addition to PEPFAR expenditures on testing in ANC, treatment for HIV positive infants and support for EID commodities. PEPFAR has made significant investments in central, health facility and community based interventions to improve adherence and retention, improve the EID care

cascade, increase male involvement and integrate VL testing in ANC. Additionally, PEPFAR has invested more than $6.4 million USD to support the new mothers 2 mothers strategy, including training mentor mothers dedicated to MCH.

Interventions: Current strategies and interventions implemented in public PMTCT sites by NHS to improve retention in care and treatment focus on reducing waiting times in health facilities and improving quality of care through decongestion of health units; early pregnancy testing; expansion of services to peripheral health units, peer/ family approaches and strengthening psychosocial support services, as well as training and streamlining support groups.

MOH and partners will implement key recommendations of the national strategy for the promotion of adherence and retention to PMTCT and HAART in children. This will involve a review of the national communication strategy to include an adolescent interpersonal communication component in all training packages. Demand creation methods will include multimedia communication, peer to peer communication and community level outreaches. The program will reproduce material to promote retention on the PMTCT program and on HAART for children, aimed at health professionals, activists and families around the country. The MOH will organize training sessions on interpersonal communication at national level and ensure the inclusion of an interpersonal communication component in all packages of training of health providers at provincial and district level, particularly MCH, psychosocial support, testing, and other services.

Strategies for EID improvement will include ensuring access to EID including POC and prevention for children exposed to HIV. MOH also requests Global Fund support for EMTCT planning and engagement, critical commodities and ongoing integration of family planning and HIV services within MCH**,** including the purchase of contraceptives. Strategies to address barriers to increased EID coverage are addressed in the EMTCT strategy (Annex 33) and PEPFAR COP (Annex 40, p43.)

Expected impact: The program will seek to move towards elimination as stipulated in the country's 5-year development plan 2015-2019. PMTCT plan and the HIV/AIDS Acceleration Plan (2013-2017) have the following goals: (i) Reduce to less than 5% the MTCT rate; (ii) Achieve 90% coverage of more effective ARV regimens for HIV-positive pregnant women; (iii) Increase access to HAART to 80% coverage of eligible children until 2017; (iv) Increase retention in care for 36 months after the beginning of HAART to 75%. MOH is currently elaborating a new strategy for Elimination of MTCT of HIV and Syphilis. The new plan will focus on quality improvement, managing infections and increasing coverage. PEPFAR funds are dedicated to providing both community and facility-level support for increased uptake and retention within the PMTCT care cascade. Global Fund support will complement this investment with a focus on supporting development of an updated EMTCT plan, social and multi-media penetration at the community level and integrate Family Planning.

3. Module: Prevention programs for key populations- MSM - $2,886,614

Rationale: Only about 6% of the estimated 81,918 gay men and others having sex with men (MSM) are covered with comprehensive prevention programmes; majority with Global Fund and PEPFAR support. Yet the MOT Study 2013 and IBBS revealed evidence of overlapping sexual networks between key and general populations, which can reverse current gains in reduction of incidence if coverage for MSM is not assured. In providing the comprehensive package of interventions, there will also be need to address the human rights and gender related barriers to MSM's access to services; which also limit service providers' and planners' ability to increase coverage. The human rights catalytic funds module seeks funding to address barriers and reach more MSM. PEPFAR will support to provide services to 10,712, while the Global Fund will support efforts to reach and provide services to at least another 3,750 MSM by 2020.

Interventions:

- Community empowerment: Civil society and the MOH will review and guarantee the inclusion and participation of MSM in health sector planning and implementation mechanisms at the community level. This will include coordination and planning meetings at district level for a selected number of districts; to disseminate the strategy and capacitate community groups to coordinate with the health sector in order to ensure access to services and health commodities for MSM; report on stock-outs, stigma, discrimination, and plan outreaches.
- MSM representatives will be trained on advocacy and linked to health committees which plan to meet jointly with community-level workers for monthly reviews.
- Addressing stigma, discrimination, and violence against MSM and their partners: While UNDP will support a national advocacy meeting between MSM as rights holders and judiciary, police and other governance, justice, law, order and health officials as duty bearers, Global Fund will support follow up and review meetings between MSM and duty bearers in each of the provinces with a view to reducing stigma, discrimination, including literacy of rights and alleviating barriers to access. These and other forums will disseminate information on laws on Human Rights, Sexual and Reproductive Rights, and Stigma and Discrimination against Sexual Minorities through IEC, trained peer educator and debates broadcasted on radio. Community to health center referral materials will also be disseminated.
- Behavioral interventions for MSM and their partners: BCC messages will be integrated in the above meetings, alongside messages and referral to care and treatment of HIV, STIs, and TB specific for MSM.
- Condoms and lubricant programming for MSM, their partners will be availed.
- All MSM will be offered testing in hotspots and other venues, and those testing positive will be followed up, provided psychosocial support and cascaded through the Test and Start services through trained providers and peer networks. PEPFAR will continue to support harm reduction, diagnosis and treatment of STIs and other sexual health services, prevention and management of co-infections.

Expected Impact: Reduction in incidence by at least 40% among MSM; intensified prevention efforts among key, vulnerable and general populations through differentiated service packages.

4. Module: Comprehensive prevention programmes for sex workers and their clients $5,197,996

Rationale*:* Prevalence among female sex workers is between 31.2% in Maputo, 23.6% in Beira, and 17.8% in Nampula (INS et al., 2013); about twice that of women in the general population. 60.3% of sex workers living with HIV are above 25 years of age; while 14% are aged between 17-24 years. Less than 2% of women in Mozambique have attained secondary education. Out of an estimated population over 170,000 only 53% of sex workers are covered with services due both to barriers to access and delivery. The 2013 MOT study revealed that 29% of new infections were among sex workers, their clients and men who have sex with men (MSM). Reduction of incidence in Mozambique is significantly dependent on increases in coverage of comprehensive prevention packages and intensification of services for sex workers. Yet, many sex workers still wrongly think sex work is illegal despite changes in law, are still harassed or extorted by police (Baseline study on Human Rights and Gender Related barriers to access 2017); and still cannot access services. This module will seek to increase coverage from 53% to 63% of sex workers, while the module on human rights will seek to alleviate these barriers and reach another 27% of health workers.

Interventions: Funds requested under this module will seek to provide a comprehensive package of tailored services and commodities to at least 75301 FSW and their clients for

each of the three years; complementing PEPFAR's coverage of 31,056 FSW. This investment will increase coverage for FSW from 56% in 2016 to 63% by 2020.

Interventions:

- Community empowerment for sex workers: MOH and civil society will ensure inclusion and monthly participation of at least 125 sex workers / peer educators, in community-facility level planning, implementation, monitoring and review mechanisms around the country including ART committees and Co-Gestao (management) Committees. These are existing structures, but participation of key populations has previously been hindered by high transport costs and inadequate technical skills on how to influence changes in policies, budgets and attitudes; as well as inadequate legal and policy literacy.
- Address stigma, discrimination, and violence against sex workers: FSW will be supported to meet and advocate with judiciary, police, health workers and other governance, justice, law, order and health officials as duty bearers routinely and on special occasions such as Law Days. This is currently supported on a low scale by PEPFAR, in some districts. Global Fund will support scale up of such stigma reduction efforts through directive, negotiation, education and participative approaches. Efforts will also involve literacy on rights and alleviating barriers to access. These and other forums will disseminate information on laws on Human Rights, Sexual and Reproductive Rights, and Stigma and Discrimination against Sexual Minorities through IEC, trained peer educator and debates broadcasted on radio. Community to health center referral materials will also be disseminated. Global Fund support will also build the capacity of 15 sex workers per district to educate, defend and advocate on rights. Copies of provincial and district directories for clinical and community services as well as referral forms will be developed, translated and availed to sex workers, law enforcement, and medico-legal staff.
- Behavioral interventions for sex workers and their clients: Funds will be used to Standardize the contents of IEC and BCC strategies on prevention, transmission, care and treatment of HIV, STI, TB targeted specifically at Sex Workers and their clients, including knowledge on HIV prevention methods and where to obtain commodities and services (condoms, lubricants, PEP, PMTCT, MC, HTC, ART and others.)
- Condoms and lubricant program for sex workers: Between Global Fund, UNFPA, and other partners, condoms and related will be availed free of charge to all sex workers and their clients covered by the program.
- HIV testing services for sex workers and their clients: 500 FSW and other staff will be trained as lay counselors and TOTs to train another set and increase access to HTC at the community level and in hotspots in accordance with national guidelines, Test kits will be provided. HTC will be integrated with the ART program.
- Diagnosis and treatment of STIs and other sexual health services for sex workers, currently concentrated in three provinces, will be integrated with the SRMNACH program and scaled up countrywide. Syphilis test kits will be procured for sex workers, and those expecting babies will be referred to ANC clinics and cascaded into the PMTCT program.

Activities are further detailed in the Budget and Workplan appended to this request. PEPFAR will continue to support harm reduction, diagnosis and treatment of STIs and other sexual health services, prevention and management of co-infections.

Expected impact: Reaching 90% of sex workers will be key in reducing incidence by up to one third by 2020. Program Data will be collected annually to monitor comprehensive knowledge, condom use and other indicators.

5. Module: Comprehensive Prevention for PWIDs and their partners - $ 1,998,730

Rationale: According to IBBS (2013), 50.3% of PWIDs were HIV positive. PWIDs face significant barriers, including criminalization, while injecting drug use is considered a mental disorder by the health sector (Baseline assessment of human rights barriers (Annex 18) and while needle exchange is currently not accepted under the law or in the health policy. Of the estimated 4212 people who inject drugs, many are in hiding, while only 50 receive support so far. Most PWID are young. Less than 70% of young people are on ART compared to older patients at 89%(IMASIDA, 2015). Funding in this module has been requested to reach at least 91%[10] or 3833 of the PWID with a comprehensive prevention and harm reduction package by 2020 delivered through their trusted networks, while catalytic funding has been requested through the human rights module to address the barriers to PWID access to HIV prevention and treatment highlighted in section 1.2 of this request.

Interventions:

- Community empowerment for PWIDs: MOH and Civil Society will collaborate to guarantee PWID access to health and community services; by ensuring their representation in health management and ART committees, among others; train 275 peer educators in harm reduction and others; train 30 people on HIV testing for PWID.
- Addressing stigma, discrimination and violence against PWIDs: MOH is currently developing policy guidelines, IEC materials for provision of healthcare to PWID. These materials will be printed and distributed to all facilities and key population networks/ civil society service providers; and health workers trained on them. PWID will be sensitized n service availability and access. Ten focus groups will be formed across the country in major urban areas where injecting drug use is prevalent, comprising of law firms which will be facilitated to meet, draft and propose a new law upholding the right of PWID to HIV prevention services and commodities.
- Behavioral interventions for PWIDs and their partners: The directory of health services available to key populations will be sent by SMS, Internet and also distributed to PWID networks and service providers. IEC materials on integrated services have been distributed to limited areas, and these will be scaled up to all PWID hotspots following a national mapping. About 2000 updated copies of minimum standards for key population services will be distributed to health facilities.
- Condoms and lubricants will be offered free of charge to PWIDs and their partners
- Overdose prevention and management
- HIV testing services with linkages to ART and others will be offered at least twice a year to PWIDs and their partners. 50 lay counselors will be trained as peer educators and on how to test for HIV and track TB in PWID. Those testing positive will be followed up for provision on ART and those on HAART and TAT will be followed up for adherence and retention. PWID testing HIV negative will be followed up and provided guidance to remain negative.
- Prevention and management of coinfections and co-morbidities: PWID living with HIV will be provided OI management commodities and psychosocial support.
- Harm reduction: at least 1683 harm reduction sessions will be performed in communities.

If successful/ accepted from a legal, policy or public health perspective, funds will be reprogrammed for needle exchange programs.

Expected impact: Service delivery under this module will seek to increase coverage of PWID receiving a comprehensive package of tailored services from 4% in 2017 to 91% by 2020. The Global Fund will support the PWID directly, while providing a more enabling legal and public health environment through human rights catalytic funding - to complement PEPFAR's expected coverage of 50 PWID to be piloted for harm reduction. Activities are expected to steeply reduce infection among PWIDs. Program Data will be collected

[10] Partner field experience suggests the population size estimate for PWID is underestimated. This is plausible given the methodological limitations in IBBS size estimations.

annually to monitor comprehensive knowledge of prevention and use of preventive commodities by PWID, among other indicators.

6. Module: Prevention programmes for prisoners - $ 2,470,148

Rationale: As described in section 1.2, prisoners are a dual key population of both HIV and TB. HIV prevalence among prisoners is 24% (Directriz de Populacao Chave), 18% among prison guards, while TB prevalence is more than eight times that of the general population. Yet, only 19 of the 84 prisons have health posts and only 39% of prisoners currently receive prevention and treatment services.

Interventions: Services will be expanded from the current 19 to all 84 prison settings.

- Addressing stigma and violence against prisoners: MOH and Civil Society will monitor stigma and violence in prison settings, conduct at least two meetings a year to educate authorities on disclosure laws, human rights, stigma and discrimination reduction within the main detention facilities. IEC materials will also be distributed during these meetings. Prison warders and PLHIV on ART will be trained to support and accompany others on treatment within detention centers. Designated warders will routinely record instances of stigma and possible triggers to enable learning and design of appropriate advocacy and sensitization content tailored to each prison setting. Positive prevention meetings will be held to reduce stigma and discrimination against prisoners with HIV or TB.
- Behavioral interventions for prisoners: Some prisoners will be trained and IEC sessions held to disseminate prevention and treatment availability information; these trainees will continue providing prevention and treatment service availability messages within the prison setting. Quarterly BCC sessions will be held in each prison. MOH, Ministry of Justice and Civil Society will empower penitentiary employees to work as lay cadre activists for TB, HIV, STI, Malaria, sexual and reproductive health rights.
- Condoms and lubricant programming for prisoners: Latex male condom and lubricants will be availed to prisoners. Internal logistical management information mechanisms and policies will be strengthened to ensure continuous availability of supplies. Civil society and Ministry of Justice will be provided transport funds where required to conduct beyond last mile distribution into prisons.
- HIV testing services for prisoners: Prisoners and warders will be provided free testing services within or referred outside the setting where appropriate; provided TB screening at entry and routinely; and linked to ART services of positive. ARVs, TB, and STI testing and treatment services will be offered. ARV drugs will be availed within prison settings. Health facilities will conduct outreach to nearby prisons to monitor quality of service and patient conditions in a private manner. Suspected STI cases will be noted and nearby health facilities contacted to perform outreaches. Families of prisoners with TB will be tracked, screened and offered treatment if positive.

Expected impact: Service delivery under this module will seek to increase coverage for prisoners receiving a comprehensive package of tailored services from 39% in 2017 to 98% in 2020. The Global Fund will provide preventive and treatment assistance to 2249 prisoners, complementing PEPFAR's coverage of 21,188. Prisons and civil society implementers will collect routine data based using standardized tools for service use, stigma monitoring, and for the logistical management system.

7. Module: Differentiated prevention programmes for adolescent girls and young women $11,530,534 ($ 5,801,476 allocation and $5,728,788 matching funds)

Rationale: Within this module, Mozambique has strategically prioritized adolescent girls and young women. Section 1.2 states that adolescent girls and young women 15-24 have the highest incidence within the general population; and that 60% of PLHIV are girls and women. There are approximately 7.5 Million adolescents girls and young women aged 10-

24 years. However only about 1.4 Million or less than 19% of the population are being reached with comprehensive prevention packages, despite their contribution to the highest HIV incidence within the general population (21%). Only six out of 10 are likely to be on ART if living with HIV, compared to 9 out of ten for women in the 40-45 age groups and older. They inequitably face gender, sociocultural, economic, and human rights barriers to access, as described in section 1.2. Majority are not in school- only 3 in 200 complete secondary education, while four in 10 are likely to be pregnant before they reach 20 years. Many partners implement projects for this group at a low scale (less than 30%). These include projects funded by UN, Government of Sweden, PEPFAR (DREAMS) and Civil Society. Funding in this module will strive to reach at least 6 Million adolescents and young people.

Interventions: The Ministry of Health and partners have developed the Estratégia Nacional de Saúde Escolar e dos Adolescentes e Jovens 2016-2020, a health strategy for in and out of school, adolescents and young people, Annex 38) along global guidelines and standards. This document guides all partners programs, for adolescent girls and young women. Pages 21-29 of the document outline strategies, interventions and activities to promote access to services, create demand, monitor and evaluate the national response. It also outlines how all the ongoing programs are coordinated. Interventions include involvement of adolescent girls and young women in planning programs, and community engagement. Through the grant, more adolescent girls and young women will be involved in planning, implementation, M&E of health services, and in decision-making. More providers in communities and homes will be provided integrated training on high quality service delivery for adolescents. Use of mobile technology will ensure prevention, linkage and service availability messages are available to adolescents round the clock. In addition to community and facility strategies, adolescents will be reached in school and through mobile and current social media networks, home based and peer-led networks, cultural and entertainment nights and through icons with services outlined in the Estrategia de SEA. Mentoring programs for teenage girls and youth will be expanded; while they will be trained on leadership and against alcohol abuse. Other partners identify and train youth 10-24 in leadership, and against drug and alcohol abuse. Through these programmes, young people are offered integrated packages of SRH, HIV, STI, TB and GBV prevention services, and the avoidance of early marriages, unintended pregnancies, and linkages ART for young people. Alternative income generating opportunities are provided through the SMS BIZ (using mobile phones) and Geraçãoo BIZ. About 1 million girls and young women have been targeted with integrated SRH and HIV services, mentorships and counselling in 20 districts of Zambezia and Nampula. They also receive early pregnancy testing, support for uptake and retention in antenatal care and referral to critical services such as HTC, PMTCT, TB, and other testing, prophylaxis and treatment. Healthcare workers continue to be trained on provision of services to adolescents and young people, while confidentiality and privacy are key messages within Mozambique's health system currently. These programs will be expanded from 28% to 75% coverage of adolescents and young women beginning with high and medium prevalence areas.

Behavioral changes as part of programs for adolescent girls and young women: MISAU, Civil Society and partners will update and extend the SAAJ package of services which defines integrated services for adolescent girls and young women within and outside health facilities; and equip these facilities and community sites with products that young girls and women require. Ongoing successful programmes will be expanded, adopting new technologies including popular mobile, games, social media, entertainment platforms and school based activities. Peer-led advisory services through mobile phones and the "Nweti" project and effective IEC materials will be provided. The grant will be used to disseminate successful prevention messages in these projects to larger groups including illiterate girls, those with disabilities and translated across languages and dialects. in HIV prevention and treatment access advocacy. Community dialogue through parents, guardians, religious leaders, PMT, and midwives, initiation rites committees to continue addressing

SRH/HIV/STI/TB/GBV/PMTCT and continue disseminating the standard package of community activities; empowering activists and youth organizations.

Male and female condoms will be provided to adolescents and youth, in and out of school, as well as education (including negotiation skills) packages to promote their continued and consistent use will be offered free of charge to all girls, young women and their partners. Studies will be undertaken to map sexual activity and update appropriate condom distribution points.

GBV prevention and treatment programs: INAS, UNICEF, ILO, FDC, PEPFAR/VOC: FHI Covida, World Vision and others are currently implementing GBV programmes in 77 districts. Members of child protection committees and INAS will be empowered to monitor cases of GBV, ensure medico-legal and police linkages, refer vulnerable girls and their partners to PMTCT and provide services for girls and boys of different ages (10-14; 15-19 and 20-24). Services will also include socioeconomic protection for victims and potential GBV victims, empowerment of child service providers (Attorney, IPAJ, Police) to assist girls and young women victims of abuse.

Testing Services for out of school girls and boys: 2.5 Million girls and boys will be tested annually outside of the school setting, in line with current policies and strategies

Community mobilization and norms change will be part of behaviour change activities, while service providers will address stigma, discrimination, and legal barriers to accessing care through the human rights module. The SAAJ package will be revised to strengthen linkages and referrals between HIV, RMNCH, STI, OI and TB with programs for adolescent girls, and young women; implemented as per Annex 38, pp.35-39)

Keeping girls in school: Behaviour change interventions will integrate messages and monitor progress in keeping girls especially those most likely to drop out, in school, and expand community socioeconomic interventions in areas where girls are most likely to drop out. Other interventions for adolescent girls and young women are detailed in the workplan and budget appended to this request.

Expected impact: Reduced HIV incidence by 40% between 2016 and 2020; increased comprehensive knowledge of HIV prevention among adolescents girls and young women 15 to 24 years from 30.2% for males and 30.8% for females in 2015, to 75 % in 2020; Reduced unintended pregnancies among adolescent girls and women living with HIV integrated with the PMTCT and SRH programs. The appended performance framework describes indicators, modalities for collection and reporting of this module.

8. Module: HIV TB Collaborative Interventions $ Costed under TB

Rationale: The National TB Program has achieved high coverage of HIV services in TB clinics: 96% of TB patients registered know their HIV status and 94% of TB patients living with HIV were initiated on ART. The reported provision of initial TB screening and IPT has increased among new enrollees in HIV care. However, challenge remain regarding the screening of all new enrollees in HIV care for HIV and IPT provision. Additional efforts are also needed to test all TB patients for HIV and have all HIV+ TB patients started on ART. The NTP and HIV programmes will intensify efforts to find missing TB (and HIV) cases and additional co-infected patients by continuing the successful implementation of the integrated 'One Stop Model" services at health facilities and implementing an integrated community package. Catalytic/ matching funds have been requested to find missing TB cases at community level.

Interventions:
IPT is prescribed for PLHIV in the absence of active TB disease, and for children under 5 years of age who are close contacts of a sputum-smear positive index patient. Training on

IPT provision is integrated in all TB/HIV training. New service providers will be trained while active TB contact tracing and TB screening will be integrated with “HIV index case” outreach. Integrated training will include Maternal and Child Health, Pediatric TB, and Nutrition Training for maternal and child health nurses, pediatricians, and other health care providers; training all clinical providers on screening for TB, TB/HIV, MDR-TB, Pediatric TB, Infection Control, and treatment of latent TB with IPT; routine training on the testing algorithm for TB. The GeneXpert MTB/RIF will be expanded as a first-line test at health centers with this capacity and for all PLHIV and other eligible patients. During this grant period NTP will update and distribute guidelines and tools to strengthen implementation of the "One Stop Model" where TB/HIV patients are treated for both diseases by the TB and HIV nurse. The next grant period will include rollout in terms of refresher training of providers, and standardization.

TB Key Population Interventions: *Prisons*: MOH will expand TB and HIV screening from the current 19 to cover all 84 prisons (Test and Treat) using mobile vans with digital CXR, on-site GeneXpert Omni testing (This cost will be moved to the HIV program) as well as support sputum referral networks. ***Miners*:** The World Bank is supporting a TB and HIV package of interventions among miners and their communities in south region (Gaza and Maputo province), from 2016 to 2021. ***Health Workers*:** Systematic screening and training of HCW (including activists) for TB, HIV, and Infection Control principles (supported in part by PEPFAR via JHPIEGO, World Bank, but also by Global Fund). Screening among healthcare workers will be included as a key performance indicator for the head of each health site and monitored routinely through DHIS2. ***PLHIV*:** Intensified case finding activities via partners.

Expected impact: Increased TB case finding among PLHIV and TB/HIV co-infected patients; improved access to life-saving anti-TB treatment and ART; Increased TB case finding within the community; and other settings; Reduced morbidity and mortality among TB/HIV co-infected patients.

9. Module: HIV Care and Treatment - $ 215,197,973

Rationale: Less than 55%, or 990000 PLHIV are currently on ART at a time when the extended HIV Strategic Plan (PEN IV) and new treatment guidelines prioritize aggressive approaches to scale up Test and Start in 2018. The WHO-recommended “Treat All” approach, is being phased in since August 2016 and will be rolled out nationally from 2018. Treatment guidelines are being amended to reflect this change. PEN IV (Annex 31) targets 80% of PLHIV for treatment by the end of 2020. PEPFAR’s COP (Annex 40, p.21) maps treatment coverage by district. Under current arrangements, the number of PLHIV on treatment is increasing by an average of about 16,700 each month, while the laboratories conduct viral load tests for about 37% of patients ever on treatment, annually.

Interventions and activities:

- **Differentiated ARV therapy service delivery**

ARVs for more than 297,838 PLHIV, including 21,750 children will be procured with PEPFAR and other support annually, while the balance for 871,078 including 63,611 children will be covered under the allocation amount. PEPFAR has partnered with MOH to evaluate data collected during their Test and Start readiness assessments. This data, combined with other Ministry datasets, is providing site-level information on human resources and physical infrastructure needs. A consolidated and prioritized list of system investments is allowing PEPFAR-Mozambique, MOH and the Global Fund to define a balance between scale up and health systems investments. Test and start will be implemented and optimized through differentiated service delivery models (6 months’ clinical consultation, 3 months’ ARV distribution, family approach expansion, and revitalization of the community level adherence support system through PEPFAR support. ART distribution will be expanded to include non-ART clinics while ART provincial committees will be strengthened to respond to 2nd line ARV needs.

This Funding Request proposes to guarantee uninterrupted supply of ARVs for 807,467 adults and 63,611 children through 2020. Funding availability, the need to invest in improved retention, (including through research to understand and address specific[11] reasons behind high loss to follow up in Mozambique) and concurrent health system strengthening needs have been considered while reaching the decision to maintain patients on ARVs using Global Fund support.

Funding for additional patients newly testing HIV positive between 2018 and 2020 and that will require ARTs has been requested under the Priority Above Allocation Request (PAAR). The program requires and will institute improvement in treatment including introduction of more efficient FDC regimens, rationalized scale up of monitoring, drug surveillance, and markedly improved retention through adherence support at the household level, with linkages to facilities.

- **Treatment monitoring- drug resistance surveillance:** Mozambique has the highest LTFU rate in the region. The generation of scientific evidence will be critical. The US Government will support HIV drug resistance surveys (acquired and transmitted) and qualitative studies. Pharmacovigilance will be supported through this grant.
- **Treatment monitoring - viral load:** Viral load testing was launched in Mozambique from July 2014 and it is being implemented routinely since 2016 in test and start districts. PEPFAR will support routine VL monitoring in conjunction with the Test and Start program. While CD4 will still be offered at startup and gradually reduced, the number of patients receiving viral load testing will be scaled up gradually from the current 35% to 50% and higher. A viral load scale up plan is currently being developed to guide implementation, scale up, staffing and quality assurance processes. However, there is still need to continue biochemistry tests as part of laboratorial follow up of patients, scaling it down gradually.
- **Treatment adherence, counseling, psychosocial support and positive prevention:** An enhanced community level retention package patient tracking mechanism will be introduced to prevent LTFU, hence reduce deaths, maintain the effectiveness of first-line regimen, and reduce costs.

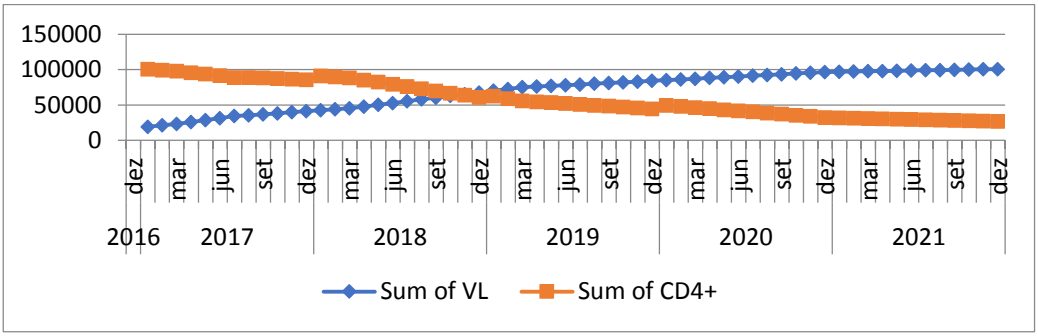


Figure: A summary of the Viral Load scale up projections and scale down of CD4 based on increasing laboratory capacity.

PEPFAR will support the deployment of m-health platforms for patient messages and defaulter tracing, pilot the basic food package approach and continue to support various models of PLHIV peer-support i.e., community level, Mothers-to-Mothers support groups, GAAC's adolescent and pediatric support groups, and *Pais e Cuidadores*, Parents and Caregivers). The Global Fund grant will support the training of additional household level health workers, mostly PLHIV who have been in the program for three years or longer on adherence support, patient tracking, and psychosocial support. This will involve studying and tracking the patients most likely to be LTFU at the household level through a dedicated lay cadre specially attached to each patient.

[11] Some reasons for non-adherence and high LTFU provided by: Unge, Södergård, et al. (2010) Long-Term Adherence to Antiretroviral Treatment and Program Drop-Out in a High-Risk Urban Setting in Sub-Saharan Africa: A Prospective Cohort Study. PLoS ONE 5(10): e1361 doi:10.1371/journal.pone.0013613) some studies have found that young, single people with post-secondary education are also more likely to default (Uzochukwu et al. (2009) determinants of non-adherence to subsidized anti-retroviral treatment in South East Nigeria. Health Policy Plan. 2009;24:189–96. Pub Med

Expected Impact: The proportion of PLHIV receiving ART increased from 54% in 2014 to 80% in 2020.[12] Increased ART retention rates from 70% at 12 months in 2016 to 80% in 2020; Reduction in mortality and incidence by 40% each by 2020. A performance framework appended to this document provides Indicators, measurement and means of verification for this module.

10. Module: Human Rights - $3,418,964 (Ring fenced matching funds 4,700,000)

Rationale: Human rights and gender barriers to HIV services exist for key and vulnerable populations, including PLHIV, gay men and other MSM, transgender people, FSW and their clients, PWID, prisoners, miners and other mobile populations (including long-distance truck drivers), adolescent girls and young women, orphans and other vulnerable children. The studies highlight capacity gaps among duty bearers and right holders to address and alleviate these barriers since human rights approaches are relatively nascent concepts to stakeholders. (Annex 18, pp.5-31). Identified barriers include persisting stigma, discrimination and access to health services; harmful laws, policies and practices; harmful cultural norms and practices related to gender, exploitation and unsafe working conditions. These are highlighted in section 1.2 of this document. The below activities are indicative, and partly inform the ring-fencing of funds for human rights activities. Catalytic funding will be sought during grant-making.

Interventions:

Stigma and discrimination reduction: Government, CSOs and partners will review the policies (HIV strategy of public sector in the workplace, HIV policy for the private sector), develop brochures and training manual; reproduce and disseminate it; IEC materials dissuading discrimination in the workplace will be reproduced; policies and materials will be translated into the 10 local “official” languages and conduct awareness and sensitization and community level. Conduct de next stigma and discrimination index.

- **Legal literacy ("Know Your Rights"):** Empower trainers/lecturers (inspectors of public institutions, focal points of HIV, Human Resources managers and representatives of trade unions, national human rights Commission, Office of Ombudsmen) human rights, stigma and discrimination; Empower community agents (Paralegals and Community Leaders) to disseminate messages about human rights, stigma and discrimination and referral of victims; Perform supervision and support to GAACs for inclusion of subjects on human rights, stigma and discrimination in their IEC materials; Conduct lectures for employers (Advisory Board of Cabinet, Responsible for central, provincial level, Steering Boards, Provincial Government, district, District Advisory Councils and Private Sector; and general public; CSO will conduct educational campaigns on human rights, stigma, discrimination and GBV using the media (TV, radio, newspaper), theater, and mobile telephony engaging the participation of celebrities like "role models" in the fight against stigma and discrimination; Maintain and monitor the complaints mechanism; disseminate strategy and policy tools.
- **Important actions will be to empower HIV and TB Key populations with information on their rights and responsibilities**.
- **Training health care providers on human rights and medical ethics related to HIV and HIV/TB:** Produce a human rights package (law on protection of PLHIV, health protocols, charter of users ' rights and duties, professional ethics, law of providers when they infect, and other content while strengthening the issue of privacy, confidentiality, equality, discrimination and health impact) for inclusion in all formations and form trainers; Reproduce material of IEC to prevent discrimination among health professionals; and implement programs to ensure safe working environment and conditions in the work place.
- Implement a discrimination index at the medical centers to assess the constant human rights violations of Key populations infected by HIV and TB.
- **Sensitizing lawmakers and law enforcement agents:** Advocate together of parliamentarians (Republic Assemblies, provincial and municipal), institutions of Justice,

[12] New spectrum model targets currently have the country reaching 79% coverage in 2020, while PEN IV aims for 80%.

Police, and prison staff for greater sensitivity and speed in the Affairs of TB, HIV, human rights, stigma and discrimination and gender-based violence through four main behaviour change approaches: education (lectures); directives (regulations and advisories from superiors); negotiations and participatory approaches.

- Capacity building of Police and Justice Officials to fight stigma and discrimination in their respective workplaces.
- **Improving laws, regulations, and policies relating to HIV and HIV/TB:** Advocacy and lobbying parliamentarians and Ministers of health and Justice, to the ratification of the Convention on Social and cultural rights as well as other relevant international treaties aiming to promote an environment free of stigma and discrimination and advance prevention, treatment and care; advocacy for the implementation of penitentiary policy in accordance with the new International Standards ' improvement. A Monitoring and Evaluation system at all levels should be put in place to support data collection, and the development of a national monitoring system of human rights. Equipment will be purchased as well as technical staff trained at all levels to collect data from the national level and to report to the national system.

- **Reducing HIV-related gender discrimination, harmful gender norms and violence against women and girls in all their diversity:** Conduct lectures to community leaders, religious, PMT and others to reduce standards, practices and customs that are harmful to the genus as well as traditional practices that endanger HIV infection women, girls, men and boys; Review, reproduce and distribute IEC material sensitive to gender (women and girls/men and boys); expand SRHR programmes for girls in particular in rural areas; Empower vulnerable women, TB/HIV and or victims of violence through income generation projects; Implement action research on harmful practices for girls and women on SRHR; Support expansion of services of prevention and protection of GBV; Support (finance) vulnerable women, TB/HIV and or victims of violence in income generating projects, conduct the next gender index.

Expected impact: Increased access to HIV Services by key and vulnerable populations; reduced infection amongst key and vulnerable populations; increased access to health rights and legal protection services by 2020.

Human Rights Matching Funds interventions have been allocated at $7.4M ($3.4M from Human Rights Module and $4.4M for stigma and discrimination reduction integrated into key population modules). Results of a Global Fund supported baseline study on human rights barriers to HIV have will soon be finalized, and the evidence will inform prioritization of interventions for matching funds. This funding has been ringfenced, and programming for human rights matching funds will be performed during grant-making.

Tuberculosis

The NTP notification targets for the NFM in Mozambique were set at a very ambitious level. Nevertheless, under the current grant the NTP has achieved encouraging results for DS-TB, by significantly increasing case notifications and meeting 96% of the 2016 program annual target. The treatment success rate has increased to (88%) and is on track to reach the 90% target by 2020, as recommended by WHO. The TB/HIV collaborative interventions show good performance with 96% of TB patients tested for HIV, and a decreasing TB/HIV co-infection rate, at 44% in 2016, and 94% of TB patients living with HIV were initiated on ART. The number of MDR-TB cases detected has shown an upward trend reaching 911 MDR-TB Patients initiated on treatment in 2016. However, this is only 33% of the estimated MDR-TB patients (2,700) presenting with MDR-TB among the annual notified PTB patients. Treatment success rate of MDR-TB patients in 2016 was 47% while the (international) target is 75%.

The main challenges to reach effective epidemic control are: low case detection rates for DS and DR-TB, weak laboratory capacity, weak lab sample transportation and referral systems, and limited community involvement and linkages. Gains achieved with previous and current GF grant investment will be sustained and further strengthened to: 1) increase case detection through broader community involvement, awareness raising, contact tracing, FAST screening, demand creation and health facility engagement; 2) expanding availability and use of digital CXR for screening in addition to symptom screens; 3) scale-up GeneXpert as the primary diagnostic test for TB in order to expand access to quality diagnosis for DS-TB and DR-TB; 4) strengthen the lab sample referral and transportation system; 5) expansion of first- and second-line drugs sensitivity testing (LPA and culture) for RR-TB patients; 6) increase MDR-TB treatment success by provision of the short treatment regimens in combination with patient and clinician adherence packages, as well as strong community enabling and support packages; 7) accelerate and ensure correct introduction of new TB drugs (bedaquiline, delamanid, clofazimine, linezolid) for treatment of patients with adverse drug effects to injectable or with (pre-) XDR-TB; and 8) target the most populated, heavy disease burden districts and key population (TB contacts, incarcerated population, miners, health workers, PLHIV and infants); 9) continued support for digital TB surveillance systems including electronic recording and reporting for aggregate and patient level data using DHIS2, OpenMRS and improved laboratory connectivity solutions in order to inform prioritization, monitoring and decision-making. These are aligned with the “High-impact TB Interventions” described in the Global Fund’s Tuberculosis Information Note. Coupled with the activities and interventions proposed in the application for Catalytic Funds this application will lead to epidemic control of TB in Mozambique.

Prioritized modules for the TB component under the “within allocation funding” request, are the following: DS-TB Care and Prevention; TB-HIV Collaborative Interventions; MDR-TB and Program Management. The table below summarizes costs and allocations as a proportion of total funding available to the country for HIV and TB.

TB Modules	Total ($)	% of allocation
TB/HIV	424,952	0.1%
TB care and prevention (Including medicines)	43,148,851	12.9%
MDR-TB	1,520,355	0.5%

Matching/ Catalytic Funds

TB Modules		
Finding Missing TB cases	$6,000,000	

11. Module: TB Care and Prevention **$ 43,148,851** (Including $17 million for essential medicines)

Rationale: *gaps, issues, lessons and strategies*
In Mozambique low TB case detection, estimated at 38% for 2015 by the WHO, continues to fuel the TB epidemic. Programmatic and operational challenges affecting and limiting the country's ability to diagnose DS-TB and MDR-TB are closely linked to: limited laboratory network, limited availability of diagnosis technology (GeneXpert, first and second-line DST/LPA, chest X-ray), very limited effective and timely lab sample collection and referral services. Besides that, there is shortage in number of trained health and community workers and low investment in awareness raising and community demand creation efforts to promote effective TB care and treatment seeking behavior. To facilitate rapid diagnosis this grant proposes to expand and improve the testing capacity of the national laboratory network, and to allocate more than twice the amount for DS and DR-TB medications than the prior grant. The package of service to be implemented at community level include IEC for demand creation; active case finding; contact investigation (index case contacts screening); initiation of IPT; and improved tracking of lab results and patients on treatment. Mozambique is also applying for $6 million in catalytic funding to further accelerate TB case notification, trough systemic community interventions closely linked with health facility network and services.

Interventions:
Case Detection and Diagnosis
An integrated training package is being developed under the current 2015-2017 grant and will be rolled out through training and refreshment training of health workers on screening, testing and treatment of TB, TB/HIV, MDR-TB, pediatric TB, psychosocial support for TB patients, TB treatment, and Infection Control principles. The main audience will be for front line health care workers including physicians, health technicians, nurses, medical staff. Tailored training packages will also be developed for community health workers and lay personnel.

Expansion of FAST approach: The FAST (**F**inding **A**ctively TB and MDR TB cases, **S**eparate safely and **T**reating effectively) strategy for infection control and case detection has successfully been implemented with support from JPHIEGO, CCS, CTB in selected districts and will be significantly expanded to sustain gains and impact through cough officers, lay health workers and community level activists, who collectively contribute roughly 5% of cases detected and notified at facility level. NTP will train an additional 3 cough officers in FAST strategy in each of the 550 selected health facilities. NTP expects the scale up of this approach will account for more than 15% of the total notified cases each year in Mozambique by the end of this grant.

Broad TB awareness raising campaign: Implement comprehensive TB (Drug-Sensitive TB, MDR TB, Pediatric TB, Infection Control) awareness-raising campaign with focus on: a) Signs and Symptoms; b) TB services (health facility and community); c) TB treatment and adherence (including MDR-TB). These will be developed in Portuguese, translated into the primary local languages and aired on radio, TV, and billboards throughout the country – the first phase in the development of these spots and initial pilots will be supported by core grant funds, and national dissemination via saturation campaigns will be via Catalytic Funds. This will complement awareness raising efforts targeting patients in waiting areas at each health facility led by cough officers.

*Systematic Screening of High-Risk Groups***:** Implement screening campaigns for TB/HIV in priority high-risk communities/populations; sputum collection and referral to facilities by activists and HCWs for further evaluation and CXR if indicated. GeneXpert Omni, will be used in the field to test the samples from some of these screening campaigns to reduce turn-around testing times. Integration of community work and health facility efforts will

include CHW-led family and work place contact tracing of all TB and DR-TB patients, particularly those who test bacteriologically positive for TB (contact investigation). CHWs will screen household and workplace contacts for TB and provide HIV testing, evaluation for IPT eligibility, and tracking down patients that were diagnosed with TB by the laboratory, but didn't return for their lab result and weren't started on TB treatment.

Increase pediatric TB diagnosis: This will entail training TB, SRMNACH nurses and other health care providers in a comprehensive package for pediatric TB (including diagnosis and use of new pediatric formulations for treatment, MDR-TB in pediatric patients). This is expected to increase pediatric TB notification to 15% of the total number of notified TB patients by 2020.

Increase Diagnostic capacity and refine the test algorithm: GeneXpert, culture, LPA, DST, infection control/biosafety principles, and sample referral system. In 2017, an additional 40 GeneXpert machines are being purchased with World Bank and Global Fund support. With this grant, an additional 46 GeneXpert machines will be procured (through RSSH Service Delivery funding) in an effort to have at least 1 GeneXpert in all priority districts, with additional machines deployed based on demand. All machines will be connected to GxAlert which enables real time information processing and acts as a monitoring and early warning system. In RSSH Service Delivery funding we will also procure 15 digital chest x-ray (CXR) kits (in addition to the 30 that will arrive in 2017) while trainings staff on their effective use. Maintenance contracts for CXR equipment will be bundled with the procurement cost.

The NTP will expand quality control activities for TB labs that perform smear examination, GeneXpert, LPA, culture and DST testing, in a process coordinated by the National TB Reference Laboratory. This will be supported in part with funds from CTB.

Treatment

The NTP will treat more than 290,000 confirmed TB cases using medicines purchased through the pooled procurement mechanism to cover estimated needs through 2020. Procurement and supply management of commodities will comprise the majority of this grant. To support treatment and retention, MOH and partners will procure more than $14 million in 1st line, 2nd line adult and pediatric drugs (including Bedaquiline, delamanid, Linezolid, Clofazimine, and Isoniazid for IPT).

Strengthening warehousing and distribution capacity of CMAM, which stores and distributes medicines and laboratory reagents to district level remains a major concern of this grant request and is described in the RSSH section of this request.

The NTP will develop and implement an integrated psychosocial support package for TB/TB-HIV/MDR-TB patients aiming to increase adherence (especially for MDR-TB). The NTP will also introduce transportation vouchers and cash transfer using mobile phones, and nutritional support in partnership with the WFP and civil society partners; this will be coordinated with services offered by the HIV program and PEPFAR partners.

Expected impact:

- GF Allocated resources will allow Mozambique to achieve 94% of country targets by 2020: Increase the Number of notified cases of all forms of TB bacteriologically confirmed plus clinically diagnosed (new and relapse) from 73,470 in 2016 to 85,566 (2018); 92,063 (2019); and 97,307 (2020).

- Additional 6 million USD investment needed to reach 100% of country targets requested through matching funds (additional cases notified due to matching funds = 5,228 in 2018, 5,625 in 2019, and 5,945 in 2020)

12. Module: TB/HIV Collaborative Interventions $ 424,952

Rationale: *gaps, issues, lessons and strategies*
The National TB Program has achieved high coverage of HIV services in TB clinics: 96% of TB patients registered know their HIV status and 94% of TB patients living with HIV were initiated on ART. The reported provision of initial TB screening and IPT has increased among new enrollees in HIV care. The proportion of eligible new enrollees (TB ruled out) who initiated IPT has steadily increased from 12% in 2011 to 50% in 2016. HIV Prevalence among TB patients is slowly reducing form 61% in 2010 to 44% in 2016. The TB program's current challenge is to test 100% of TB patients for HIV and have all HIV+ TB patients started on ART. The NTP and HIV programme will intensify efforts to find missing TB (and HIV) cases and additional co-infected patients by continuing the successful implementation of the integrated 'One Stop Model" services at health facilities and implementing an integrated community package. Catalytic funding has also been requested to find missing TB cases at community level.

Expected impact:

- GF Allocated resources along with PEPFAR and Government investments will allow Mozambique to achieve 100% of relative country targets (95%) by 2020. Proportion of HIV positive new and relapse TB patients on ART during TB treatment 32,515 (95%) in 2018; 33,235 (95%) in 2019; and 33,279 (95%) in 2020.

Interventions:
IPT is prescribed for PLHIV in the absence of active TB disease, and for children under 5 years of age who are close contacts of a sputum-smear positive index patient. Training on IPT provision is integrated in all TB/HIV training. New service providers will be trained while active TB contact tracing and TB screening will be integrated with "HIV index case" outreach. Integrated training will include Maternal and Child Health, Pediatric TB, and Nutrition Training for maternal and child health nurses, pediatricians, and other health care providers; training all clinical providers on screening for TB, TB/HIV, MDR-TB, Pediatric TB, Infection Control, and treatment of latent TB with IPT; routine training on the testing algorithm for TB. The GeneXpert MTB/RIF will be expanded as a first-line test at health centers with this capacity and for all PLHIV and other eligible patients. MOH will update and distribute guidelines and tools to strengthen implementation of the "One Stop Model" where TB/HIV patients are treated for both diseases by the TB and HIV nurse. The expansion of the "Treat All" approach will bring many more PLHIV into care – these individuals will be screened for TB; a number will be diagnosed with active disease. We also expect that the expansion of "test and treat" will put more PLHIV on ART, strengthen their immune system and somewhat decrease their risk for TB – this will be further driven down by treating eligible patients with IPT.

TB Key Population Interventions: ***Prisons*****:** MOH will expand TB and HIV screening from the current 19 to cover all 84 prisons (Test and Treat) using mobile vans with digital CXR, on-site GeneXpert Omni testing as well as support sputum referral networks. ***Miners*****:** The World Bank is supporting a TB and HIV package of interventions among miners and their communities in south region (Gaza and Maputo province), from 2016 to 2021. ***Health Workers*****:** Systematic screening and training of HCW (including activists) for TB, HIV, and Infection Control principles (supported in part by PEPFAR via JHPIEGO, World Bank, but also by Global Fund). Screening among healthcare workers will be included as a key performance indicator for the head of each health site and monitored routinely through DHIS2. ***PLHIV*****:** Intensified case finding activities via PEPFAR, CTB/FHI360, and other partners. A portion of the catalytic funding will also target innovative case-finding strategies in key populations.

Community TB/HIV care delivery

The table below outlines a TB Community set of interventions covering: community level prevention, diagnosis, referral, treatment, adherence support, stigma reduction and advocacy.

Theme	Activities
Prevention	Awareness-raising, information, education and communication (IEC), behavior change communication (BCC), infection control, training of providers
Diagnosis	Screening, contact tracing, sputum collection and transport, providers training
Referral	Linking with clinics, transport support and facilitation, accompaniment, referral forms, providers training
Treatment adherence support	Home-based supervision and patient support, adherence counselling, stigma reduction, pill counting, training of providers, home-based care and support, cash transfer for transportation support
Stigma reduction	Community theatre/drama groups, testimonials, patient/peer support groups, community champions, sensitizing and training facility and CHWs and leaders
Advocacy	Ensuring availability of supplies, equipment and services, training of providers, addressing governance and policy issues, working with community leaders

Approach for TB Community Interventions: The NTP in close coordination with selected CSO PRs and Partners will invest in the design of a multi-theme and multiform BCC campaign with focus on community mobilization, stigma reduction and demand creation for all TB related services. Full roll out of the BCC component will be supported by catalytic funds. As part of this community full engagement process, the NTP and the new PR will coordinate a train a cadre of CHW, including Activists, Traditional Healers and APEs to implement standardized package of community TB diagnosis interventions, covering Prevention, Diagnosis, Referral; Treatment Adherence support, Human Right literacy, advocacy and Stigma Reduction (learning from FHI CTB and other current community interventions). Selected PR will also be supported to provide enabling package of services, including cash transfer and nutritional support to improve retention for MDR-TB Treatment and other eligible TB patients. The approach for community interventions will be further defined during the remaining phase of current NFM grant (2017), using reallocated funds.

13. Module: Drug Resistant Tuberculosis $ 1,520,355

Rationale: *gaps, issues, lessons and strategies*

Slow progress MDR-TB Case Detection and Treatment outcomes

Despite current GF grant investments and partner's contribution to address the gaps the NTP missed the NFM MDR-TB targets. In 2016, the program detected 911 cases out of 1328 planned, equivalent to 69% of the target, but only 33% of the annual estimated number of MDR-TB patients among all notified TB patients (2,800). Low case finding resulted in low treatment coverage. MDR-TB treatment success rate reduced from 52% for the 2013 cohort to 47% for the 2014 cohort. Death rates remains above 10%. The multiplicity of factors that contribute for low performance on MDR-TB detection and treatment include: weak lab network including a limited number of and underutilization of GeneXpert machines, lack of a reliable maintenance system of GeneXpert platforms resulting in non-functioning GeneXpert modules, weak sputum referral system from districts to the regional laboratories (Maputo, Nampula and Beira), inadequate access to 1st and 2nd line DST at reference laboratories, poor treatment and psychosocial support, slow feedback and results communication within the sample referral system (OIG Report, 2017: pp 15-17).

To address these challenges, the NTP program will deploy the following strategies: 1) increase investment in health workers capacity building (training clinicians and laboratory personnel in updated DR-TB treatment, and create a tele mentoring network and community of practice utilizing DR-TB ECHO); 2) expand GeneXpert coverage/access (along with a national service/maintenance/calibration and connectivity contract for all GeneXperts) and an associated intra-district sample referral system to increase access to

rapid testing for RR; 3) expand referral and sample transportation system for confirmed RR cases and 1st and 2nd line DST testing by LPA and culture at TB reference laboratories; 4) improve communication of results between reference laboratories and front-line HC workers using innovative reporting systems such as GxAlert; 5) ensure patients are treated with STRs and NDs if eligible with appropriate adverse side effect monitoring; 6) provide supportive supervision for clinicians engaged in MDR-TB cases management and laboratory technicians involved in diagnosing DR-TB; 7) offer an integrated psychosocial support and enabler package described in the previous section; 8) expand the use of an integrated patient level electronic recording and reporting system for all DR-TB patients.

Interventions:

- *Case detection and diagnosis of MDR-TB:* This will entail training clinicians in PMDT and DR-TB based on updated guidelines that will be finalized in 2017; DR-TB campaigns and supervision visits to ensure all presumptive DR-TB patients are tested using Xpert MTB/RIF; distributing audiology equipment and training on their effective use; ECG, and specialized laboratory equipment for aDSM for DR-TB patients; procuring medication to treat DR-TB side effects and train providers how to use them; training on revised MDR-TB guidelines and the community TB/MDR-TB manual; as well as increased advocacy and social mobilization awareness on TB and MDR-TB at all levels and engage community workers in MDR-TB care. While listed under TB care and treatment, this proposal also includes a request to significantly expand 1st and 2nd line testing for DST using LPA and culture in the TB reference laboratories along with appropriate sample transport systems.
- *Treatment of MDR-TB:* This will entail procuring high quality second line TB drugs, DR-TB medicines and ancillary drugs, and distribution of short MDR-TB drug regimen to facilities providing MRD-TB Services. In addition, MOH will procure 1st and 2nd line adult and pediatric IPT drugs, reagents & consumables, include new TB drugs for management of patients who need an individualized MDR/XDR-TB regimen. Funding will support extensive pharmacovigilance training in regions; enforce strict supervision on clinical and programmatic management of MDR-TB; drugs quality control; expansion of DST capacity (Zambezia Province) and improve coordination with Carmelo Hospital in Gaza and CISM in Maputo Province; supervision visits to model DR-TB sites to evaluate, certify, and to maintain certification as a DR-TB center of excellence; reinforcing TB treatment follow-up through CB DOTS volunteers and health facility staff and providing enabler packages (transportation cost) trough community networks to enforce treatment adherence. In case the pilot DR-TB ECHO program is successful, funding will be reprogrammed to expand the project for effective tele mentoring of providers treating DR-TB.
- *Infection Control:* Funding has been requested to purchase, distribute N95 mask for health care providers; purchase and distribute surgical masks for DR-TB patients; train health workers in infection control assessment; conduct district level internal TB infection control evaluation; and strengthen DR-TB program through enhanced mobile communication with DR-TB focal points; national level training for DR-TB led by Civil Society and technical assistance; and refresher DR-TB trainings at provincial level. Funding will also support monthly clinical committee meetings at national and regional level.

Expected impact:

- GF Allocated resources will allow Mozambique to achieve 94% of country targets by 2020: Identification of 1,587 (20%) of estimated MDR-TB patients in 2018; 1,983 (28%) in 2019 and 2,388 (41%) in 2020. Additional 6 million USD investment needed to reach 100% of country targets requested through matching funds (additional cases notified due to matching funds = 97 in 2018, 121 in 2019, and 146 in 2020)

- Allocation resources will allow Mozambique to achieve 94% of country targets by 2020 (see comment on line G that requests additional matching funding in order to

reach 100% of country targets). Number of notified cases with RR-TB and/or MDR-TB that began second-line treatment: 1,507 (2018); 1,884 (2019); 2,269 (2020). Additional 6 million USD investment needed to reach 100% of country targets requested through matching funds (additional cases notified due to matching funds = 92 in 2018, 115 in 2019, and 139 in 2020)

14. Module: Program Management (Costs included in care and prevention; and Program Management Module)

Program Management

The CCM has nominated MISAU (MOH) to continue as government recipient with a specialized PMU. Expanding the dual track mechanism, the CCM has selected three civil society PRs to manage community level treatment, care and prevention aspects of the grants. The following interventions will strengthen programme management and mitigate related risks going forward:

- **Policy, planning, coordination of management of national disease control programs:** MOH and partners will update the Strategic Plans based on results of prevalence survey, Drug Resistance Survey and consider options to sub-contract NGOs and other organizations; Strengthen procurement plan to ensure that equipment, logistics are in place to implement activities through procurement specialists to help design contracts, Request for Proposals; work with staff in DAF to support additional projects; decentralize activity and funding to provinces for specific work; and fund portions of programme reviews (e.g., Annual pediatric TB National Coordination meeting)
- **Grant management: MOH and partners will r**eview grant management mechanisms for better funds flow; add staff in NTP to manage activities, grants, streamline process to work with Program Management Unit.
- M**&E, Supervision and Research:** Strengthen M&E system to monitor program and implementer outputs, outcomes and impact; procure a more efficient means of transport for routine supervision of facilities (a vehicle) for MOH supervisory, quality assurance and audit level staff. This is expected to reduce costs of transport through flights or hire especially for distances over 2000 kilometers apart.
- **HIV Program MOH (MISAU); and Civil Society** Principal Recipients will strengthen staffing and build capacity in M&E, Finance and Grant Management to more efficiently manage the program and sub recipients.

TB Programme Management

Rationale: In the current NFM 2014-2017 grant the Mozambican NTP has seen significant improvements in key TB and TB/HIV indicators, particularly case notification rates. However, the NTP has also found it challenging to absorb all of the allocated funds, particularly for some of the more ambitious activities. To increase its overall performance and evidence based programing, with this request the NTP will invest in:

Strengthening central and provincial managerial capacity: The core proposals in this section including hiring additional key staff, including a grant manager, provincial level clinical advisors (11 total), pharmaceutical expert, community liaison officer and M&E expert to ensure that there are adequate technical and administrative staff to effectively execute the activities in this proposal, and to more closely coordinate and oversee PRs responsible for community based HIV/TB interventions.

Complete National TB Prevalence Survey (PS) and Drug Resistance Survey (DRS): Mozambique has never had a national TB Prevalence survey. The first one is set to begin in mid-2017, and data collection will be completed in 2018. The NTP anticipates permission from the GF to roll-over approximately $2.5m USD from the NFM to complete data analysis and result dissemination. Similarly, the Mozambican NTP is starting a DRS in 2017, run in

partnership with an independent research organization to ensure that the national TB reference laboratories are not overwhelmed with samples from both the PS and DRS. The NTP will roll-over unspent funds from the $500,000 USD allocated for the DRS in the NFM. The NTP is requesting an additional $350,000 USD in this allocation (2018-2020) to analyze DRS samples with Whole Genome Sequencing, which is rapidly becoming the standard for DRS studies, but which was not included in the costing for the original DRS. Previous DRS studies were poorly powered, particularly for MDR/RR rates in retreatment cases, and did not include rates of 2nd line drug-resistance.

Enhanced TB Surveillance System: In 2017, the TB Program is transitioning all routine aggregate reporting to the recently MOH adopted DHIS2/SISMA platform – currently approximately 60% of health centers are using this system. The NTP is also starting to digitize patient registries for drug-resistant and drug-sensitive TB into this system to create patient-level electronic recording and reporting systems. Many of these activities are covered under proposals covered in the RSSH section but we expect that this system will allow the TB program to analyze their own data in more detail during monthly and quarterly data review meetings to better allocate resources to maximize impact.

Expected impact:

- Full absorption and efficient management of the entire TB budget allocation
- Use the results of the PS and DRS to update the national strategic plan and efficiently spend/reprogram funds to target interventions and geographic areas that will have the maximum impact on reducing the TB burden in Mozambique
- Develop more accurate and robust electronic information systems to provide more targeted supervision to under-performing health centres, to help determine NTP strategic prioritizes and to evaluate the impact of specific interventions

2.2 RSSH Funding Request

The Global Fund strongly encourages funding requests for RSSH investments to be submitted within a ***single*** application, and preferably to be requested in the first submission.

Does this funding request include an RSSH component?	☒ Yes	☐ No

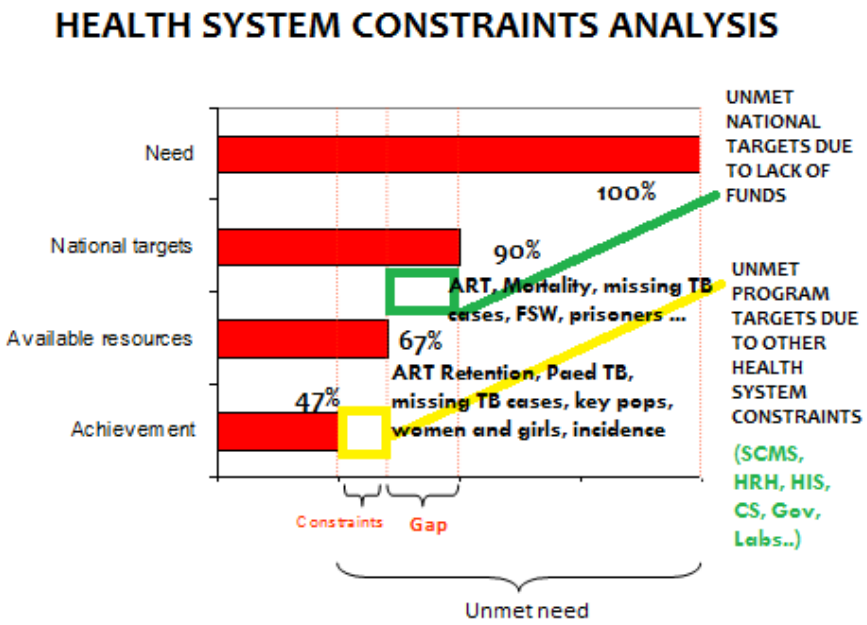
If yes, describe the request below and how it is strategically targeted.

Referring to the national health strategy, gaps and lessons learned outlined in the previous section, describe the funding request for RSSH and how the investment is strategically targeted to strengthen systems for health and achieve greater impact on the diseases. In your explanation, refer to the Funding Landscape Table on 'government health spending', Performance Framework and Budget as appropriate. Note that it is optional to complete a Programmatic Gap Table for RSSH.

(maximum 3 pages)

[*Applicant response*]:

Rationale: Challenges in Mozambique's health system include the lowest health worker to population ratios in the region; insufficient supply chain infrastructure (warehouses and laboratories); inadequate distribution of equipment; inadequate funding; low quality M&E data, an information system (DHIS2/ SISMA) that has not yet scaled to a majority of facilities and therefore unable to improve quality; weaknesses in coordination/ standardization, management, and others discussed in previous sections. While the prevention, treatment and care budget will complement government, USG, UN and other partner funds to fill programmatic gaps, lessons from the current implementation period reveal that health system constraints may continue to hinder results if unfunded. For instance, ART retention rates are lowest in Southern Africa due to a collection of these systemic constraints. The country dialogue for prioritization of modules was complemented by health systems and risk analyses led by MISAU, the Global Fund country team, PEPFAR, and others, in addition to a report by the Office of the Inspector General (April 2017). These have informed prioritization from the national health system strategy (PESS, Annex 9, pp. 50-110) of the RSSH funding request.



RSSH Interventions

The RSSH funding request prioritizes a few aspects in the following modules that will directly improve and sustain overall results: Procurement and supply chain management systems; Health Information Systems; Human Resources for Health; Infrastructure; financial

management systems and community systems strengthening. The strategic objective is to build resilient and sustainable systems for health that can support efficient intensification of the response its quality and retention on treatment.

Table: RSSH Budget Summary

RSSH Modules	Total	%
RSSH: Procurement and supply chain management systems	4,133,823	2.9%
RSSH: Financial management systems	2,689,355	0.8%
RSSH: Health management information systems and M&E	5,586,086	1.9%
RSSH: National health strategies	627,330	0.2%
Program management	2,456,484	0.7%
RSSH: Human resources for health (HRH), including community health workers	2,642,240	0.8%
RSSH: Community responses and systems	4,041,903	1.2%
RSSH: Integrated service delivery and quality improvement	11,666,952	2.8%

Matching/ Catalytic Funds

		Time of Application
Data Quality and Use	$3,000,000	At Grantmaking

Module: Procurement and Supply chain management systems $4,133,823

The Supply Chain Management system is run down, prone to stock outs and pilferage and incapable of handling the testing, treatment, viral load and other logistical needs in its current state. MOH, CMAM and UGEA will deploy Global Fund support to complement PEPFAR and other partner efforts to strengthen it. A joint planning process will aim to streamline processes and create adequate conditions for efficient investments in logistics, construction, rehabilitation and third-party outsourcing of transportation to be realized. **Rehabilitation, expansion of warehouses and improvement of drug** r**edistribution capacity from provincial to district and health facility level**: Several reviews (Annexes, 40, 41, 43, 44, 46 and section 3 of this document have prioritized Supply Chain Management as a priority risk portending the most severe impact to the Global Fund grant and disease programs in general. MOH/ CMAM will rehabilitate and expand regional medicine storage facilities in Beira and Nampula to serve north and central regions. MOH will rrefurbish and equip some provincial storage facilities currently in critical condition; and outsource drug transportation to ensure more timely availability at facilities. To monitor and stop pilferage, CMAM will deploy web camera surveillance systems in Maputo, Beira and Nampula regional warehouses and in the provincial warehouses. CMAM personnel will receive refresher training to build their capacity to manage the drugs supply chain. MOH and UGEA will hire a procurement specialist and an assistant to coach and mentor existing MoH personnel, train UGEA personnel, and provide equipment and transport to assist with supervision. **To strengthen national product selection, drug safety, registration and quality monitoring processes,** the Logistical and Pharmaceutics Department will conduct a drug safety study for HIV, TB and Malaria Drugs; review it for consistency with the national list of medicines; train personnel and purchase equipment to detect counterfeit drugs and reagents; while the MOH Pharmaceutics department will **review the distribution plan for medicines and health commodities.** Further details are included in the detailed budget and workplan accompanying this request.

Module: Human Resources for Health, including Community Health Workers

$2,642,240

According to the WHO, Mozambique has one of the world's lowest health worker to population ratios. Quality assurance and retention in ART and TB treatment are among the major issues observed in the grant. The grant will support training of health personnel in the country's 17 training institutions using standardized curricula approved in the National Plan

for Human Resource Development, with a view to increasing the number of health professionals required for Test and Start, Viral Load, and to better supervise and quality-assure community health workers/ lay cadres. Trainees will include pharmacists, laboratory technicians, maternal and child health nurses in the training institutes of Maputo, Chimoio, Tete, Inhambane, Beira and 12 other institutions spread within 17 districts around the country. Medical technicians will be trained at the IMEPS Polytechnic Health Institute for mid-level cadres. 53 directors and mid-level cadres running the training institutes will be trained on strategic Human Resource Management and retained throughout the grant. Additional facilitators will be paid on performance basis. The Beira and Inhambane training institutes will be furnished with desks and chairs to train an additional forty students at a time, while Beira, Inhambane and Lichinga will be equipped with 40 laptops for trainees. Tete, Chimoio and Lichinga training institutes will receive clinical equipment for practical laboratory training. At the DNAM- Lab Clínico; laboratory technicians will be trained on supply chain management, logistics and reagent management.

Module: Community Systems Strengthening for Enhanced Service Delivery $4,041,903

The US Government and malaria grant have deployed several thousand lay cadres at community level. Still, the ratio of community level workers tracking and offering adherence support (psychosocial, palliative care, tracking; feedback to facilities, data collection etc.) at the household level is 1:400. About 30% of ART patients are lost to follow up within 12 months, while more than half cannot be traced after three years. Integrated training will be offered to these household level cadres, especially retained “Champion” PLHIV on ART and those successfully treated for TB and MDR-TB, as well as key populations, women and girls to track and accompany colleagues. This is expected to bridge the high rates of LTFU, and strengthen the community health information system. **Community based monitoring**: Stakeholders will integrate an information management system for all diseases under the coordination of MOH and CNCS, hold monthly review, feedback and M&E meetings, and ART and management committee meetings at health facilities, consistently including communities. Only 30% of these monthly meetings have been held so far, hence performance of staff will henceforth be evaluated taking consistent community-facility level coordination into consideration. Service quality assessments and supervisory visits will ascertain this community-health facility collaboration. **Social mobilization, building community linkages, collaboration and coordination:** advocacy meetings will be held to improve commodity and service access at community level; while CNCS/ MOH and civil society will collaborate to standardize an integrated guideline for the selection, training and capacity building of community organizations and workers. Government, partners and civil society will jointly monitor activities at the central, provincial and district levels. **A plan is currently being reviewed to strengthen primary health care/DOTS; and integrated training will include**
referring patients suspected of TB, conducting home visits, tracking patients who drop out of HIV, TB and other OI treatment; service delivery to key populations, girls, women and SRMNCH. District focal points and civil society supervisors will register lay cadres, deliver reference guides, reports and supervise training sessions for community level health workers.

Module: Financial Management Systems $2,689,355

The need to improve financial management has been a major preoccupation of audit recommendations, and more recently the Office of the Inspector General’s Report. To increase sustainability and efficiency through reduced transactional costs, the health sector is engaged in decentralizing financial and programme management to the district level. Additional support has been requested to enable DAF expand e-SISTAFE at the level of SDSMAS (Several Districts) through provision of equipment, training, network system installation and technical assistance to enable the provinces monitor it. Funding will also strengthen the audit system, help monitor compliance with internal procedures and recommendations of Internal and External audits. The Office of the Inspector General of Health (IGS) will train inspectors and auditors to perform integrated audit of health institutions in the areas of pharmacy, healthcare service delivery, training, management and internal audit. IGS will monitor implementation of the Global Fund Office of the Inspector General’s recommendations, while performing inspections. Funding has been sought to equip the inspector general’s staff with computers and acquire a vehicle to enable inspectors cover Mozambique’s vast expanse (2300 kilometers in length) while visiting the over 1300 health facilities more affordably.

Module: National Health Strategies $627,330

National health sector strategies are funded by government and different partners. The Department of Health Planning (DPS) will receive Global Fund support to evaluate and strengthen the MOH planning and budgeting system through specialist technical support. 40 staff in the national office and two officers from each of the 11 provinces will be trained in implementing it. SISMA (the DHIS 2) system will be updated to include a module and summary dashboards to inform and monitor planning at all levels with a view to improving data analysis and use. DPS will be supported to conduct mid and end term evaluations of the National Health Strategic Plan (PESS 2014-2019). The pharmaceutical department will be assisted to develop a monitoring plan.

Module: Health Management Information System, Monitoring and Evaluation $5,586,086 (and Matching Funds of $3.0 million for data quality and use to be requested at Grantmaking)

Routine reporting: Data quality, use, disaggregation and consistency have been problematic throughout the entire health sector. The HMIS needs improvement to better trace patients and eliminate duplication, provide operational results on a monthly basis allowing for midstream correction and inform management in a timely, summarized basis. DPC-DIS will be supported to expand the hospital module of DHIS 2 beyond districts, to facility levels where disaggregated patient data can be recorded, collated and analyzed for better treatment outcomes and follow up. Data collectors will be trained on the new modules. **Program and data quality and use:** DPC-DIS will be supported to conduct routine data quality audits to improve general data quality and use, as a standard process by provinces, districts and expanded into facilities. It will also be supported to hold seminars and workshops on data quality at the provinces; highlight stigma and discrimination occurrences and disseminate information useful for planning at district level in a manner that is usable and understood by local planners. **Analysis, evaluations, review and transparency:** Data will be analyzed to produce the statistical yearbook, and monthly health information bulletin. **Surveys:** DPC will be co-funded through this grant to produce the Public Expenditure Tracking Survey. **Vital Registration System:** A patient registration system (SESP) was recently deployed to track patients individually. DTIC will expand the patient registration system and provide an IT infrastructural backbone including equipment, bandwidth, data security, maintenance, technical support, and continue providing an internet connection to enable seamless tracking of patients from one service and facility to another, while opening a pathway for future community information systems to be fully linked into the Health Management Information System. DPC-DIS and other staff will be trained on DHIS 2, and to cascade global data quality standards into the Mozambican system.

Catalytic funding: $ 4.4 Million has been ringfenced for data quality and use within the attached M&E budget, and a similar application of $3.0 Million will be made for matching funds towards data quality and use, during grant-making.

Module: Integrated Service Delivery and Quality Improvement $11,666,952

Several interventions still lack supportive policy guidance or standardization between funders and implementers especially for key populations (PWID), human rights, community level service delivery, girls and women. In addition, successful implementation of Test and Start, the entry of new fixed drug combinations for ARVs, and the scale up of viral load and EID will require a supportive policy and programmatic environment. **Supportive policy and programmatic environment:** The Ministry of Health convenes partners periodically to discuss policy issues. Funds have been set aside under the community response module to develop standardized policies for health workers at community level, and similar initiatives will be required to update treatment policies, develop common approaches to advocate effectively for, among others, key populations, adolescent girls and young women's programs, and disseminate summaries widely. Staff will be trained on policymaking, analysis, review and effective dissemination. **Laboratory systems for disease prevention, control, treatment and disease surveillance:** To scale up EID, and viral load currently being supported by PEPFAR**,** DNAM-Clinicos will lead government and partner efforts to strengthen the laboratory network; deploy a system to outsource sample transport service at central and provincial level; train 90 laboratory technicians on quality assurance for HIV, Malaria and TB testing across the laboratory network; hire a specialist in laboratory logistics system-quantification; procure reagents and consumables for hematology and biochemistry; print lab item requisition forms and monitor their correct use. An electronic laboratory system will be deployed to send results and reduce response times to patients. Electronic biochemistry equipment will replace the current manual ones, while hematology and auxiliary equipment for about 5% of laboratories will be purchased. Technical assistance will

be hired to develop standards for strengthening the laboratory network, standard operating procedures, and accreditation. The Laboratorio Nacional de Controlo da Qualidade de Medicamentos will strengthen the analytical and testing capacity of laboratories, including to detect counterfeit drugs.

Module: Program Management	**$2,456,484**

Policy, planning, coordination and management of national disease control programs: The four PRs will be supported to hold coordination meetings, including with sub recipients, strengthen planning and grant alignment, conduct advocacy and engage national constituencies especially key and vulnerable populations. Support will also be provided to distribute strategic plans and inform stakeholders on a continuing basis of the Global Fund. **Grant Management**: MOH (DPC-UGFG) will be supported to strengthen grant management human capacity at central level: maintain current cadre of human resources (Grant Coordinator, M & E Adviser; M & E Assistant; Financial Manager; three financial assistants; four PS Managers; Procurement expert; Procurement assistant. DPC-UGFG will also hire TA and additional experts to support grant management functions. Staffing needs for other PRs have been highlighted further in the main document. DPC-UGFC will strengthen technical capacity at central level by training staff on procurement, financial management, M&E and Program Management. Funds will support general office management, routine and ad-hoc supervisory site visits. Workshops to review, coordinate and plan grants will be held, with a view to further eliminating duplication and improving additionality.

SECTION 3: OPERATIONALIZATION AND RISK MITIGATION

This section describes the planned implementation arrangements and foreseen risks for the proposed program(s). Applicants are encouraged to **attach an updated Implementation Arrangements Map.** To respond, refer to additional guidance provided in the *Instructions.*

3.1 Implementation arrangements summary

Do you propose major changes from past implementation arrangements, e.g. in key implementers, flow of funds or commodities?	☒ Yes ☐ No

If **yes**, provide an overview of the new implementation arrangements and elaborate how these changes affect the operationalization of the grant.

If **no**, provide a summary of high-level implementation arrangements focusing only on lessons learned for the next period.

In **both cases**, detail how representatives of women's organizations, key populations and people living with the disease(s), as applicable, will actively participate in the implementation.

Include a description of procurement mechanisms.

(maximum 1 page)

[*Applicant response*]:

New implementation arrangements:

During the next implementation phase, the dual track implementation mechanism will be strengthened to more meaningfully include community-level implementers, increase accountability to the community, beneficiaries for each activity including key populations, young women and adolescents. This will accelerate implementation, efficiency, and program outcomes.

Two new civil society PRs. CCS and ECOSIDA will join Ministerio de Saude (MOH) and FDC (Civil Society). The PRs are experienced in working with key and vulnerable populations, where coverage of services has been low. Redesign of implementation mechanisms will better enable the involvement of community-led groups in treatment, prevention; support community systems strengthening and ensure their synergy with the public health sector. As described in section 1.2, key and vulnerable populations account for nearly all the HIV and most of the TB incidence. Interventions described in sections 2.1 are dedicated to them. Selection processes have been included in CCM documents.

Within the PMU, several strategic measures have been proposed to improve efficiency and mitigate risk. These include frontloading all early procurement processes and requirements before grant-signing to reduce wait times, changing the procuring entity for orders above $250,000, and the possibility of changing staff contractual arrangements. In addition, the PMU is decentralizing some budgetary, disbursement, and accountability procedures to the provinces, initially beginning with three, in a bid to make them responsive to beneficiary needs faster, and reduce accountability delays and transactional costs between districts and the central office (PMU). Additional staff and technical assistants are planned to strengthen grant management, coordination and accelerate processes analyzed as risks to the grant. peed up processes.

Implementation maps for finance, data, governance, and commodity procurement and supplies, have been reviewed for areas, processes, and entities that may require strengthening, and efficient ways to make them function better proposed under the program management module in section 2.1 and as part of the RSSH modules in section 2.2 of this funding request.

3.2 Key implementation risks

Using the table below, outline key risks foreseen, including those that were provided in the *Key Program Risks* table shared by the Global Fund during the Country Dialogue process. You can also add key operational and implementation risks, which you identified as outstanding over the previous implementation period, and the specific mitigation measures planned to address each of these challenges/risks to ensure effective program performance in the given context. Applicant response in table below. Applicant Response:

This table prioritizes the key risks and mitigation measures defined during a risk assessment workshop organized by the Global Fund and PEPFAR/ USAID in May 2017 in collaboration with MOH, CCM, Civil Society and various stakeholders. It followed a risk, severity and impact analysis process with individuals. Other risks have been highlighted in the GRAM tool.

Risk Category	Key Risk (And causality Analysis	Mitigation Measures	Timeline
Health services and health products quality risks	**Insufficient space; inadequate storage and distribution conditions** Current infrastructure and transport system incapable of handling the diagnosis and treatment needs for HIV and TB	a. Update (Q1 2018) and gradual implementation of the PELF in 5 years b. Construction of the warehouse of Nampula (From September 2018) and construction of Beira warehouse c. Gradual construction of intermediate warehouses (first 3 beginning September 2017) d. Expansion of Zimpeto warehouse 2017 to June 2019 Last mile Project, tertiary sector of transport to the health facility	**(**Beginning 2017 – completion June 2019/ Quarter 2/19) ; Project on intermediate warehouses - June 2017
Health services and health products quality risks	**Interrupted services:** a. Inadequate equipment procurement plans; b. Lack of maintenance contracts c. Lack of equipment	a. Improve the procurement plan annually b. Develop reagent rental contracts; Bundle equipment maintenance in contracts, with indicators of performance c. Standardize and purchase laboratory equipment	a. During grant life b. Q4/17-Q3/18 c. Q1/18-Q4/20
Health services and health products quality risks	**Infrastructure:** Malfunctions of laboratory equipment; a. Contamination by technicians b. No monitoring of temperature c. Lack of purified water, electric current surges d. Inadequate space for testing, patients and for lab storage; e. Waste management unavailable	a. Refresher training of staff b. Purchase of cold storage equipment c. Purchase of stabilizers/ UPS; Purchase water purifiers d. Rehabilitate and expand laboratories, e. Develop an architectural model for laboratories; f. Develop waste management plan	a. Grant life b-c Q1-4 2018 d-e Q1-8 f. Q1
Health services and health products quality risks	**Sample transportation and referral weaknesses; Delay in lab results** • Inefficient reference system; • Late arrival of samples, late results; • Long laboratory response time; • Quality of samples weak	• Develop plan to improve referral network • Purchase kits and packaging material for samples • Expand electronic systems for referra up to level III Build capacity of laboratory staff	Q2-4 2018
Programmatic and program performance	**<u>Not achieving grant outcome and impact targets</u> due to linadequate Coverage of Health Services** (a) Human resource management issues; high trunover; critically low numbers of staff; poor distribution and little motivation. (b) Centralized Implementation;	(a) MISAU will develop staff retention and development plan with performance based incentives and improved working conditions.; (b) MOH will begin to decentralize implementation to share responsibilities provinces and districts; (c) All prevention, treatment/ retention	(a) HR Retention plan developed; Q2/18 (b) Financial decentralization plan - Ongoing (c)Communication plan developed (d) National Policy

	(c) Weak multi-sectoral engagement; (d) Poor understanding of efficient community engagement for prevention and treatment of diseases; (e) Low awareness of the impact of the three diseases by leaders (f) Inadequate service delivery infrastructure (g) Inadequate community involvement	human rights, gender and care modules to sensitize duty bearers (d) Programs to review communication plans and make them culturally and community sensitive (e) Conduct leadership education programs; (f) Expand current service delivery systems e.g. health posts, lab, providers (g) MOH to consultatively develop community engagement models	on community Engagement Developed as per ENPS II (Annex 16)
Health services and health products quality risks	**Inadequate quality of services** (a) Low coverage of interventions impeding improvement of quality of diagnosis, especially TB, HIV and malaria. (b) Limited Coverage of interventions to improve the quality of treatment and disease prevention especially malaria; (c) Limited Coverage of interventions to improve the quality of management of resistance to HIV, TB and malaria; (d)Weak adherence and retention in treatment, for PLHIV and MDR TB (e) Inefficient sample transport and long delays in delivering results to patients	(a) Develop Laboratory Systems Strengthening Strategy (b) Regular audit of case management and diagnosis (c) Develop monitoring plan for the three diseases; (c2) Implement an integrated plan to improve the quality of services (d) Develop a patient register and retention strategy for TB/HIV patients for use by health facilities and community workers. (e) Evaluation of the network of laboratories and the transportation of samples to identify bottlenecks and take corrective measures.	(a) December 2017 (b) Ongoing, grant life (c) March 2018 (d) March 2018 (e) Ongoing through grant life
Financial and Fiduciary risks	**Low absorptive capacity** (a) Lengthy verification, information and planning processes especially for variances (b) Informational gaps in planning and lack of knowledge on eligibility of some activities /case of fixed funds	(a) PMU to anticipate verification process to include the time taken by LFA, revisions and corrections	(a) Q4/2017
Programmatic and program performance	**Inadequate M&E data and poor data quality** due to: (a) Lack of information policy and M&E Strategic Plan (b) Limited data analysis capacity, inferencing and use of strategic information for program planning (c) Inadequate quality of data, for decision-making	(a) DIS and stakeholders will develop an information Policy and M&E Strategic Plan (b)DIS and partners will implement a capacity building plan on data use; (ii) implement a supervision plan (c) Implement internal and external data quality audits	(a) Q1-2018 (b)Q 2 (ii) Grant Life (c) Grant Life
Governance, Oversight and Management risks	**Weaknesses in reporting and compliance by Principal Recipients** Low quality of reports especially by new PRs and lack of compliance to deadlines Lack of PR management dashboards Lack of details on budgets (e.g. TB grant). Inability to respond to requirements of management on the payment of fees by the Ministry of Finance**.**	(a) Integrate and budget in the financial request the strengthening of new PRs (b) Budget for installation of PR management dashboards and establish their use (c) Strengthen data collection processes to manage quarterly reporting (d) Use DHIS 2 to facilitate reporting by PMU, and analyze information for decision-making	a) In Grant Request b) Q2-Q4 2018 c) Ongoing to Q4 2018 d) From Q2/2018

SECTION 4: FUNDING LANDSCAPE, CO-FINANCING AND SUSTAINABILITY
This section details trends in overall health financing, government commitments to co-financing, and key plans for sustainability. Refer to the **Funding Landscape Table(s)** and supporting documents as applicable. To respond, refer to additional guidance provided in the *Instructions.*

4.1 Funding Landscape and Co-financing		
a) Are there any current and/or planned actions or reforms to increase domestic resources for health as well as to enable greater efficiency and effectiveness of health spending? **If yes,** provide details below.	☐Yes	☐No
b) Is this current application requesting Global Fund support for developing a health financing strategy and/or implementing health-financing reforms? **If yes,** provide a brief description below.	☐Yes	☐No
c) Have previous government commitments for the 2014-16 allocation been realized? **If not**, provide reasons below.	☐Yes	☐No
d) Do current co-financing commitments for the 2017-19 allocation meet minimum requirements to fully access the co-financing incentive, as set forth in the Sustainability, Transition and Co-financing Policy?[13] **If not**, provide reasons below.	☐Yes	☐No
e) Does this application request Global Fund support for the institutionalization of expenditure tracking mechanisms such as National Health Accounts? If yes or no, **specify** below how realization of co-financing commitments will be tracked and reported.	☐Yes	☐No
(maximum 2 pages)		

a) Country plan for increased domestic resourcing for health

Planned Government Contributions. The GRM has committed to increase domestic public expenditure for health by an additional US $35 million between 2018 – 2020 in accordance with the Global Fund counterpart financing agreement. MOH will continue to finance a large portion of human resources, health facility infrastructure, supply chain and the CNCS. The Ministry of Defense (Ministério da Defesa Nacional -MDN) will continue to invest in military health care systems for armed forces, their families and communities surrounding military bases. Despite positive projections however, narrow fiscal space may constrain GRM's efforts fully cover the costs of its response to HIV and TB. The estimated resource gap from 2018 to 2020 will be at least US $400 million if current expenditure levels are held constant[14], representing over 36% of the Government's Health Sector Budget for the same period. The government is the third-largest individual source of HIV funding, with US $11.3 million allocated to HIV in 2016. GRM expenditure for HIV increased at a higher scale than overall health expenditure. Domestic public HIV expenditure increased by 41% between 2014 to 2016 in local currency but reduced by 30% once converted into the US Dollar as the local currency lost 100% of its value between last grant signing and May 2017.

National health accounts, desk reviews and technical consultations define sustainability strategies and actions to increase domestic resources. These are described in the PESS (Annex 9), and a forthcoming Health Financing Strategy. The policy for health sector financing stipulates how

[13] Refer to the Sustainability, Transition and Co-Financing Policy.

[14] Projections based on CNCS NSP IV projected costs 2017 and GAM 2017 indicator 8.1. The projections do not take into consideration updated HIV prevalence from IMASIDA 2015.

resources will be mobilized, aggregated, allocated and paid for where appropriate. Potential additional financing sources include tax collection, custom services, health insurance, private sector and special taxes for health (*tax levy,* Health Fund, etc.), among others. MISAU advocates to the Ministry of Finance at the beginning of the budget cycle. Additionally, the government is decentralizing services and tracking to reduce inequity and improve allocative efficiency.

b) Country plan for implementation of the Health Financing Strategy

A health sector financing strategy is being developed to define sustainable ways of increasing domestic funding for the health sector. The RSSH module in section 2.2, in line with the PESS 2014-2019 defines health institutional reforms (PARI) measures being implemented, some of which the grant will contribute to. These include decentralization of eSISTAF (the public financial management system). This funding request includes support for decentralization of financial management systems from national PMU to provincial and district levels, making reports more disaggregated and shedding off a layer of significant transactional costs incurred during program implementation to lower levels where this can be more affordably and efficiently implemented.

c) Status of realization of Governments' commitment in 2014-16 allocation cycle

The Government of Mozambique met its commitment to invest 15% of its aggregate Global Fund allocation of $450,276,362 for the 2014-2016 allocation period, equaling $ 67,541,454, complying with the Global Fund's counterpart financing policy. This was confirmed by the Global Fund in its performance letter dated 16 October, 2016, following a review of government health expenditure data for 2015 in relation to grants MOZ-H-MOH, MOZ-M-MOH and MOZ-T-MOH.

d) Co-financing commitments for the 2017-19 allocation:

Current co-financing commitments meet minimum requirements to fully access the co-financing incentive as set forth in the Global Fund's Sustainability, Transition and Co-financing policy. (Please refer to May 2017 letter from Government of Mozambique committing additional investments)

e) Request for Global Fund support for the institutionalization of expenditure tracking mechanisms

Funding has been requested to support the MOH Department of Information Systems (DPC-DIS) to conduct a Public Expenditure Tracking Survey. This will be expanded to at least cover spending for TB. The MOH does not currently track or report spending by disease category. Reporting of HIV specific funding is based on the National AIDS Spending Assessment (NASA), elaborated by the CNCS, which details HIV expenditure by financing source, programmatic area, beneficiary population and geographic location. Data available was estimated by CNCS using another methodology – MARF – Monitoring and Analysis of Financial Resources for HIV, which uses available information from the FY16 PEPFAR Expenditure Analysis, Official Development Assistance to Mozambique Database (ODAMOZ), commodity consumption data from CMAM, estimates from GRM expenditures for human resources and other donor reports. TB and several other programs currently cannot track with such granularity.

4.2 Sustainability

a) Synopsis of the Funding Landscape Analysis

The HIV strategic plan (2014-2019/20) needs as costed has funding needs of $396 m (2018), $ 409 m (2019) and $ 418 m (2020). Domestic resources including funding from GRM and partners covers about % needs annually. A gap of $ 97.5 m (2018), $ 108.9 m (2019) and $ 115.1 m (2020) had this been calculated to exist using the 2014 projections.

HIV Funding Landscape: The HIV Funding landscape is summarized in the table below.

Category	2018	2019	2020
NSP Cost ($) millions	**396**	**409.7**	**418.9**
Available resources from GRM	18.2	20.8	23.8
Resources from partners ($) million	280	280	280
Total Available resources ($)	298.2	300.8	303.8
Gap ($)	97.8	108.9	115.1

The Global Fund allocation of $ 289 m covers a significant portion of that gap with a residual gap for the three years estimated at over $ 32million. Key caveats must accompany the use of this data: Needs estimation for the strategic plan was first done prior to the release of the AIDS and Malaria Indicator Survey 2015 data (IMASIDA, Annex 22) in May 2017, revealing an increase in previously estimated number of PLHIV by about 300,000. Secondly, the national health strategic plan budget had not been costed, and now requires $7.8 Billion, with an estimated $200 m needed to directly support HIV program delivery through the supply chain, information system and human resources for health and other recurrent expenditure. HIV response is 94% donor funded. PEPFAR and the Global Fund contribute more than 85% of the funding for HIV/AIDS and TB. Government funding primarily supports salaries, infrastructure, supply chain management and recurrent expenditures. PEPFAR finances more than 60% of the Mozambican AIDS response, including the entire need for VMMC and nearly all of OVC responses, and viral load scale up needs.

TB Funding Landscape

Resource tracking for TB and other disease programmes is not as exhaustively done as it is for HIV. This funding request will support a portion of expenditure tracking. The TB program has been co-funded by an occupational health grant from the World Bank, targeting miners migrants and their communities. $40m will be used directly by Mozambique over 5-years, and roughly two-thirds will be used for TB-related activities in six provinces: Maputo Province, Gaza, Inhambane, Manica, Tete and Zambezia. For 2018 to 2020 the expected World Bank contribution for TB is $15.8 million USD and will be used to implement TB/HIV screening and innovative health care delivery for migrants and labor sending areas - especially miners, and laboratory strengthening/ infrastructure improvements. From 2018 to 2020 the Mozambican NTP expects a $23.4 million USD contribution from PEPFAR (based on 7.8 million USD PEPFAR COP17 allocation for TB/HIV and assumed flat funding for 2019 and 2020) which will support key TB related interventions including TB infection control, some TB and HIV contact tracing, screening for TB in all PLHIV and in key populations, support for Xpert implementation, TB/HIV clinical mentorship/training in areas of geographic priority, and a small sub-award directly to the NTP (see COP17, Annex 40). The NTP anticipates a Challenge TB contribution of $11.4 million over 3-years (assumes continued funding at current level of $3.8 million annually and that CTB will be renewed in 2020) for targeted community and health facility-based TB screening of high-risk populations, contact tracing and clinical mentorship. This work is led by FHI360 in Mozambique and is active in 4-provinces: Sofala, Tete, Zambézia, and Nampula. through the end of 2019. Besides the Global Fund, there are no other external funders for TB drugs.

(c) Sustaining Global Fund financed programs

Historically, the national HIV and TB responses have been heavily dependent on donor funding. The Global Fund has been responsible for approximately 25% of the resource needs of the HIV program and majority of the TB program financing. PEPFAR supports over 60% of the Mozambican HIV response. The government has acknowledged this sustainability risk and is leading sectoral financial reforms. It has adopted a pooled funding and programming mechanism for the sector (PROSAUDE) with a view to increasing

efficiencies. The share of government expenditure to health has been increased, at least in Metical terms. Value for money is being emphasized, while measures described in section 4.1a will feature in the health financing strategy. Other macro-level sustainability strategies include aligning donor funding to national disease, sector and development strategies and creating a cohesive policy and implementation environment. Decentralization and expansion of service delivery to the community, where it is more affordable and cost-effective is also a key strategy highlighted in section 2.2 of this request. Similarly, increased task shifting and sharing with lay workers and peer groups, decentralization and the increasing use of PROSAUDE for pooled programming offer a platform from which the government can begin taking the reins of the sector's funding needs once fiscal space is broadened by increased revenues within the medium to long term (8 to 15 years), for example through the exploitation of natural gas. Detailed information on government plans is available on PESS (Annex 9, section 6)

SECTION 5: PRIORITIZED ABOVE ALLOCATION REQUEST / UPDATE

Prioritized Above Allocation Request

Provide in the table below a prioritized above allocation request which, if deemed technically sound and strategically focused by the TRP, could be funded using savings or efficiencies identified during grant-making, or put on the Register of Unfunded Quality Demand to be financed should additional resources become available from the Global Fund or other actors (e.g. private donors and approved public mechanisms such as UNITAID and Debt2Health). This above allocation request should include clear rationale and should be aligned with the programming of the allocation for maximum impact. The request should reflect the order in which interventions will be funded if additional resources become available. In line with the Global Fund's Strategy to maximize impact and end the epidemics, the prioritized above allocation request should be ambitious (for example, representing at least 30-50 percent of the allocation amount).

Module	**Interventions**	**Amount requested**	**Brief Rationale, including expected outcomes and impact** (how the request builds on the allocation)
HIV Treatment and care	Differentiated ART for PLHIV	$70,795,813	Despite 70% of the country's HIV allocation procuring ARVs, the Global Fund supporting 762597 patients and PEPFAR supporting 298,838 this will be sufficient to place only 61% of adult PLHIV and 54% of children on treatment. This moderate coverage will not be adequate to reduce mortality and incidence as expected (Annex 37 pp9-18, Annex 47 and section 2 above.) Above allocation investment is requested to initiate and retain 126,137 adults on ART in 2018, 233,530 in 2019, and 328,491 in 2020; and 11,144 children on ART in 2018, 16,656 in 2019, and 20,731 in 2020. This will help reach at least 81% adult and 67% paediatric coverage by 2020. Routine HIV surveillance at ANC clinics, prevention activities among key and vulnerable populations such as sex workers, MSM, young girls and women, TB patients, miners and others are expected to yield new HIV positive patients. Recent evidence (IMASIDA 2015, Annex 22, released in 2017); has led to an upward revision of the total number of PLHIV by nearly over 300,000 individuals at a time when less than two thirds of the Mozambican population has tested for HIV, only 54% have been initiated on ART and fiscal space is narrow, constraining domestic financing. At the same time PEPFAR commitments for 2018 have been agreed. In addition to the above factors, the investment in improvement of retention and longevity will further increase the need for ART. While PEPFAR will review its contributions for 2019 and 2020, this is unlikely to cover the entire ARV gap going by historical trends. Prioritized Above Allocation investment is requested to support **Expected outcomes and impact:** Increase in the proportion of PLHIV receiving ART from 54% in 2014 to 80% in 2020, and iincreased ART retention rates from 70% at 12 months in 2016 to 80% in 2020 will lead to reduction in AIDS related mortality by 40% by 2020 and reduction in incidence by 40% by 2020.
HIV Treatment and care	*Therapeutic Nutritional support for acutely malnourished 70,000 on ART*	4,129,402	About 15% of PLHIV on ART are estimated to be suffering from acute malnutrition and have a propensity for LTFU; this component seeks funding to provide 70,000 of them nutrition, to complement about 50,000 receiving support from PEPFAR.
RSSH	PSM; QA HMIS M&E;	67,016,662	Following consultations, the HIV and TB programme reviews (Annexes 40, 41 and 43) , Global Fund Office of the Inspector

	Community: HRH		General audit and Green Light Committee recommendations (Annexes 44 and 46) a risk assessment workshop supported by the Global Fund and PEPFAR/ USAID in collaboration with MOH, Civil Society and other stakeholders in May 2017, the most critical risks to the Global Fund grant and disease programs include the supply chain infrastructure, critically inadequate staffing and capacity in critical HRH positions, weak HMIS and grossly inadequate community systems capacity. The table on risk, found in section 3.2 of this document specifies and prioritizes some of these risks in terms of likelihood, severity and impact to the program. The allocated RSSH funding addresses only part of these risks, but some critical gaps remain. For instance, due to insufficient space, inadequate storage and distribution conditions**, the current** infrastructure and transportation system are incapable of handling diagnosis and treatment needs for HIV and TB. The country has the lowest ART retention rate in the region partly because community health workers are outnumbered nearly 400:1 by patients on ART alone and are therefore incapable of effectively tracking LTFU. Above allocation funding for RSSH will support the interventions described below, which are all supported by detailed budget assumptions appended to Annex 3, and by Annexes 14-17.
TOTAL AMOUNT		**$141,941,877**	

Additional contextual information relevant to the prioritized above allocation request: The Prioritized Above Allocation Funding Request is supported by a detailed budget (Annex 3), and justified in section 3.2 on risk management, Annex 40, pages 6-22; Annex 41, pp. 3-21; Annex 43, pp8-42, Annex 44, pp. 11-15-24 and other annexes, Annex 46, pp. 3-36.

Module	Interventions	Budget
Module: Procurement and Supply chain management systems	Rehabilitation, expansion of 2 warehouses; drug safety study for HIV, TB and Malaria Drugs; review distribution plan for medicines and health commodities. (Please see section 3.2 and annexes 3 and 39-46 for justification and details)	$13,038,668
Module: Human Resources for Health HRH), including Community Health Workers	Train pharmacists, recruit and train laboratory technicians, maternal and child health nurses in the training institutes of Maputo, Chimoio, Tete, Inhambane, Beira and 12 other institutions; train 53 directors and mid-level cadres on Strategic Human Resource Management Please see section 3.2 and annexes 3 and 39-46 for justification and details)	$6,676,647
Module: Community Systems Strengthening for Enhanced Service Delivery	Community based monitoring: Integrate information management system for all diseases; under the coordination of MOH and CNC; Service quality assessments and supervisory Social mobilization, building community linkages, collaboration and coordination; join sectoral monitoring; strengthen primary health care/DOTS; and integrated training	$19,011,651
Module: Financial Management Systems	Expand e-SISTAFE at the level of SDSMAS (18 Districts) through equipment, training, network system installation and technical assistance; strengthen the audit system; computers for audit staff	$596,942
Module: National Health Strategies	Training on national budgetary system and expenditure tracking; SISMA (the DHIS 2) system uploads and expansion	$125,466
HMIS and M&E	Routine reporting; Analysis, evaluations, review and transparency; Surveys; Establish Vital Registration System and DHIS 2 expansion to facilities	$14,419,867
Module: Integrated Service Delivery and Quality Improvement	Supportive policy and programmatic environment for HIV and TB - EID, PWID, new short term and fixed drug combinations; human rights; Laboratory systems for disease prevention, control, treatment and disease surveillance	$12,603,036
Module: Program Management	Programme management: Policy, planning, coordination and management of national disease control programs, Grant Management	$543,385

Total PAAR for RSSH		$67,015,662

Further details are included in the detailed budget and workplan accompanying this request.

CORE TABLES, CCM ELIGIBILITY AND ENDORSEMENT OF THE CONCEPT NOTE

Before submitting the concept note, ensure that all the core tables, CCM eligibility and endorsement of the concept note shown below have been filled in using the online grant management platform or, in exceptional cases, attached to the application using the offline templates provided. These documents can only be submitted by email if the applicant receives Secretariat permission to do so.

Relevant Additional Information (optional)