The Global Fund
To Fight AIDS, Tuberculosis and Malaria

STANDARD CONCEPT NOTE (ZIMBABWE)

Investing for impact against HIV, tuberculosis or malaria

A concept note outlines the reasons for Global Fund investment. Each concept note should describe a strategy, supported by technical data that shows why this approach will be effective. Guided by a national health strategy and a national disease strategic plan, it prioritizes a country's needs within a broader context. Further, it describes how implementation of the resulting grants can maximize the impact of the investment, by reaching the greatest number of people and by achieving the greatest possible effect on their health.

A concept note is divided into the following sections:

Section 1: A description of the country's epidemiological situation, including health systems and barriers to access, as well as the national response.

Section 2: Information on the national funding landscape and sustainability.

Section 3: A funding request to the Global Fund, including a programmatic gap analysis, rationale and description, and modular template.

Section 4: Implementation arrangements and risk assessment.

IMPORTANT NOTE: **Applicants should refer to the Standard Concept Note Instructions to complete this template.**

SUMMARY INFORMATION			
Applicant Information			
Country	**Zimbabwe**	**Component**	**TB**
Funding Request Start Date	**1st January 2015**	**Funding Request End Date**	**31st December 2017**
Principal Recipient(s)	**Ministry of Health and Child Care (MoHCC)**		

Funding Request Summary Table

A funding request summary table will be automatically generated in the online grant management platform based on the information presented in the programmatic gap table and modular templates.

SECTION 1: COUNTRY CONTEXT

This section requests information on the country context, including the disease epidemiology, the health systems and community systems setting, and the human rights situation. This description is critical for justifying the choice of appropriate interventions.

1.1 Country Disease, Health and Community Systems Context

With reference to the latest available epidemiological information, in addition to the portfolio analysis provided by the Global Fund, highlight:

a. The current and evolving epidemiology of the disease(s) and any significant geographic variations in disease risk or prevalence.

b. Key populations that may have disproportionately low access to prevention and treatment services (and for HIV and TB, the availability of care and support services), and the contributing factors to this inequality.

c. Key human rights barriers and gender inequalities that may impede access to health services.

d. The health systems and community systems context in the country, including any constraints.

a) Current and evolving epidemiology of TB in Zimbabwe:

Zimbabwe continues to be severely burdened by the dual TB-HIV epidemic. Current estimates of TB prevalence are 433/100,000 population, placing the country still among the top 22 high burdened countries in the world[1]. The estimated incidence, currently at 562/100,000 represents a doubling of 1990 estimates, having reached a peak of 799/100,000 population in 2005. Estimated TB mortality (excluding HIV) has stabilized around 30/100,000 population over the last decade[1].

HIV continues to be an important risk factor for TB in Zimbabwe. Evidently, the evolution of the TB burden has been largely influenced by the trajectory of the HIV epidemic as depicted by the corresponding increase in TB case notifications with the increase in HIV prevalence since 1984, when the epidemic began (See Figures 1 and 2).[2] The latest estimates of HIV prevalence among adults aged 15 - 49 years remains high at 15.2%,[3] and the economically active males aged 25-49 year age-group remains the most affected by TB in Zimbabwe as is the case in most high HIV prevalence settings.[2]

[1] Global TB Report, 2013
[2] Epidemiological Review and Impact Assessment, Zimbabwe 2013
[3] Zimbabwe Demographic and Health Survey, 2010-11

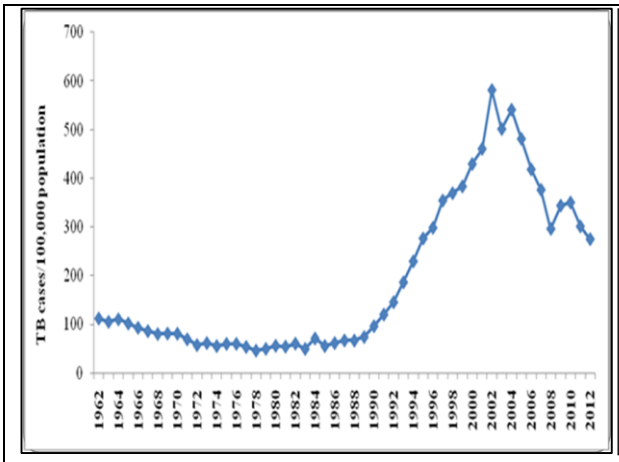


Fig 1 TB Case notification in Zimbabwe, 1962-2012 [2]

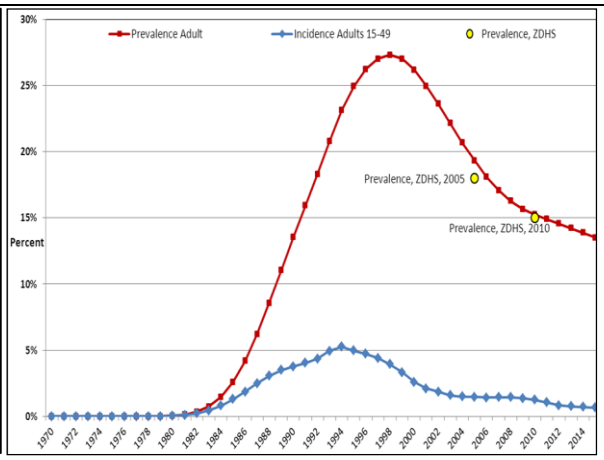
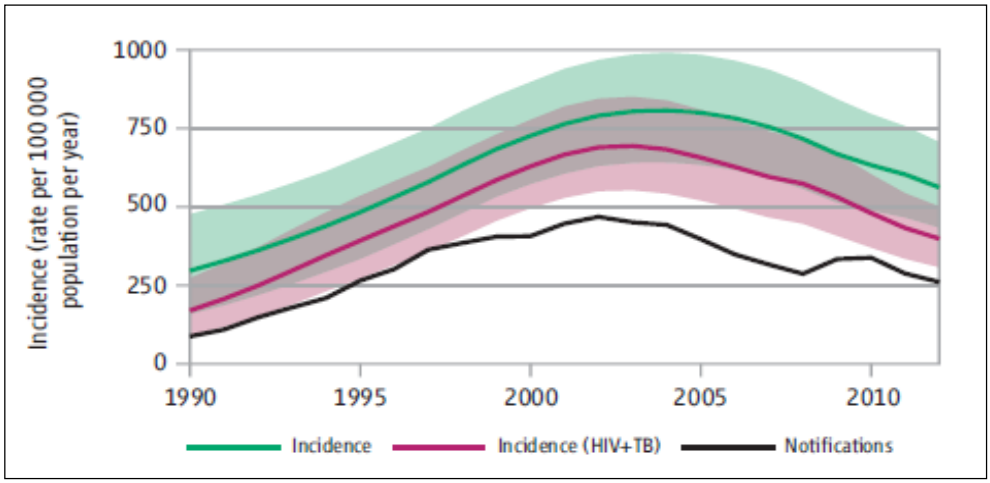


Fig 2: Adult (15-49 years) HIV prevalence, 1970 – 2015 [4]

Over the last 5 years, the country has witnessed stagnation in TB case notification rates. In 2012, 35,760 new and relapse TB cases were notified, translating to a notification rate of 281 per 100,000 population[1]. This represents a 31% decline from the peak of 407/100,000 in 2000. The trends in notification rates over the last decade seem to suggest a huge gap in TB case detection as illustrated in figure 3 below[1]. While the sustained increase in access to antiretroviral treatment among co-infected TB patients could partly account for this decline, limited case finding, especially among high risk populations may be a contributory constraint. Notably, children account for only 8% of notified TB cases[2].

Fig 3: Trends in TB incidence and notifications in Zimbabwe, 1990-2012[1]



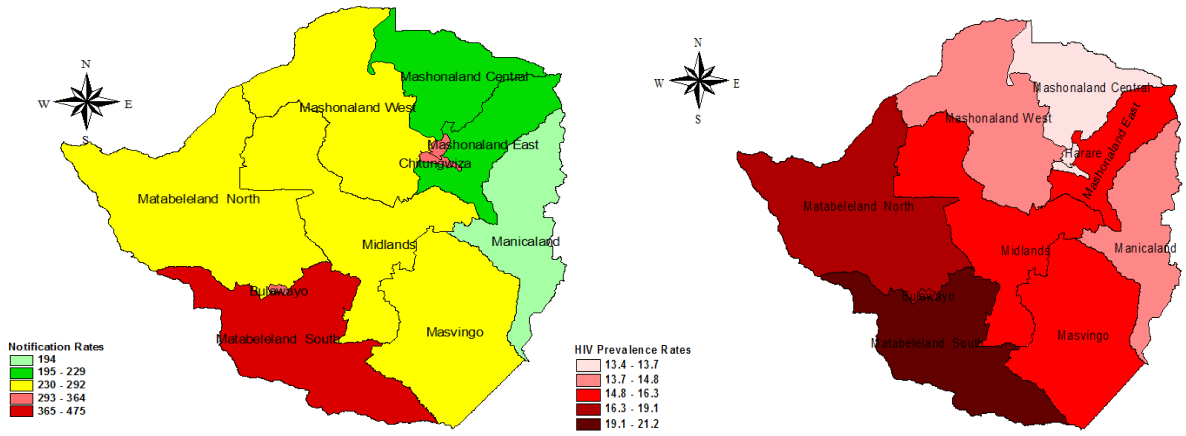
The current national TB notification rate conceals wide sub-national variability, with the southern part of the country disproportionately affected. Some districts in the southern part of the country, such as Beitbridge have notification rates as high as *872 per 100 000* population in 2013, while districts in the north, such as Mudzi report rates as low as *80 per 100 000* population.[5] Notably, provinces, such as Matabeleland North have experienced a more pronounced decline over the last 3 years, while Masvingo has had no significant change.[5]

Regional variation in HIV prevalence mirrors that of TB notifications. According to the latest Demographic and Health Survey of 2010/11, Matabeleland South and Bulawayo reported the highest HIV prevalence, 21.2% and 19.1% respectively[3]. Incidentally, these provinces have consistently reported the highest TB notification rates, 521 and 427 per 100 000 population respectively in 2012[5].

Fig: 4 TB Notifications by Province, Zimbabwe, 2013

Fig: 5 HIV Prevalence by Province, Zimbabwe, 2010/11[3]

[4] Zimbabwe HIV NFM Concept Note for early applicants
[5] National TB Control Program Annual Report, 2012 (draft)



The country faces an emerging threat from drug-resistant tuberculosis, with annual estimates of 930 MDR-TB cases in 2012[1]. Only 149 MDR-TB cases were confirmed in 2012, owing to the country's limited diagnostic capacity. Furthermore, the network of community-based structures, which could potentially be leveraged for active case finding have not been optimally utilized[6].

Explanatory

The gaps between notified and estimated burden is largely explained by accessibility constraints. This is more pronounced in remote, hard to reach rural areas and densely populated urban settings, where poverty may limit timely care seeking, due to transport and health care cost barriers. In addition, inadequate active case finding among key populations such as prisoners, informal mine workers, and patients with co-morbid conditions such as diabetes may also be contributing to low case finding[2].

The country's TB case detection is limited to use of modeled estimates. Annually, it is estimated that more than 50% of cases remain undetected[1]. The country has embarked on a prevalence survey, anticipated to be completed by the end of 2014, with a view to establish a more accurate measure of TB burden, to enable refining of current estimates.

Some of the variations in access could also be attributable to health system-related constraints. There is limited access to TB diagnostic services, particularly microscopy and Xpert MTB/Rif technology, inadequate referral mechanism for sputum collection and transportation to serve the growing need particularly in rural populations. This tends to be more pronounced in the southern part of the country; that has a disproportionate burden of TB.

b) Key affected populations:

Key populations affected by TB include;

People living with HIV:

TB-HIV co-infection among all TB cases notified in 2012 was has high as 74%[5]. Despite gains in antiretroviral scale-up, access among co-infected patients fall way off universal access, and was 75% in 2012[5].

Mining communities:

Mining communities in the Southern African Development Community (SADC) have been noted as an important risk group. In recognition of this plight, there are efforts to mobilize a shared regional response through the SADC declaration of TB in the mining sector.[7] In the Zimbabwean context, with the economic down turn, sprouting informal small scale mining

[6] Zimbabwe Tuberculosis Program Country Team Portfolio Analysis summary
[7] SADC Declaration of TB in the mining sector, 2012

settlements, with negligible regulatory arrangements, and invariably increased vulnerability to silicosis, present an important risk group to TB.

Children:

- TB case finding in children continues to decline. The proportion among notified cases decreased from 11% in 2007 to 8% in 2012[2]. Clearly, much needs to be done to deliberately target TB case finding in children as a high risk group.

Migrant workers:

- There is substantial migration for work to South Africa, especially around border provinces. Such workers may have poor living and working condition, potentially predisposing them to HIV and TB infections.

Prisoners:

- Although passive case detection of TB takes place in Zimbabwe's prisons, it is likely the burden is underestimated. There is no systematic screening of prisoners either at entry or specific intervals being done.[2]

Health care workers:

- TB surveillance among health workers is not well established, though data from partner supported Integrated TB-HIV clinics clearly demonstrate increased vulnerability to nosocomial transmission.[8]

c) Key human rights barriers and gender inequalities

As a communicable disease, TB is notifiable in Zimbabwe, with provision for free treatment, regardless of ethnicity, gender or religious affiliation. The male to female ratio of notified TB cases has been consistently around 1.3[1], though there is no evidence of gender-based differentials in utilization of TB services for the majority of inhabitants. There are pockets of religious practices however, that tend to affect the ability of women and girls to seek health care, especially among a growing number of indigenous religious sects, who discourage use of formal medical care and education in some instances. Some hard to-reach populations remain, such as mobile populations, small scale informal miners, and resettled populations distant from health facilities. There are isolated instances, such as in Gokwe and Chiredzi districts, with seasonal variation in geographic access during the rainy season.

Zimbabwe has experienced improved economic growth rate in recent years but this has not yet translated into increased productive employment and reduction of poverty. While anti-TB and ARV medicines are provided free of charge, economic access still remains a barrier to services including through out of-pocket expenditures on user fees at health facilities, laboratory and X-ray charges, and transport to seek health care.

d) Health systems and community systems context

i) Country context:

Underpinning the Ministry of Health and Child Care (MoHCC) mission, is the need to achieve equity in health, by targeting resources and programmes towards the most vulnerable. The Primary Health Care approach remains the main strategy in this pursuit, with a deliberate thrust to widen participation of stakeholders, in the spirit of fostering country ownership of health issues.[9] The MoHCC has the sole mandate to provide, coordinate, and advocate for equitable access to quality health services, while maximizing the use of available resources. Local authorities, under the Ministry of Local Government, have delegated responsibilities of providing primary health care services to residents in their jurisdiction. Within the context of health service delivery, engagement of faith based organizations through mission hospitals,

[8] TB CARE I AP4 Quarter 4 Report (Jan-Mar 2014)

[9] The National Health Strategy for Zimbabwe (2009-2013)

most of whose recurrent costs are co-funded by government, there has been widened reach to the most vulnerable who access such facilities at highly subsidized cost. There are also well established private and mine hospitals across the country and most major cities that complement the MoHCC in the provision of health care services[10].

At national level, the National TB Program coordinates policy formulation and resource mobilization for TB control. Interventions are guided by strategic plans, aligned to the Global STOP TB Strategy. The district is the functional (implementation) level, where all comprehensive health services, including TB diagnosis, treatment initiation and patient follow up are provided. The District Medical Officer is the accounting officer and reports to the Provincial Medical Director. The province and district health offices are responsible for the management and control of all communicable diseases at sub-national level. The day to day coordination of program implementation is the responsibility of the District and Provincial TB coordinators.[10]

TB services are decentralized to the most peripheral primary care facility. Laboratory diagnosis, using sputum smear microscopy is the current modality for TB case investigation. The TB laboratory network comprises of two National Tuberculosis Reference Laboratories, ten intermediate (provincial/city) laboratories and 220 peripheral level laboratories[11].

Estimates of expenditure or budget requirements for each year are requested by Treasury from all Government Ministries, to inform annual budget allocations. Based on what is available to Treasury, the Ministry of Health and Child Care receives a budget allocation each year of between 8-10% of the overall national budget, way below the Abuja targets. In 2014, this translated to ***US$337,005,000.00.*** Budget provision to health is in turn re-allocated to sub-national (Provincial and District) level, particularly for service delivery, public sector investment projects such as construction of health infrastructure, excluding staff salaries which is managed at head office. In addition, there is program specific budget allocation each year for TB-HIV related interventions, managed by the national AIDS and TB unit. These funds support procurement of anti-TB medicines and national level program support activities. In 2014, ***US$500,000.00*** was allocated for anti-TB medicines[12].

TB treatment guidelines were reviewed in 2010 and all TB patients are treated with fixed dose combination of anti-TB medicines. Key implementing partners in Procurement and Supply Chain Management (PSCM) of health related commodities including for TB are the National Pharmaceutical Company (NatPharm) and Medicines Control Authority of Zimbabwe (MCAZ). Under the current TB GF grant NatPharm is a sub-recipient for storage and distribution and MCAZ is responsible for quality assurance. R5 Global Fund grant, the NatPharm-Crown Agents Consortium was formed in 2006 as a Public-Private Partnership to handle procurement for the Principal and Sub Recipients of the Global Fund and also serviced several other non-Global Fund supported Non-Governmental Organisations. Crown Agents is an international development company providing direct assistance, consultancy and training for public sector modernisation, particularly in financial management, banking, procurement and logistics as well as health systems strengthening. Between 2007 and 2010, the Consortium procured medicines and goods for over $16.5m. However, under additional safeguard measures, the procurement systems for TB, HIV and malaria products had been managed by the Principal Recipient (PR) i.e. the United Nations Development Program (UNDP). The procurement arrangement resulted in an additional management layer in the administration of procurements, adversely impacting on the timeliness of order initiation and product arrival.

The Zimbabwe Informed Push System (ZIP) was used as a response to economic and health system challenges in 2007 and 2008 to distribute anti-TB medicines. However, the system has resulted in inequitable distribution of medicines characterized by stock management challenges. Given these challenges, a new harmonized pull system is being introduced, the Zimbabwe Assisted Pull System (ZAPS) to allow greater ownership of stock management as

[10] National Tuberculosis Program External Review Report, June 2011
[11] National Tuberculosis Control Program Strategic Plan (2015-2017)
[12] National Budget 2014

well as to introduce cost-efficiency to the distribution system. This system allows health staff and the district to collect their own consumption data for use in decision-making.

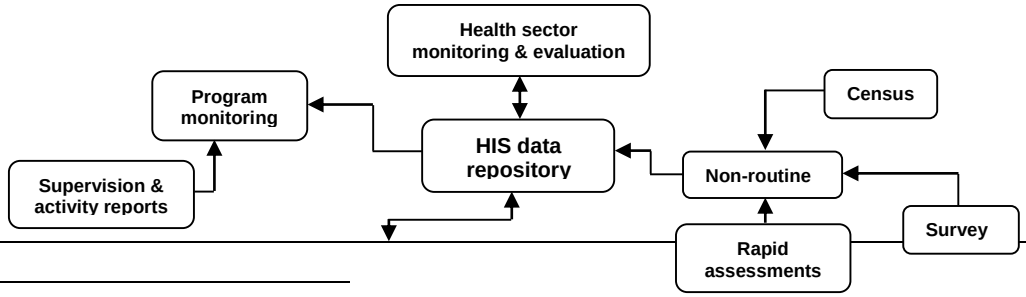
Community-based approach is one of the five pillars of the National Health Strategy (2011-2015). Notably, 7 (22%) of the 32 goals, and 58 (42%) of 138 objectives contained in the strategy cannot be implemented effectively without the involvement of Community Health Workers (CHWs).[13] There are two main categories of community health workers, namely: the Village Health Workers (VHWs) and the Community Health Based Care (CHBC) volunteers. The VHWs are supervised by MoHCC whereas the CHBCs are supervised by NGOs and CBOs. The VHWs are selected members from the community who volunteer to render community health services, and serve as the link between the clinic and the community, while CHBC volunteers primarily focus on providing care and support to people living with HIV/AIDS. They work as secondary caregivers and maintain regular contact with patients and their primary caregivers, undertaking such roles as providing care and support to the client and training family members in how to best provide psychosocial support and palliative care to the patients. In addition, there are some community volunteers who are engaged by different health programs for specific time-bound health related activities. These volunteers include: those involved in distributing condoms; the behaviour change facilitators; those involved in distributing treated nets and DOTs observers.[13]

In 2009 the Government of Zimbabwe successfully applied for a Global Fund grant to strengthen Community Health Systems. Out of the total of 11,514 CHWs, around 8,000 VHWs were trained on community management for TB, HIV and malaria under the HSS grant. [13] However, knowledge gaps on community TB management still remains among secondary care givers.

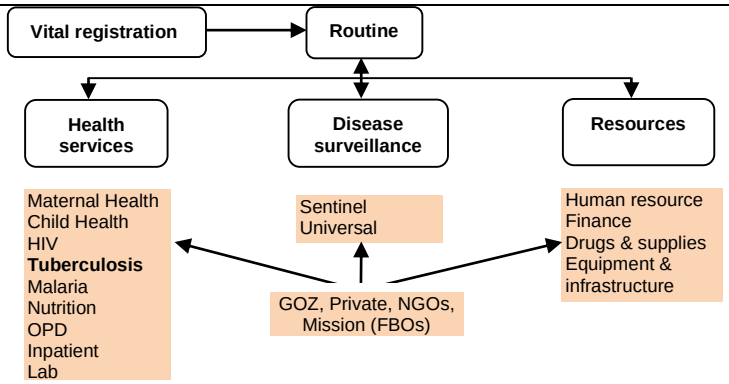
Zimbabwe's health information system is guided by a National Health Information Strategy, 2009-2014, that provides the overall framework for the establishment of a flexible, comprehensive and integrated data collection; storage; processing; analysis and utilization system. There is a well-defined system of data collection and reporting from the most peripheral primary health facility up to the national level, as illustrated in the figure below[14]. There are a number of core TB specific indicators noted in the National Health Information Strategy, prioritized for tracking. These include; TB notification rate for smear positive pulmonary cases, TB treatment success rate, HIV co-infection rate and annual notified cases of MDR TB[14]. The National TB Program has a comprehensive recording and reporting system, which is predominantly paper based. The tools have since been updated in line with revisions in the WHO reporting framework. Integration of TB and HIV indicators in the tools has been completed. A process is underway to complete development of data use guides, to support use of surveillance data for programming and decision making at all levels[11].

The National AIDS Program has already launched an Electronic Patient Medical Record System (EPMS) in 85 sites and the National TB Programme is also planning to implement a patient level electronic system. The need to ensure systems integration including with existing DHIS2 is key. This will guarantee reduced burden on health workers who have to enter patient data into different systems, continuum of care, monitoring and reporting on indicators for TB-HIV integration[6].

Fig 6: Health Information System (HIS) (Sub-systems, data sources and information flow)[14]



[13] Global Fund Round 8 HSS Grant Community Systems Strengthening Evaluation, 2012
[14] National Health Information Strategy, 2009-2014



ii) Notable constraints:

Against the background of severe economic circumstances and limited fiscal space, the funding landscape for the health sector has become a big challenge for Zimbabwe. The overall budget allocation to the public health sector has remained low, at less than 10% of annual budget, against the agreed Abuja target of at least 15%. In 2009, the MoHCC was allocated per capita expenditure of $16.5 against a target of $34[15]. The running of health services is receiving considerable support from development partners, threatening sustainability in the event of donor fatigue. Notably, almost 99% of medicines at NatPharm are donations and on average, 40% of health professionals' salary is donor funded. The Human Resources for Health vacancy rate as at May 2013 was 19%, with 69% of the District Medical Officer posts being vacant[9].

Medical equipment in most facilities is obsolete, and in most cases non-functional. Notably, 60% of district hospitals do not have functional X-ray machines[9]. Access to TB diagnostic centres is skewed to urban settings, compounded by geographic variations in population density. Most rural communities have a coverage of <1 microscopy centre per 50 000 population[11].

While the capacity of the CHWs to provide health education as well as identify, manage and refer cases has been noted to be significant, their effectiveness has been affected by their numerical inadequacy, and inadequate support in terms of supplies, incentives, supportive supervision and mentoring. There is also lack of integration of the reporting system into the Health Information Systems (HIS), resulting in non-transmission and unavailability of community related performance data at all levels[13].

Despite significant economic related cross border migration within the SADC region, and in particular South Africa as well as worthwhile intentions by the region to develop a comprehensive framework for regional collaboration on control of communicable diseases, inter-country specific interventions and integration of surveillance systems remains negligible[16].

A comprehensive assessment of the supply chain management identified key priorities for remedial redress. These included the need for integration of medicines and product distribution systems, improvement and expansion of storage at health facilities, and more efficient computerized inventory management systems. Waste management systems for biological waste and unusable health products has been noted as a challenge, with some facilities failing to dispose expired medicines, thereby further reducing the potential space to store health products. The situation calls for upgrading of waste disposal infrastructure to accelerate disposal of medical waste[17][18]

[15] Zimbabwe National Health Accounts (2010-2011)
[16] SADC Protocol on health, 1999
[17] Comprehensive assessment of the supply chain for health commodities in the public sector in Zimbabwe
[18] Assessment of storage capacity and conditions for health commodities in Zimbabwe

Laboratory supply chain has not received the due attention and support over the years, with frequent stock outs and expiries of laboratory commodities, which has impacted on quality of health service provision. Past assessments also indicate sub-optimal distribution of laboratory commodities and equipment with some equipment and reagents lying idle at NatPharm for extended periods[6]. Despite being ISO certified, MCAZ has faced challenges in the area of routine post-marketing surveillance, due mainly to human resources and funding constraints. This is a significant risk to public health in a situation where health products are stored in sub-optimal conditions, often in high temperatures, but with an impaired capacity to detect product deterioration and loss of quality[6].

Engagement of the private sector in TB control remains restricted to only large private hospitals in diagnosing, treatment initiation and referring to public facilities for DOT[10].

1.2 National Disease Strategic Plans

With clear references to the current **national disease strategic plan(s)** and supporting documentation (include the name of the document and specific page reference), briefly summarize:

a. The key goals, objectives and priority program areas.

b. Implementation to date, including the main outcomes and impact achieved.

c. Limitations to implementation and any lessons learned that will inform future implementation. In particular, highlight how the inequalities and key constraints described in question 1.1 are being addressed.

d. The main areas of linkage to the national health strategy, including how implementation of this strategy impacts relevant disease outcomes.

e. For standard HIV or TB funding requests, describe existing TB/HIV collaborative activities, including linkages between the respective national TB and HIV programs in areas such as: diagnostics, service delivery, information systems and monitoring and evaluation, capacity building, policy development and coordination processes.

f. Country processes for reviewing and revising the national disease strategic plan(s) and results of these assessments. Explain the process and timeline for the development of a new plan (if current one is valid for 18 months or less from funding request start date), including how key populations will be meaningfully engaged.

4-5 PAGES SUGGESTED

a) Key Goals, Objectives and Priority program areas.

The goals and objectives of the Zimbabwe National TB Programme draw from the vision, goals and targets of the National Health Strategy, consistent with the broader 5 year development strategy, the Zimbabwe Agenda for Sustainable Socio-economic Transformation (2013-2018)[19].

The National TB Strategic plan 2010 – 2014, which guided the Zimbabwe national TB control efforts in the last 5 years is coming to an end in December 2014. Following a review of its achievements, lessons learnt and a recently conducted TB epidemiological impact assessment, a new strategic plan was developed to provide strategic directions in line with the post-2015 TB strategy. Therefore, the priority setting for TB program interventions proposed in this concept note was guided by the new National TB Strategic Plan (NSP), 2015-2017.

The Zimbabwe TB NSP 2015 – 2017 outlines an ambitious course for the next three years, building on the solid achievements and yet drawing from lessons learnt in the current implementation arrangement[11].

[19] Zimbabwe Agenda for Sustainable Socio-economic Transformation (2013-2018)

The goal of the NSP is:

- By 2025 to have reduced the incidence of all forms of TB by 80% from 562/100000 in 2012 to 112/100 000.
- By 2025 to have reduced mortality of all forms of TB by 80% from 132/100000 in 2012 to 26/100 000.

Strategic Objectives:

- To increase case notification rate of all forms of tuberculosis from 269/100 000 (35,556 patients) in 2013 to 313/100 000 (43,231 patients) by 2017.
- To increase treatment success rate for all forms of tuberculosis from 78% in 2012 to 87% by 2017.
- To increase the number of DR-TB cases detected annually from 393 in 2013 to 1600 in 2017.
- To increase treatment success rate of Drug resistance TB from 59% in 2011 to 75% in 2017

Priority Program areas:

- Expand access to high quality TB prevention, diagnosis, treatment and care to all populations with special focus on key populations at risk of TB;
- Strengthen implementation of TB-HIV collaborative activities to achieve full integration of service delivery; and implement infection control.
- Establish a sound programmatic management of Drug resistant-TB to effectively prevent and manage resistant cases;
- Contribute to health and community systems' strengthening.
- Strengthen collaboration with private care providers and other non-state actors in delivery of quality TB care;
- Document best practices and lessons learnt including programme-based operational research to improve programme performance.

b) Implementation status, including main outcomes and impact achieved:

The implementation of the NSP 2010 – 2014 has so far enabled the country to expand high quality DOTS country-wide, strengthened TB/HIV collaborative activities; established programmatic management of drug-resistant TB (PMDT) as well as initiating community involvement in TB care.

High quality DOTS enhancement & expansion:

In line with the NSP objectives of strengthening TB diagnostic services, the programme scaled-up access to basic microscopy services through expansion of the microscopy network. The number of sites providing sputum smear microscopy doubled from 115 in 2010 to 220 in 2013. Furthermore, an improved linkage of the most peripheral health facilities without on-site microscopy laboratories has been achieved through specimen transportation systems and the use of courier services[11].

As a result of this expansion, an exponential increase in the number of presumptive TB cases investigated from 47,552 in 2009 to 130,195 smear investigations in 2012 was achieved. The proportion of new pulmonary cases with no initial smear investigation was reduced drastically by 21% from 2009 to 2012 (i.e from as high as 29% in 2009 to 8% in 2012)[5].

From 2011, the strengthening of the TB diagnostic services was enhanced with the roll-out of Xpert MTB/RIF, which enabled increased diagnosis of TB especially among PLHIV as well as rapid detection of rifampicin resistance. This has resulted in minimizing the diagnosis vs treatment gap for DR-TB cases. A total 58 machines have been installed across the country. Programmatic management of Drug resistant TB has been decentralized from the initial 2 sites to the country's 10 provinces[11].

Treatment outcomes for patients in care have lagged behind global achievements, with treatment success among all forms in 2012 reported as 78%[5]. Unfavorable treatment outcomes, in particular, deaths have consistently weighed down overall treatment success, with southern provinces registering rates as high as 15-18%[11].

Address TB-HIV, Drug resistant TB and high risk groups :

The programme registered in strengthening TB-HIV collaboration. HIV testing among TB patients has firmed from 27% in 2007 to 90% in 2012. Similarly, the uptake of ART among co-infected patients increased from 23% in 2007 to 75% in 2012[5]. Through partner support, NTP has successfully piloted the feasibility of an integrated "One stop shop" TB-HIV clinic, for comprehensive provision of nurse led HIV testing, CPT and ARVs under one roof. This has since been scaled up from the initial 3 pilot sites to an additional 23 sites. The new HIV grant will see sustained scale up to more sites.

A national programmatic management of drug resistant tuberculosis (PMDT) operational plan 2013-2015, National MDR-TB management guidelines and associated training materials were developed in 2012 to guide implementation. Currently, MDR-TB care has been decentralized to all provinces with the two centres of excellence in Harare and Bulawayo providing support, supervision and clinical mentoring. Through the existing TB GF grant, MDR-TB patients receive financial support to cater for food and transport (for follow up visits). So far the programme has achieved 59% treatment success rate among the 2011 MDR-TB cohorts. The interim outcome results for the 2012 first quarter cohort indicate a smear conversion of 64%[5].

Contributing to health and community systems' strengthening:

Since 2010, a total 440 Microscopists were recruited and trained on TB smear microscopy, rapid HIV testing and malaria diagnostics to support expansion in TB microscopy services. With diagnostic service expansion, motorized riders were engaged and motorcycles procured for sputum transportation from peripheral clinics to laboratories. These riders not only transport TB related specimen but every other specimen that may need laboratory investigation[11].

c) Limitations to implementation and any lessons learnt

Despite the expansion of microscopy services, notification rates continue to decline. The true burden of TB remains unknown, though a prevalence survey underway, supported by the current grant will likely clarify current estimates. It remains uncertain whether the observed decline in case notifications is anything to go by, given the noted decline in estimated case detection. Notably, reliance on less sensitive smear microscopy in the context of an HIV driven epidemic may be undermining case detection.

Diagnostic capacity for drug resistant TB remains limited. There are only two culture laboratories, giving coverage of 0.8 per 5 million population; still way below recommended coverage. The country has no capacity for second line DST, restraining the potential for timely detection of extensively drug resistant cases. Despite the expanded access to Xpert MTB/RIF, unstable supplies of cartridges have limited utility.

Achievements in treatment success rates have remained sub-optimal, and fallen short of global achievements and millennium targets. In 2012, the treatment success for all forms of TB was 78%, against a target and global achievement of 87%. Case containment has largely been biased to facility based care, with limited engagement of the community in supporting TB patients. There has been limited leverage of community structures to support retrieval of patients lost to care[13].

There is notably a significant mis-match between health facilities enabled to initiate ART (401) compared to those initiating TB treatment (1 643). This has contributed to the restrained coverage of ART among co-infected patients, 75% in 2012 and possibly the observed sub-optimum treatment outcomes.

An uninterrupted and sustained supply of quality-assured anti-TB medicines is fundamental for optimum treatment outcomes. There have however been erratic supplies of anti-TB medicines, partly due to the prolonged lead times to delivery through the GDF mechanism and also inadequate implementation of drug supply and management systems at facility level. HCWs lack comprehensive knowledge on detecting, recording and reporting adverse Drug Reactions(ADRs).

Despite on-going efforts to decentralize Programmatic Management of Drug Resistant TB, training coverage at sub-national level remains low, limiting the potential to suspect, investigate and manage drug resistant TB cases[11] Isolation facilities for patients who may need hospitalization are limited and may pose a nosocomial transmission risk as health workers may be forced to improvise to isolate such patients[11] Treatment of Drug Resistant TB is long and associated with frequent adverse drug reactions. Prolonged use of aminoglycosides frequently leads to hearing impairment, which quite often is picked too late due to lack of comprehensive audiology surveillance. Quite often TB patients on 2nd line are on prolonged treatment and may not be economically productive for an extended period while recuperating. This presents pertinent psychosocial and economic strain to the family living with the disease, especially in the event the patient is a bread winner[11].

Lessons learnt:
Throughout implementation of the preceding strategy, key lessons have been documented and have informed important changes in program implementation. *Murimwa et al* in 2012 noted that in Mutare district, as high as 43% of cases on treatment were not registered through the routine M&E system.[20] Consequently, NTP has prioritized introduction of an electronic reporting system, initiated in 2013.

Mlilo et al in 2013, in a study published in the Public Health Action journal observed that, treatment outcomes did not differ by type of treatment support. This has accelerated the impetus to strengthen Community based DOT.[21] Furthermore, in 2012, *Takarinda et al*, noted that taking self-medication increased patient delays to TB treatment or care, justifying the need to strengthen health education for improved health seeking[22]. This has buttressed the national drive toward more patient centred approaches, biased towards community based care.

The three clinics that piloted integrated TB-HIV care through nurse led TB-HIV service provision consistently documented better coverage of TB-HIV indicators including ARV uptake[23]. Lessons learnt thereof have led to phased scale up, with initial pilot sites being used as centres of excellence for capacity building.

d) Main areas of linkage to National Health Strategy

The current National Health Strategy (NHS) 2009-2015 recognizes the significance of TB as a public health concern. Intervention targets of the Strategy are aligned to the Global Stop TB Strategy. Specifically, the 7th goal of the NHS is to reduce the mortality, morbidity and transmission of tuberculosis in line with the 2015 Millennium Development Goals (MDGs) and the Stop TB Partnership targets. The objectives for tuberculosis control in the NHS are also consistent with the objectives of the current National TB Strategic plan (2010-2014).

Among priority interventions are the need to enhance TB/HIV collaboration, including TB screening for health care workers. Community engagement is enshrined in the vision of the

[20] *Murimwa et al* International Health Vol.4 No.4 (2012) 320-322

[21] *N. Mlilo et al* Public Health Action, Vol. 3 No. 2, Published 21 June 2013

[22] *K.C Takarinda et al (BMC Public Health Journal pending publication).*

[23] Implementing TB-HIV Collaborative activities, A Program Guide, The Union (2012)

National Health Strategy, an important pillar that the new National TB Strategic Plan will leverage on in strengthening community TB care delivery.

e) TB-HIV linkages between National TB and HIV program

The Zimbabwe National TB Program and National AIDS Programs are both housed under one Directorate in the MOHCC, each of which is headed by a Deputy Director. Joint planning and supportive supervision by the two programs has fostered a more integrated approach at all levels. A National TB/HIV Coordinating Committee has been in existence for the past 5 years, which serves as the platform for joint planning, discussion of implementation progress/challenges as well as updating of key strategic policy guidelines. Periodic TB-HIV partnership forum, convened jointly by both programs with key partners has minimised overlap in the scope of partner support. Regular joint validation of reports between the two programmes on TB/HIV indicators prior to UNAIDS and WHO reporting remains a gap in the collaboration. At the provincial level, TB/HIV coordinating committees are jointly maintained by the TB and HIV/AIDS focal points with varying degrees of functionality.

The current impetus to equip more primary care facilities to offer integrated TB-HIV services under one roof through the new HIV grant will ensure increased coverage of more holistic and patient centred diagnostic and follow-up care. The National TB Program has recently updated M&E tools in consultation with the National AIDS program to align with the new WHO M&E framework. This joint review has ensured key TB-HIV indicators are not left out.

f) Country processes for reviewing National TB strategic plan

The process of coming up with the National TB Strategic Plan, 2015-2017 has been all inclusive. A wide spectrum of stakeholders were consulted, from grass root community based organizations involved in community TB interventions, through frontline health care providers, in the spirit of fostering country ownership[11]. Consultations deliberately reached out to constituencies of civil society representing people living with TB-HIV. Technical assistance was sought for a comprehensive situational analysis and epidemiological impact assessment to clarify the trajectory of the epidemic. Technical assistance was also sought to cost the strategy and also develop an M&E framework and plan. Consultative stakeholder sessions were convened as a platform for comprehensive dialogue, on a shared vision, mission and strategic program priorities. Core writing teams were constituted to synthesize input from different stakeholders[11].

SECTION 2: FUNDING LANDSCAPE, ADDITIONALITY AND SUSTAINABILITY

To achieve lasting impact against the three diseases, financial commitments from domestic sources must play a key role in a national strategy. Global Fund allocates resources which are far from sufficient to address the full cost of a technically sound program. It is therefore critical to assess how the funding requested fits within the overall funding landscape and how the national government plans to commit increased resources to the national disease program and health sector each year.

2.1 Overall Funding Landscape for Upcoming Implementation Period

In order to understand the overall funding landscape of the national program and how this funding request fits within this, briefly describe:

a. The availability of funds for each program area and the source of such funding (government and/or donor). Highlight any program areas that are adequately resourced (and are therefore not included in the request to the Global Fund).

b. How the proposed Global Fund investment has leveraged other donor resources.

c. For program areas that have significant funding gaps, planned actions to address these gaps.

1-2 PAGES SUGGESTED

a) Funding landscape for National TB Program

In the aftermath of the economic challenges experienced by the country, government funding for priority disease programmes including the national TB response began to improve. According to the government's expenditure estimates for the year ending December 31st 2014, which includes 2014-2016 projections, a progressive increase in allocation to the two TB-related budget lines is expected (Table below).

Table 1: Government expenditure estimates on TB-related interventions

Budget line	2013 Budgeted (US$)	2014 Budgeted (US$)	2015 Budgeted (US$)	2016 Budgeted (US$)
Anti-TB drugs	500,000	500,000	508,000	544,000
HIV/AIDS, TB, STD Programmes	300,000	205,000	208,000	224,000

Source: Government of Zimbabwe: Estimates of expenditure for the year ending December 31, 2014. Ministry of Finance & Economic Development

Government also provides funding for TB and HIV/AIDS through the National AIDS Trust Fund (NATF) under the National AIDS Council (NAC). The National TB Programme receives a variable annual funding allocation from NAC, which has been prioritized towards procurement of 2nd line anti-TB medicines and TB diagnostics mainly Xpert MTB/Rif cartridges. Up to 55% of the National AIDS Trust fund supports procurement of anti-retroviral medicines, which benefits TB/HIV co-infected patients. This translates to 25% of the actual country needs of antiretroviral drugs. The NATF funding supported procurement of 12 Xpert MTB/RIF machines in 2012 and from 2015 to 2017 government has committed USD$1,5million annually for TB control.

From a long-term sustainability standpoint, the MoHCC is in the process of developing a comprehensive Health Financing Policy. This policy will provide the enabling environment in pursuit of the universal health coverage agenda, which will ensure a minimum package of basic health services for all. Various proposals for innovative health financing including social health insurance are under consideration to improve access to care.

Development partners that compliment government efforts include the United States Government (USG) through funding mechanisms such as TB CARE I and PEPFAR. The current support has been supporting TB-HIV collaborative activities, Programmatic Management of Drug Resistant TB (PMDT), Monitoring and Evaluation and Health systems' strengthening. The support has also included procurement of 24 Xpert MTB/RIF and associated training activities. In the next three (3) years, no major changes are anticipated in the scope of partners financial support for the Zimbabwe TB Programme.

The full expression of need to implement the National TB Strategic Plan, 2015-2017 is to the tune of *USD$ 88,706,770.00.* Anticipated domestic funding to support implementation of the Strategy is *USD$ 6,269,196* representing 7% of the actual need*.* Areas of support from domestic funding are summarized in the table below.

Table 2: Projected funding landscape for TB control in USD$, 2015-2017

Funding source	Program intervention/ activity	Funding projection 2015	Funding projection 2016	Funding projection 2017	Total Domestic funding
National budget allocation.[24]	AIDS & TB Unit allocation for program activities *(20% of overall provision to AIDS and TB)*	41,600	44,800	48,246	***134,646***

[24] Budget estimates of expenditure report for year ending Dec. 2014

	TB drugs	508,000	544,000	582,550	***1,634,550***
National AIDS Council	TB Drugs 2nd line	1,500,000	1,500,000	1,500,000	***4,500,000***
Total					***6,269,196***

b) Tracking and reporting arrangements of domestic funding commitments:

Government funding commitments and expenditure are currently managed through a web-based accounting package called the Public Finance Management System, accessible on the government intranet, which enables tracking and reporting by budget line. The fiscal budget of the Government of Zimbabwe includes two (2) TB-specific budget lines with one dedicated solely to procurement of anti-TB drugs, while the other is for programme operations jointly with HIV/AIDS and STDs. The PFMS system will therefore be used to track TB related budgetary commitments and expenditure on a monthly basis including the generation of status update reports. The National TB Programme will liaise with the MOHCC Finance Department responsible for the tracking of the ministry's budget. Anticipated shortfalls in funding commitments will be closed through resource mobilization targeting existing and new potential partners.

c) Global Fund investment leverage on other funding sources:

The anticipated investment from Global Fund to support the national TB response will leverage on the existing domestic funding. Partner funding support is anticipated to be sustained to compliment government commitments. Reference is made to US Government funding through TB CARE I and PEPFAR, which continues to fund key programmatic interventions with an annual budget provision of USD$5-6 million. Despite this significant contribution and taking into account the indicative funding provision for this current application, a funding gap to the tune of USD$60,354,927.00 is anticipated, part of which would be requested above allocation.

d) Planning to address significant funding gaps:

To address the projected funding gap, which will not be included in the funding request, the National TB Strategy will be used as an investment case to explore new opportunities for mobilization of funds from non-traditional sources including key business constituencies. These will include but not be limited to the Mining sector, to address particular strategic interventions targeting mine workers as an important high risk group. A number of partners including the Harare Municipality have been receiving grant support through TB Reach. Such resource mobilization efforts will be enhanced to broaden the scope of partner support.

2.2 Counterpart Financing Requirements

Complete the Financial Gap Analysis and Counterpart Financing Table (Table 1). The counterpart financing requirements are set forth in the Global Fund Eligibility and Counterpart Financing Policy.

a. Indicate below whether the counterpart financing requirements have been met. If not, provide a justification that includes actions planned during implementation to reach compliance.
b. Compared to previous years, what additional government investments are committed to the national programs in the next implementation period that counts towards accessing the willingness-to-pay allocation from the Global Fund. Clearly specify the interventions or activities that are expected to be financed by the additional government resources and indicate how realization of these commitments will be tracked and reported.
c. Provide an assessment of the completeness and reliability of financial data reported, including any assumptions and caveats associated with the figures.

Counterpart Financing Requirements	Compliant?	If not, provide a brief justification and planned actions

i. Availability of reliable data to assess compliance	☒Yes ☐ No	Estimates of counterpart financing (for tuberculosis specifically) are based on direct government contributions, particularly to the anti-TB medicines. However, these estimates likely underestimate the level of counterpart financing; beyond anti-TB medicines, government has invested in other areas of TB control, including infrastructure and service delivery systems, human resources, and appropriate case management. A dedicated resource tracking mechanism is needed to more accurately quantify this investment. Government allocations to the Ministry of Health and Child Care are reflected in the Budget Statements and Estimates of Expenditure Report – the Blue Book - which is published every year. Health expenditures are tracked through the National Health Accounts. There are plans to institutionalize the National Health Accounts as the System of Health Accounts (SHA), which will be a real time tracking of health expenditures, beginning with public health institutions, and later to be rolled out to the private sector.
ii. Minimum threshold government contribution to disease program (low income-5%, lower lower-middle income-20%, upper lower-middle income-40%, upper middle income-60%)	☒Yes ☐ No	Given the total allocation to Zimbabwe of US$478m, 15 % ($72m) is tied to 'willingness to pay'. Zimbabwe is required to put in an additional $18m into the three diseases in 2015 and 2016; an estimated additional $37m is expected to come from the Government of Zimbabwe through the AIDS Levy during the 2015-17 period, compared to 2012-14 period. This would be sufficient to meet the WTP requirements.
iii. Increasing government contribution to disease program	☒Yes ☐ No	The Zimbabwe Government funding commitment under the two main sources (Line ministry and NAC) for 2014-2016 indicates a progressive increase of up to 7%. While the National AIDS Trust Fund will commit a fixed amount of USD$1.5m per year, the contribution from the MoHCC line ministry for TB related interventions will increase by 7.5% annually, translating to an overall upward adjustment of 1% per annum.
iv. Increasing government contribution to Health sector	☒Yes ☐ No	The government budgetary 2014-2016 projections published by the Ministry of Finance & Economic Development in the ''Blue book'' shows that the allocation to the health sector will progress increase from $337m in 2014 to $357m in 2015 and $374m in 2016.
2-3 PAGES SUGGESTED		

SECTION 3: FUNDING REQUEST TO THE GLOBAL FUND

This section details the request for funding and how the investment is strategically targeted to achieve greater impact on the disease and health systems**.** It requests an analysis of the key programmatic gaps, which forms the basis upon which the request is prioritized. The modular template (Table 3) organizes the request to clearly link the selected modules of interventions to the goals and objectives of the program, and associates these with indicators, targets, and costs.

3.1 Programmatic Gap Analysis

A programmatic gap analysis needs to be conducted for the three to six priority modules within the applicant's funding request.

Complete a programmatic gap table (Table 2) detailing the quantifiable priority modules within the applicant's funding request. Ensure that the coverage levels for the priority modules selected are consistent with the coverage targets in section D of the modular template (Table 3).

For any selected priority modules that are difficult to quantify (i.e. not service delivery modules), explain the gaps, the types of activities in place, the populations or groups involved, and the current funding sources and gaps.

1-2 PAGES SUGGESTED – ***only for modules that are difficult to quantify***

Programmatic gap analysis for service delivery modules

The selection of modules and interventions in this proposal request has been informed by key gaps and priorities outlined in the new National TB Strategic Plan. There are three core (service delivery modules) prioritized in this request, namely; TB Care and prevention; TB/HIV and MDR-TB. The detailed programmatic gap analysis for each of the core modules is as described in the online platform. The rationale for selecting these three core modules is as follows;

a) TB Care and Prevention module

Given the sub-optimal estimated case detection of TB in our context, 46% in 2012, interventions to find additional cases throughout the lifespan of the new strategy is an area of priority focus. In addition, case holding of patients in care to optimize treatment outcomes has been prioritized, as current achievements still lag behind global achievements and national targets *(78% Treatment success rate in 2012)*. The funding request will prioritize high impact interventions such as further expansion of the microscopy laboratory network and roll out of more sensitive diagnostic tools such as Xpert MTB/Rif and digital radiology to improve case detection of EPTB, and among PLHIV and children. It is anticipated to compliment domestic funding to improve case detection from 46% currently to at least 56% by 2017, and improve treatment success to 87% by 2017.

b) TB/HIV module

The TB epidemic in Zimbabwe is predominantly driven by HIV, with more than two thirds of notified TB patients co-infected with HIV. While gains have been registered in HIV testing among TB patients and CPT uptake, access to ART for TB patients co-infected remains challenged *(75% in 2012).* Interventions to optimize coverage through roll-out of more patient centred "one stop shop" TB-HIV clinics and consolidate current gains justify the need to prioritize this module in this request. The funding request will compliment commitments from the HIV grant and domestic resources to achieve ART access targets for co-infected patients of 100% by 2017.

c) MDR-TB Module

The emerging threat from drug resistant forms of TB continues to undermine gains in TB control efforts. The true burden in our context remains unknown and current estimates are based on the last drug resistant survey done in 1994/5. There are efforts however under the current grant to conduct a drug resistant survey that will refine current estimates. With progressive scale up of Xpert MTB/Rif, there has been a sustained increase in case detection of resistant forms of TB. In 2013, 393 cases of Drug resistant TB were detected, compared to 288 in 2012[11]. In spite of such notable gains, case detection for drug resistant TB remains challenged *(<50% of 2012 estimates of MDR TB detected in 2013)*[1]. There still remains a significant treatment access gap. While 288 DR TB cases were detected in 2012, only 122 (42%) were put on treatment[11]. The funding sought will optimize case detection and close the treatment access gap, justifying the selection of this module for possible funding.

Programmatic gap analysis for non-service delivery modules

Three non-service delivery modules, namely Procurement and Supply Chain management, Program management and Health information system (M&E) were selected following a thorough and inclusive programmatic and financial gap analysis of the health system supportive environment critical for successful TB programme delivery in Zimbabwe. These modules are also cross-cutting and will have synergistic effects on the overall operations of the three diseases (HIV/AIDS, TB and Malaria) in Zimbabwe, hence the inclusion in the TB concept note is meant to be complementary to other initiatives supported by the country's HIV, Malaria and HSS grants.

a) Procurement and Supply Chain management :

There have been comprehensive assessments of supply chain management for health commodities in the public sector which have noted key concerns and gaps to be closed. Commitments to date from the domestic funding landscape to close these gaps still fall short as illustrated in the table below.

Programmatic gap analysis for PSCM

Description of Gap and target	**Interventions in place**	**Funding commitments and source**	**Anticipated gap**
Inadequate and inappropriate storage space for medicines and supplies at health facilities.	Site assessments for storage capacity and additional requirements *(52 sites assessed & being refurbished under HIV grant)*	400 additional site assessments committed under the Global Fund HIV grant to the tune of USD$60,125	1108 additional site assessments
	Refurbishment of sites based on assessment findings	USD$8,475,090 committed under the Global Fund HIV grant for 400 facilities	Refurbishment of 1108 additional sites
Paper based Logistics Management Information System	Rolling out of dispensing software (Electronic inventory system)	USD$1,400,000 committed under the Global Fund HIV grant	Nil
Parallel programme based distribution systems for medicines and a weak laboratory commodities supply chain system.	Orientation and training of Health Care workers on the *"Zimbabwe Assisted Pull System" (ZAPS) and "Zimbabwe Lab commodities distribution systems" (ZiLaCoDS)*	Trainings, support and supervision and mentorship on ZAPS and ZiLaCoDS under the HIV NFM.	Training of 300 Health workers on ZiLaCoDS @USD$132,000
	Post training mentorship and support visits on *"ZAPS"* & "*ZiLaCoDS"* implementation	HIV NFM supporting implementation up to 2016	Support visits @ USD$90,000 in 2017

	Optimization study for warehouse and distribution fleet	USD$45,000 committed under the Global Fund HIV grant	Nil
Inadequate stock management capacity (including pharmaco-vigilance) at all levels	Training of Health workers on stock management *(including pharmaco-vigilance)*	HIV NFM	Training costs for 480 health workers
No quality assurance of imported commodities at designated ports of entry	Procurement of handheld Raman Spectrometers for use at key border posts (MCAZ)	USD$200,000 committed under the Global Fund HIV grant	Nil
Inadequate capacity for MCAZ to carry out comprehensive post marketing surveillance for anti-TB medicines	Post marketing surveillance testing for TB medicines	Motor vehicle procurement for Post Marketing Surveillance from HIV NFM	Cost over-heads for Medicines Control Authority of Zimbabwe to support post market surveillance @ USD$11,250 per year
Inadequate NatPharm capacity to procure medicines	Revive NatPharm-Crown Agents Procurement Consortium, established in 2006 to handle procurement for Principal & Sub-Recipients under the R5 Global Fund grant.	Nil	Procurement, managements and distribution costs (PSM costs).
	Training of NatPharm and MOHCC personnel on procurement systems including GF mechanisms such as GDF system for TB medicines.	Nil	Training of NatPharm and MoHCC personnel on procurement systems.
Inadequate capacity for medical waste disposal	Procurement and Installation of incinerators at regional NatPharm depots	Commitment under current HIV grant for installation of two Incinerators at the Bulawayo and Harare depots. Incinerators being installed in Hospitals.	Nil

b) Program management and Health Information Systems (HIS):

Key programmatic gaps in Program management and Health information systems are summarized in the table below;

Programmatic gap analysis for Program management and HIS

Description of Gap and target	Interventions in place or required	Funding commitments and source	Anticipated gap
Program coordination			
Inadequate technical capacity at central level to support policy formulation and strategic planning	Current TB grant providing salary support for 15 staff at Central level	Nil	Funding support to strengthen technical capacity and sustain salary support
Limited ownership of TB programme activities at sub-national level	Unplanned ad- hoc meetings with Provincial Medical Directors (PMDs)	Nil	Funding for scheduled Quarterly update sessions between NTP and PMDs

Limited capacity for effective coordination of PMDT and TB-HIV activities at all levels	Partner secondment of PMDT Focal point at Central level. Funding commitment ending in 2014	Nil	Funding support for recruitment of Medical Officer at Provincial level to coordinate PMDT/TB-HIV activities & support National PMDT Coordinator
Program support			
Inadequate funding to sustain current fleet of program vehicles and motorcycles for specimen transportation and replace old fleet	Current TB Global Fund grant ending in 2014 supporting fuel and service costs	Nil	Program activity fuel costs and service contracts for current fleet *(10 Program vehicles & 305 motorcycles)* and procure new fleet of 84 vehicles to replace fleet procured in Round 5
Inadequate capacity for sputum transportation to support timely diagnosis	TB CARE I supported introduction of dedicated motorcycle riders for specimen transportation in 8 Rural provinces *(1 district per province)* and 3 Urban cities	Funding support through TB CARE ending in 2014	Expansion to more districts to optimize coverage, through procurement of 440 additional motorcycles and sustain current fleet
Community Systems support			
Limited engagement of Civil Society Organizations (CSOs) supporting community TB activities.	Currently only 2 CSOs *(RAPT & ZNNP+)* engaged under the current TB grant	Funding support ending in 2014	Strengthen and expand coverage of CSOs supporting Community TB activities
Constrained capacity for comprehensive and consistent supportive supervision for Community Health Workers/Volunteers	Limited capacity by the 2 CSOs supported under current grant	Funding support ending in 2014	Strengthen capacity for CSOs to support Community TB activities
Monitoring and Evaluation/Health Information Systems (HIS)			
Obsolete IT equipment to support HIS service delivery	Round 8 Global Fund supported procurement of IT equipment.	Nil	Replacement cost for 87 desktop computers
Limited funding for Provincial and District TB Review meetings	Current funding support under TB grant and TB CARE I	Funding commitment ending in 2014	Sustain funding support for review meetings from quarterly currently to bi-annually
Cumbersome paper based recording and reporting system with notable deficiencies in data quality.	TB CARE I funding phased rolled out of Electronic reporting system (ETR)	Funding commitment ending in 2014	Funding for national roll-out of ETR and implementation of routine onsite data verification & External data audits
Inadequate documentation of Community TB activities	Ad-hoc and uncoordinated reporting on Community TB activities	Funding support under current TB grant ending in 2014	Integration of Community M&E activities into routine reporting arrangements
Limited use of TB surveillance data for decision making at all levels	TB CARE I currently funding development and piloting of data use guides	Funding commitment ending in 2014	Funding for phased scale up of training on data use guidelines
Lack of updated research agenda to inform TB related operations research	Ad-hoc partner supported TB research activities	Nil	Support for updating TB research agenda and implementing priority research activities
Infrequent External Program reviews	Last review done in 2011	Nil	Budget provision for National Program review

3.2 Applicant Funding Request

Provide a strategic overview of the applicant's funding request to the Global Fund, including both the proposed investment of the allocation amount and the request above this amount. Describe how it addresses the gaps and constraints described in questions 1, 2 and 3.1. If the Global Fund is supporting existing programs, explain how they will be adapted to maximize impact.

Zimbabwe has recorded progress in expanding access to TB diagnosis and treatment. However, challenges remain with the declining TB case notifications; and treatment success below the international and NSP target over the last 3 years. This underscored the prioritization of interventions to increase early TB case detection as well as improvement of the treatment success rate as envisioned in the current NSP.

Goals and objectives of the NFM funding request:

The main goal of this concept note is contribute to the reduction of the TB, TB/HIV and MDR-TB burden in Zimbabwe in line with the national and global TB targets.

The strategic priorities for this concept note only include addressing the declining TB case notifications, timely initiation of treatment, expanding access to integrated TB and HIV services through a one stop shop approach, strengthening programmatic management of drug-resistant tuberculosis (PMDT) and optimizing the contribution of communities in TB care and control through empowerment. The programme management and procurement and supply management system will be strengthened as part of supportive health system environment to facilitate effective programme implementation.

These priorities fall under 6 (three Core and three supportive) modules. The breakdown of the proposed investment related to each module is as follows:

Module	**Allocated funding request (US$)**		**Above allocated funding request (US$)**	
	Amount (US$)	**%**	**Amount (US$)**	**%**
TB Care and Prevention	15,073,404.00	46	10,333,550.00	37
TB/HIV collaboration	1,628,490.00	5	3,176,125.00	11
MDR-TB	5,929,462.00	18	5,324,188.00	19
Procurement & supply management (PSM)	2,224,260.00	7	2,936,880.00	11
Programme Management	5,622,423.00	17	3,582,730.00	13
Health information (Monitoring and Evaluation)	2,419,517.00	7	2,393,899.00	9
TOTAL	32,897,556.00	100	29,433,292.00	100

TB Care and prevention Module

Interventions proposed for funding under this module are meant to address the gaps TB case detection and treatment success. Successful implementation is expected to increase coverage to TB diagnostic services for adults and children; reduce the proportion of PTB cases diagnosed without smear result; and increase treatment success rate. Enhanced childhood TB management is expected to increase the proportion of children among notified cases.

Anticipated coverage/impact of Global Fund investment (TB Care and Prevention)

Coverage indicator	**Investment**	**Baseline**	**Expected coverage/impact**

Number of notified cases of all forms of TB *(Bacteriologically confirmed + clinically diagnosed)* New and relapses		**2013**	**2015**	**2016**	**2017**
		35,566	39,212	41,172	43,231
	Domestic and other sources		11,764	12,352	12,969
	Allocated		11,440	9,077	24,660
	Above allocated		16,008	19,743	5,602
Assumptions: Current case detection is based on WHO estimates. This will be adjusted when results of the on-going prevalence survey are released.					
Coverage indicator	**Investment**	**Baseline**	**Expected coverage/impact**		
% of all new TB cases, *(Bacteriologically confirmed + clinically diagnosed)* successfully treated (Cured + treatment completed) among all new TB cases registered for treatment during a specified period		**2013**	**2015**	**2016**	**2017**
		30,764 (81%)	32,938 (84%)	35,408 (86%)	37,611 (87%)
	Domestic and other sources		9,881 (25%)	10,622 (26%)	11,283 (26%)
	Allocated		23,057 (59%)	24,786 (60%)	26,328 (61%)
	Above allocated		0	0	0
Assumptions: Current case detection is based on WHO estimates. This will be adjusted when results of the on-going prevalence survey are out.					

Case detection and diagnosis

This includes expansion of the basic AFB microscopy network; improvement of access to quality radiological services for enhanced diagnosis of childhood TB; as well as Xpert MTB/Rif for PLHIV, presumptive DR-TB suspects and other high risk populations as per the national diagnostic algorithm.

This funding request will support the retention of the existing 210 microscopists funded under the existing TB R8 grant. Laboratory consumables for microscopy will also be procured over the three years.

An additional 37 Xpert MTB/Rif machines will be procured to meet the shortfall in the national Xpert roll-out of 130 machines. This compliments the already installed 58, and the HIV NFM grant commitment (30 machines), TB Reach (4 machines) and MSF (1 machine). These machines will be deployed in underserved populations with disproportionately high TBHIV co-infection rates. Cartridges will be procured for new and existing Gene Xpert machines.

To improve laboratory performance and quality, TB Laboratory specific strategic plan will be developed, bacteriology guidelines, Standard Operating Procedures (SOPs) and External Quality Assurance (EQA) guidelines will be updated. Refresher trainings for laboratory personnel and supervisors on microscopy and EQA, being implemented under the current grant will be maintained.

Six (6) Digital X-ray machines will be procured and installed in high volume district hospitals to enhance diagnosis of childhood TB. This will complement the 13 machines in place procured under the current grant and 20 procured by the government in 2014.

Childhood TB-specific guidelines and training curriculum will be developed and health workers trained on pediatric TB case management, followed by post training mentorship. Mantoux will be procured to improve TB diagnosis in children.

Treatment

The NFM funding will support procurement of first line anti-TB medicines for the treatment of an estimated 98,892 new cases, 12,361 retreatment patients and 12,361 pediatric cases over the three years period. Ancillary drugs will also be procured to manage side effects. Training, mentoring of Health workers will be supported.

Community TB care delivery

The funding will support establishment of mechanisms for coordination of TB activities by CSOs. This will enable the utilization of the full potential of the over 11,000 existing CHWs trained through the HSS grant, which are currently under-utilized for TB care. The main activities to be supported include advocacy communication and social mobilization for demand creation, systematic TB contact investigation, treatment adherence support, stigma prevention and retrieval of patients lost to follow up. The existing community TB care guidelines will be updated in line with the WHO ENGAGE-TB approach. Annual TB day commemorations at national and provincial levels will be conducted as well as updating and printing of IEC materials for Community TB Care (CTBC). Trainings on CTBC for CHW will be conducted followed by community awareness campaigns.

Engaging all care providers

The allocated funding will support development of training materials, site assessments and training of private practitioners on TB case management. Post training mentorship visits will be conducted to support implementing sites.

TB Care and prevention (Allocated funding request)

Case detection and diagnosis

The laboratory infrastructure in 20 health facilities will be renovated to increase access to quality-assured basic TB microscopy services to the rural and underserved populations in the country. An additional 40 microscopists will be recruited to man the new laboratories. The funding will also support service contracts for microscopy laboratory equipment.

An additional 59 digital X-ray machines will be procured to complement the 6 already earmarked under the indicative funding request. This is expected to increase coverage and access to radiology services for TB diagnosis.

Targeted mass TB screening campaigns in prison settings, densely populated communities, mines, refugees and displaced communities *(e.g. flood victims)* will be undertaken. For intensified TB screening in these communities, the programme intends to utilize the 2 mobile CXR units procured for the ongoing TB prevalence survey supported by the current R8 TB grant. The mobile trucks will be fitted with GeneXpert Machines and this will allow for early conformation of diagnosis and early treatment initiation.

Engaging all care providers

The proposed above-allocated funding request will support a study tour to a country that has shown effective implementation of PPM activities.

TB-HIV Module

With two thirds of TB patients in Zimbabwe co-infected with HIV, strengthening the implementation of collaborative TB/HIV activities remain a high priority in the current TB NSP 2015-2017. This NFM funding request responds to the programmatic gaps identified by the NTP and stakeholders to achieve the national targets with respect to sub-optimal ART coverage among TB patients. Integrated model of TB/HIV care will be strengthened and expanded in terms of coverage.

Anticipated coverage/impact of Global Fund investment (TB-HIV)

Coverage indicator	Investment	Baseline	Expected coverage/impact		
% TB patients who had an HIV test result recorded in the TB register		2013	2015	2016	2017
		32,460 (91.2%)	39,212 (100%)	41,172 (100%)	43,231 (100%)
	Domestic and other sources including HIV grant		19,606 (50%)	20,586 (50%)	12,969 (30%)
	Allocated		8,038 (20%)	4,940 (12%)	25,420 (59%)
	Above allocated		11,568 (30%)	15,646 (38%)	4,842 (11%)
Assumptions: HIV grant has an updated gap of 1, 146, 967 test kits in from 2016					
Coverage indicator	**Investment**	**Baseline**	**Expected coverage/impact**		
Percentage of HIV registered TB patients given antiretroviral therapy during TB treatment		2012	2015	2016	2017
		19,158 (75%)	22,194 (100%)	21,945 (100%)	21,659 (100%)
	Domestic and other sources, including HIV grant		16,646 (75%)	16,459 (75%)	5,415 (25%)
	Allocated		2,275 (10%)	1,316 (6%)	13,644 (63%)
	Above allocated		3,274 (15%)	4,170 (19%)	2,600 (12%)
Assumptions: 3.2% point annual decline in co-infection rates used to project country needs, based on current trends. HIV grant commitment will cover ART drug procurement. This request will support other key supportive activities critical for comprehensive ART provision (e.g. Trainings, HIV test kits, site renovations, Infection control, reaching the hard to reach through community health workers)					

TB-HIV (Allocated funding request)

The funding will sustain access to HIV testing and Counseling for presumptive TB clients and TB patients to sustain the current achievement of 91% of TB patients with known HIV status. An additional 300,000 HIV rapid test will be procured in 2016 to reduce the gap of 1,146,967 patients jointly determined by the HIV and TB programmes. Six (6) trainings on rapid HIV testing, targeting nurses in TB Clinics will be supported in the first year to bridge the training coverage gap on Provider Initiated Testing and Counseling.

The coverage of the integrated TB/HIV service delivery model will be expanded to ensure that co-infected patients receive both services under one roof. While TB services are

available in all 1,564 public health facilities, only 401 of these initiate ART. Drawing from the lessons learnt in the implementation of the 'one stop shop' model supported by TB CARE I, this funding request will support renovations of 20 health facilities that will include creation of outdoor waiting sheds, partitioning of outpatients to improve patient flow to minimize cross infection, securing additional widows as appropriate to maximize natural ventilation; as well as procurement of furniture. In addition four (4) trainings based on a 12-day integrated training package covering TB, TB-HIV, PMTCT, PITC, early infant diagnosis and STI for health care workers will be supported. Trained health workers will be attached to any of the 3 clinics designated as centers of excellence, already offering best practice of integrated TB-HIV service delivery.

In settings like the mines and uniformed service establishments, infection control will be enhanced through targeted training of health workers in their institutions. On the other hand, in informal mining settings, infection control will be re-enforced through training of selected CSOs, who will in turn cascade trainings to peer educators for infection control sensitization in informal congregate settings. A regional meeting will be conducted to harmonize community data collection tools.

This funding will also support procurement of N95 respirators for use by health care workers.

Funding requested will complement the current HIV NFM by procuring INH to cater for 11,000 PLHIV in 2016.

TB/HIV (Above allocation interventions)

The above allocated funding will also be used to procure an additional 100,000 HIV rapid test kits per year in 2016 and 2017.

The above allocation funding request will also support four (4) additional trainings on PITC to complement the 6 requested under the indicative allocation. This is meant to close the gap of 10 PITC trainings needed to optimize provider initiated HIV testing for TB patients across the country. Additional trainings for CHW on community TB infection control will also be supported.

To further scale up the provision of the integrated TB/HIV care, an additional 10 sites will be renovated to complement the number requested under indicative allocation. This is intended to contribute to closing the gap in the coverage of the integrated TB-HIV care delivery model. This complements the commitments under the HIV NFM grant.

INH will be procured for 333,204 PLHIV and 42,506 children living with HIV to compliment commitments under the HIV grant up to 2016.

MDR-TB Module

The emerging threat from drug resistant forms of TB continues to undermine gains in TB control efforts. With roll-out of Xpert MTB/Rif, there has been a sustained increase in case detection of resistant forms of TB. In spite of gains in case detection, case finding remains constrained by coverage in diagnostics. This is compounded by the lingering treatment access gap where not all patients diagnosed are put on treatment. The funding request will optimize case detection and close the treatment access gap. The anticipated coverage/impact is summarized below;

Anticipated coverage/impact of Global Fund investment (MDR TB)

Coverage indicator	Investment	Baseline	Expected coverage/impact		
		2013	2015	2016	2017
Number of bacteriologically confirmed, drug resistant		393	900	1,440	1,600

TB (RR and/or MDR TB) notified	Domestic and other sources		300	432	480
	Allocated		126	877	974
	Above allocated		474	131	146
Assumptions: WHO estimates used to estimate country need and set country targets, to be revised with results from on-going DRS					
Coverage indicator	**Investment**	**Baseline**	**Expected coverage/impact**		
Number of cases of drug resistant TB (RR and/or MDR TB) that began 2nd line treatment		**2013**	**2015**	**2016**	**2017**
		351 (89%)	810 (90%)	1,310 (91%)	1,472 (92%)
	Domestic and other sources		482 (54%)	389 (27%)	295 (18%)
	Allocated		164 (18%)	599 (42%)	683 (43%)
	Above allocated		164 (18%)	322 (22%)	494 (31%)
Assumptions: The funding request will complement domestic funding from the National AIDS Trust fund which will be increasingly committed to procurement of the more expensive XDR drugs over time, thus explaining the relative decline in domestic commitment.					

MDR TB Module (Allocated funding interventions)

This funding request aims to strengthen diagnosis of drug resistant tuberculosis through LPA, solid and liquid culture and DST as per the national diagnostic algorithm. Details of interventions proposed to be funded are as follows;

Currently culture and DST services are offered by two reference laboratories in Bulawayo (NTBRL) and Harare (NMRL). However, there is limited access to culture, first and second line DST due mainly to reagent stock outs and shortage of laboratory scientists trained to conduct 2nd line DST. The NFM funding request will support procurement of reagents for both conventional 1st and 2nd line DST and LPA. Service contracts for essential equipment will be secured.

In addition, the Zimbabwe National TB Reference laboratory (NTBRL) will be supported in maintaining collaboration with a supranational TB reference laboratory (SNRL) for consistent QA support. Annual technical support from the supra-national reference laboratory will be supported under this funding request.

Key affected populations

Intensified TB case finding among mobile populations will be pursued. The programme intends to build upon a TB REACH funded initiative of the International Organization for Migration (IOM) to implement TB screening at two main ports of entry with Botswana and South Africa in Matabeleland South. These border posts receive significant numbers of returnees deported from neighboring countries annually. This initiative will enable screening of at least 50,000 returnees (deported) each year. The TB REACH grant will support the establishment of TB screening using Xpert MTB/Rif at the reception centres at the two main borders. The TB NFM will support retention of staff engaged under the TB REACH project (i.e. nurses) to man the already existing roadside clinics and reception centres, and also cover administrative costs beyond 2015.

DR-TB treatment The NFM funding will support procurement of second line anti-TB medicines for the treatment of an estimated 1,628 DR-TB patients throughout the three-year implementation period. Ancillary drugs will also be procured to manage side effects and adverse reactions

Decentralization of the management of drug-resistant TB to the district level will be supported while strengthening the capacity of the existing Provincial teams to provide continuous support supervision and mentoring. This request will support capacity building of health care workers through training on PMDT to ensure provision of quality care at district and community levels.

To ensure continuation of treatment, nutritional support and transport allowances to attend clinical reviews will be provided to DR-TB patients as part of psycho-social support. This is a continuation of support provided under the currently existing R8 TB grant.

The contribution towards GLC technical support will be paid at the rate of US$50,000.00 per annum from the allocated funding.

Case detection and diagnosis of DR-TB Above allocation Interventions

The country plans to increase access to and quality of culture and DST. All patients identified as Rif. Resistant through GeneXpert will undergo 1st and 2nd line DST. Therefore funding is requested for training of staff of the two existing laboratories to perform 2nd line DST at a supra-national reference laboratory accredited with the global WHO SNRL network. The post training mentorship and technical support by the SNRL will also be supported. The Laboratory Information Management System (LIMS) which is currently installed at NTBRL will be rolled out to NMRL and all provincial laboratories to ensure results are made available swiftly to the clinician who had refereed the specimen for optimal case management.

Key affected populations

The NFM funding will continue and expand the implementation of the IOM initiative beyond the TB REACH grant period. The scope of activities will be expanded to include establishment of four additional roadside clinics which will provide integrated TB/HIV services along strategic inland transportation stop-over points. This request will also cover retention of additional staff for the new clinics

DR-TB Treatment

The above-allocated funding request will be used to further strengthen capacity for in-patient management for patients requiring hospitalization.

This funding request is sought for renovation of 8 provincial centres to provide isolation facilities for patients requiring hospital-based care. These 8 facilities will be equipped with an ambulance to appropriately transport patients who may need referral and to eliminate the necessity of such patients to share the same transport with other patients.

The management of adverse effects of second line anti-TB treatment will be strengthened and institutionalized as an integral component of DR-TB case management. Audiology assessments will be provided to all patients on 2nd line anti-TB treatment. The funding will be used to install tele-audiology facilities in 8 rural provincial hospitals. Hearing aids for patients in need will be procured. Provision will be made for routine monitoring tests through the procurement of reagents for biochemical tests.

Procurement Supply Chain Management Module

As expressed in the gap analysis, some critical gaps in the PSCM that have direct bearing on the performance of the TB programme need to be addressed to improve timely access

to TB diagnostic and TB treatment services. These gaps relate to storage, distribution, quality assurance, stock management and pharmaco-vigilance for TB and HIV drugs.

Procurement and Supply Chain Management system Allocated funding Interventions

Increase Storage capacity for medicines and health products

Inadequate storage capacity for medicines, commodities and other health products is a critical gap that needs to be addressed to ensure un-interrupted service delivery across the three diseases. The TB NFM funding request will contribute towards assessment of the storage capacity in 120 health facilities and the refurbishment of 40 of them. The scope of refurbishment covers expansion of storage space, improving shelving and installation of burglar bars to improve security and installation of air conditioners to enable storage of medicines at optimal temperatures. This complements the investment undertaken through the HIV NFM grant.

Support integrated distribution systems for medicines and health products

A harmonized medicine distribution system is currently being piloted in one of the provinces. The HIV NFM grant is supporting training of MOHCC staff at national and provincial levels on the integrated distribution system. The TB NFM funding will compliment this investment by supporting post-training and mentorship visits. This investment is expected to minimize stock outs, overstocking and expiry of medicines.

Strengthen quality assurance systems for medicines

The TB NFM will support MCAZ to carry out annual post marketing surveillance for TB medicines across all the 10 provinces.

Strengthen NatPharm's capacity to procure and distribute medicines and lab commodities

The request will support training of NatPharm, Directorate of Pharmacy Services and Directorate of Laboratory Services personnel on international procurement procedures. It will also support attachment of staff to a well-performing government procurement agency or medical stores within the sub-region. The TB NFM funding request will contribute to funding the NatPharm-Crown Agents consortium through payment of PSM costs.

Strengthen stock management and pharmaco-vigilance at facility level

The TB NFM will contribute to training of 480 healthcare workers on stock management (including pharmaco-vigilance) to complement resources from GF HIV NFM grants and funding proposed under the Malaria NFM Concept Note.

Improve laboratory commodities supply chain management

A strong laboratory supply chain system is critical for delivery of TB diagnostics. The HIV NFM is supporting training of 50 laboratory personnel on the Zimbabwe laboratory commodity logistics system (ZilaCoDS) at national level. The training includes stock status analysis, logistics decision making on redistributing to avoid expiries, ensuring equity, and emergency ordering procedures. The TB NFM will contribute towards supporting mentorship visits to assess implementation of ZiLaCoDS and training of 300 laboratory personnel on the system.

Procurement and Supply Chain Management System Above-allocation Interventions

Increase Storage capacity for medicines and health products

The above-allocated funding request will support the refurbishment of 80 remaining facilities out of the total of 120 assessed under the allocated funding. Improvement of storage conditions includes expansion of storage space, improving shelving and installation of burglar bars to improve security and installation of air conditioners to enable storage of medicines at optimal temperatures. This complements the investment for the 40 proposed under the allocated funding request.

Program Management Module Allocated funding Interventions

Enhancement of the coordination functions of the National TB Programme at national and provincial levels is key to successful implementation of the country's NSP 2015-2017 for TB care and control. This informed the recognition of the programme management module as a critical component of the Zimbabwe Concept Note.

Policy, planning, coordination and management

Maintain positions of key NTP staff.
The funding will be used to retain key NTP Central Unit staff, critical laboratory staff at national reference laboratory funded under the existing TB R8 grant. The National TB prevalence Survey field data collection activities will only be completed in December 2014 and funding is requested to support BRTI survey staff for part of 2015.

Support National TB/HIV Partners forum*:*
This aims to complement the contribution of HIV NFM grant and close the funding gap in ensuring regular and consistent joint meetings of this forum. This is critical to strengthening the TB/HIV collaboration between programmes and partners.

Technical Coordination meetings*:*
This is considered crucial to strengthen coordination across the three levels of the TB programme to ensure consistency in application of the national guidelines as well as continuous appraisal of programme performance. Funding is requested to support This responds to the current gaps in ensuring regularity of technical coordination meetings due to funding constraints.

Conduct quarterly DR-TB coordination meetings at provincial level.
To strengthen ongoing decentralization of DR TB services, quarterly DR TB coordination meetings at provincial level will be crucial. Part of the above indicative funding request is proposed to fund these meetings. The meetings will provide a forum to focus specifically on DR TB clinical and programmatic issues with the view to ensure continuous capacity building at the district level.

Maintain functional transport for programme activities.
Funding is requested to support the transport system to strengthen support and supervision, programme coordination and specimen transportation. This will cover maintenance, insurance and fuel for 110 vehicles and 405 motorbikes procured under TB grant R8.

Implementation arrangements
It is proposed that the implementation arrangements for this funding request are led by the MOHCC as the PR. Grant management costs for the PR have been allocated 6% of the total funding available

Program Management Module above Allocated funding Interventions

Policy, planning, coordination and management

Strengthen programme logistics support.

The funding will be used to procure 84 new vehicles to replace the old fleet procured under TB grant R5 and office equipment.

Maintain HR support to the NTP.
Recruit additional NTP staff at central level as well as TB/HIV/MDR-TB medical officers at provincial level. There is a strong need to strengthen coordination of TB-HIV and PMDT at sub-national level.

Conduct National TB Conference
The country also intends to organize and conduct a National TB Conference every two years with the sole objective of increasing attention to both TB and HIV on the political front and health professionals.

Health Information Systems (Monitoring and Evaluation) Module Allocated funding Interventions

Adequate support to the M&E interventions will ensure that TB patients are timely registered, notified, tracked and monitored which will result in improved programme management. Given the importance of demonstrating outcomes and impact, special attention has been given to the M&E module in this proposal. Routine data quality assessments have shown a considerable gap in the TB recording and reporting of cases.

The programme will conduct regular review meetings at all levels to monitor performance. More emphasis will also be put on routine and external data quality assessments which will enable the programme to identify and address data quality issues. To ensure that TB reports are aligned to international standards, the programme will regularly update the M&E tools. Laboratory External Quality Assurance (EQA) visits and review meetings will also be supported under this funding.

The indicative funding is proposed to strengthen supervision and mentoring at all levels in terms of frequency and quality to improve TB care and programme management through implementation of regular supportive supervision visits.

The introduction of an electronic TB recording and reporting system will improve patient record management and facilitate timely reporting. To ensure successful roll-out of the electronic TB surveillance system, the funding request will support procurement of computers and relevant software, and training of health workers.

External programme reviews have been used to monitor and evaluate the implementation of the National Strategic plan and performance of the national programme will be supported. With this allocation NTP will support operations research to generate local TB data to inform strategic planning.

Health Information Systems (Monitoring and Evaluation) Module Allocated funding Interventions

The country desires to institute a functional routine data quality assurance system for the National TB programme as well as other health programmes. This is intended to strengthen data quality across health facilities, district, provincial and national level levels.

The above indicative funding allocation is also proposed to fund procurement of computers for administration to replace those procured under the round 8 TB grant.
NTP intends to conduct an operational research on the short (9-month) DR-TB treatment. This is in view of the provisional results from similar studies in other countries indicating high treatment success rates for DR-TB patients; and the desire to generate credible scientific data that will inform relevant interventions in the country context.

3.3 Modular Template

Complete the modular template (Table 3). To accompany the modular template, for both the allocation amount and the request above this amount, briefly:

a. Explain the rationale for the selection and prioritization of modules and interventions.

b. Describe the expected impact and outcomes, referring to evidence of effectiveness of the interventions being proposed. Highlight the additional gains expected from the funding requested above the allocation amount.

4-5 PAGES SUGGESTED

Rationale for selection and prioritization of Modules and Interventions:

The selection of modules and interventions in this proposal request has been informed by key gaps and priorities outlined in the new National TB Strategic Plan. This has been the product of an elaborate analysis and consultation with all stakeholders in the country.

Modules prioritized in this request include the following;

TB care and prevention module

Given the sub-optimal estimated case detection of TB in our context, 46% in 2012, interventions to find additional cases throughout the lifespan of the new strategy is an area of priority focus. The goal is to detect the 54% of the estimated cases in the country that remain undetected annually. In addition, ensuring continuation of patient care to optimize treatment outcomes has been prioritized, as current achievements still lag behind global achievements and national targets.

Allocative funding

The existing 210 microscopists recruited, trained and remunerated under the current TB R8 grant have enabled improved access to TB diagnostic and treatment follow up. Continued support for their salaries through the NFM grant will be critical.

Based on the current national TB diagnostic algorithm, which recommends use of Xpert MTB/Rif for initial TB diagnostics among PLHIV, previously treated cases, contacts of MDR-TB, health workers and other DR-TB risk groups, use of Xpert MTB/Rif in the Zimbabwean context has prioritized underserved populations with disproportionately higher TBHIV co-infection rates. The NFM funding request will procure an additional 37 machines to meet the gap in the coverage target of the 2011 Zimbabwe Xpert MTB/Rif roll-out plan. This will complement the commitment under the HIV grant *(30 machines)*, TB Reach *(4 machines)* and MSF *(1 machine).*

The Xpert cartridge requirement for funding is a total 99,940, to compliment current commitments and ensure un-interrupted use of the additional machines to be procured under the indicative funding request.

Currently, all microscopy laboratories participate in the national QA programme. The most recent results indicate that 93% meet national standards for AFB microscopy *(95% concordance rate and 0% high false results)*. With the proposed expansion of the microscopy laboratory network, increased investment is required to sustain quality assurance. Quality assurance guidelines, SOPs and others tools will be updated.

Through this investment it is expected that; a) 100% of the laboratories will be maintained on EQA; b) All laboratories will achieve a proficiency level of at least 95%; c) The National TB Reference Laboratory will have consistent SNRL support on QA and proficiency for first and second line DST.

The country has prioritized addressing the declining detection of childhood TB cases. Over the last 3 years there has been a decline in the proportion of children among notified cases from 11% in 2007 to 8% in 2012. This informed the prioritization of childhood TB interventions in the NFM concept note. The country intends to increase detection of TB among children by instituting TB screening at ante-natal clinics and Maternal and Child Health (MCH) clinics. To optimize implementation health care workers will be trained on childhood TB care, including use of digital radiography, Xpert MTB/Rif, and approaches to obtain biological specimens for Xpert MTB/Rif testing. Collaboration will be strengthened with two regional hospitals to develop 'Model care facilities' *(Centre of Excellence)* for childhood TB, for continuous mentorship to peripheral sites.

The funding will improve the capacity of provincial hospitals to provide radiology services through equipping them with digital X-ray machines. A total of six (6) district hospitals will

be targeted. This is expected to contribute to increased detection of TB among children from the current 8% to the target of 15% of all TB cases by 2017.

With the current sub-optimum treatment outcomes of 78% treatment success, there is need to strengthen patient centred community based care, to support systematic contact investigation, treatment adherence support and retrieval of patients lost to follow up. Funding through the NFM grant will be used to strengthen community TB care to ensure wider coverage as well as strengthen coordination of community activities. The TB programme will engage all Community Health workers trained under the current HSS grant, to contribute to community TB activities in collaboration with supported CSOs.

Provision of anti-TB medicines remains a cornerstone to optimized treatment outcomes. The programme aims to ensure un-interrupted supply of quality assured first line anti-TB medicines to meet the national needs. The NFM funding will support procurement of first line anti-TB medicines for the treatment of an estimated 98,892 new cases, 12,361 retreatment patients and 12,361 pediatric cases over the three years period. Ancillary medicines will also be procured to manage side effects. Quality of patient care will be reinforced through training, support supervision and mentoring of Health workers on patient centred TB case management. This support will contribute to improving the treatment success rate from the current 78% to 87% by the end of 2017.

Above-indicative allocation

The activities proposed for funding through above-indicative funding are those considered as potentially high impact in the context of Zimbabwe and by no means less prioritized. The selected activities are priority towards improving TB case notification and treatment success rate.

A total of 20 health facilities will be targeted and will entail installation of appropriate laboratory work benches, sinks, shelving, extra windows and extractors as appropriate for infection control. This will facilitate the intended expansion in microscopy services. To support intentions for expansion of the laboratory network, funding will be needed to recruit 40 additional microscopists.

Considering the inadequate coverage of radiology services for enhanced diagnosis of TB in children, EPTB and people living with HIV, a total of 65 digital X-ray machines will be required for installation in all district hospitals. This informed the request for 59 digital X-rays units to complement the 6 already earmarked for procurement under the indicative funding request.

The programme recognized the need to strengthen TB case finding among high risk groups through targeted mass screening campaigns for prison settings, densely populated communities, refugees and displaced communities (flood victims). The funding will support use of the 2 mobile digital X-ray units, procured for the ongoing TB prevalence survey under the current TB grant.

The proposed funding request will support operationalization of the Public Private Mix (PPM) framework developed with support under the HIV grant. Interventions will include initial and follow up site assessments and accreditation of private establishments as well as training and post training mentorship of engaged private practitioners.

TB-HIV Collaboration module

The need to close the ART access gap among co-infected patients was the rationale for selecting this module. The country has recorded remarkable achievement in HIV testing for TB patients, and CPT uptake as high as 98% in 2013. The interventions selected seek to address ART coverage and sustain gains in HIV testing and CPT uptake.

Allocated funding

There is a funding gap for HIV test kits in 2016. TB NFM will contribute to bridging this gap to ensure access to HIV testing for all presumptive and TB cases which is an entry point to access HIV care services.

To bridge the training coverage gap on Provider Initiated Testing and Counseling, 6 trainings on rapid HIV testing, targeting nurses in TB Clinics will be supported in the first year to bridge the training coverage gap on Provider Initiated Testing and Counseling.

To adequately respond to the sub-optimal ART coverage among co-infected TB patients, the gap occasioned by the mismatch of TB and ART service points will need to be addressed. While TB services are available in all 1,564 public health facilities, only 401 of these initiate ART. This mismatch presents pertinent access issues among co-infected patients to ART. The indicative funding will be used to scale up integrated delivery of TB and HIV services. A “one stop shop” integrated clinic model, successfully piloted in the country through support of TB CARE 1 will be replicated to more sites. Drawing from lessons learnt, this funding request will support renovations of 20 health facilities that will include creation of outdoor waiting sheds, partitioning of outpatients to improve patient flow to minimize cross infection, securing additional windows as appropriate to maximize on natural ventilation as well as procurement of furniture. High volume clinics with microscopy services on site currently without ART services will be prioritized for renovation.

Four trainings will be supported, targeting health workers on a 12 day integrated training package covering; TB, TB-HIV, PMTCT, PITC, early infant diagnosis and STI. Trained health workers will be attached to any of the 3 clinics designated as centers of excellence, already offering best practice of integrated TB-HIV service delivery. These were part of the pilot sites with extensive experience and are currently being used to mentor new sites in the on-going roll out. Including the 3 pilot facilities, TB CARE I has been supporting a total of 26 integrated TB-HIV clinics, which have demonstrated progressive improvement in TB-HIV service uptake compared to non- supported sites. As at March 2014, patients with recorded HIV test results in the supported sites was 97%. Similarly Co-trimoxazole uptake was 98%.

TB infection control in high risk congregate settings and hard to reach settlements will be re-enforced through training of selected CSOs, who will in turn cascade trainings to peer educators for infection control sensitization. These settings include informal small scale mining settlements and refugee compounds in targeted high burdened provinces namely; Midlands, Manicaland, Matebeleland North and South. In formal congregate settings like the mines and uniformed service establishments, infection control will be enhanced through targeted training of health workers in their institutional health service.

Part of the allocated funding will also committed to closing the funding gap for the on-going IPT roll out currently supported under the HIV grant through procurement of INH for 11,000 PLHIV.

Above allocated funding request

The above-allocated funding requested will seek to support 4 PITC trainings needed to optimize provider initiated HIV testing to TB patients across the country.

The funding will also be used to procure an additional 1,416,425 HIV rapid test kits per year in 2016 and 2017 will also be needed for funding.

INH will be procured for 333,204 PLHIV and 42,506 children living with HIV to compliment commitments under the HIV grant up to 2016.

MDR-TB Module

Diagnostic capacity for case detection of drug resistant forms remains limited, despite on-going efforts to roll out rapid molecular technology. In 2012, only 6% of retreatment cases were investigated for drug resistant TB. Out of an estimated 930 cases of MDR TB, only 149 were laboratory confirmed and 105 put on treatment, underscoring the need to prioritize this module for funding request. Equally, treatment outcomes among DR-TB cases are sub-optimal (59% in 2011). The selected interventions seek to strengthen laboratory capacity for DR TB case detection; as well as strengthening institutional and community capacity for case containment to optimize treatment outcomes.

Allocated funding

The national capacity for DR-TB diagnosis will be strengthened through sustained procurement of reagents for both conventional 1st and 2nd line DST and LPA. Service contracts for essential equipment will be secured.

In addition, the Zimbabwe National TB Reference laboratory (NTBRL) will be supported in maintaining collaboration with a supranational TB reference laboratory (SNRL) for consistent QA support. Annual technical support from the supra-national reference laboratory will be supported under this funding request.

Intensified DR-TB case finding among mobile populations will be pursued. The funding will leverage on a TB REACH grant supporting TB screening using Xpert MTB/Rif at two main ports of entry with Botswana and South Africa. The catalytic supported from TB REACH, ending in 2015 will be sustained through this funding request. The scope of activities will be expanded to include establishment of TB screening points along strategic inland transportation stop-over points.

Decentralization of the management of drug-resistant TB to the district level will be supported while strengthening the capacity of the existing Provincial teams to provide continuous support supervision and mentoring. This request will support capacity building of health care workers through training on PMDT to ensure provision of quality care at district and community levels. This it is envisaged will sustain current gains in the decentralized care of DR-TB.

The NFM funding will support procurement of second line anti-TB medicines and ancillary medicines for the treatment of an estimated 1,668 MDR-TB patients throughout the three-year implementation period.

Psychosocial support to patients on treatment is considered an essential part of comprehensive care, given the duration of 2nd line treatment and the related adverse events or side effects. Funding support to supplement nutrition and for transport is expected to improve DR-TB treatment outcomes.

The funding will also support annual GLC technical support visits to strengthen PMDT capacity.

Above allocated funding request

The country plans to increase access to high quality culture and DST services. The staff from the 2 culture labs. Will undergo training and mentoring on 2nd line DST

The above-allocated funding request will be used to further strengthen capacity for in-patient management of patients requiring in patient care.

NFM funding is sought for renovation of 8 provincial centres to provide isolation patients requiring hospital-based care. The renovations will entail modifying existing structures; at least one at each provincial hospital, through partitioning designated areas for isolation admitted patients, including securing additional windows to maximize on natural ventilation. These 8 facilities will be equipped with an ambulance to appropriately transport patients who

may need referral and to eliminate the necessity of such patients to share the same transport with other patients.

One of the common adverse events to 2nd line treatment is ototoxicity. Audiology assessments will be provided to all patients on 2nd line treatment. NFM funding will be used to install tele-audiology equipment in 8 rural provincial hospitals. Hearing aids for patients in need will be procured.

Procurement and Supply Chain

An effective Procurement and supply chain management for medicines, health products and commodities is critical to ensure early diagnosis and enrolment into treatment and care. Uninterrupted supply of TB diagnostics and medicines improves treatment outcomes and quality of care.

Indicative funding

Part of the indicative funding will support the re-establishment of the NatPharm-Crown Agents consortium. Crown Agents will partner with NatPharm to assist on strategic procurement planning processes. This funding request will also support attendance of NatPharm personnel to regional trainings on Global Fund procurement processes. It will also support staff to be attached to a well-performing government procurement agency or medical stores within the sub-region.

The TB NFM funding request will contribute towards assessment of the storage capacity in 120 health facilities and the refurbishment of 40 of them. The scope of refurbishment will cover expansion of storage space, improving shelving and installation of burglar bars to improve security and installation of air conditioners to enable storage of medicines at optimal temperatures. This complements the investment undertaken through the HIV NFM grant.

A harmonized medicine distribution system is currently being piloted in Manicaland to enable holistic logistics decision making, integrated LMIS and to improve cost efficiencies for distribution. The HIV NFM grant will support training of MOHCC staff at national and provincial levels on the integrated distribution system. TB NFM funding will compliment this investment by supporting post-training and mentorship visits. This investment is expected to minimize stock outs, overstocking and expiry of medicines.

Strengthening quality assurance systems for medicines is considered a high priority, to ensure availability of efficacious medications. The TB NFM will support MCAZ to carry out post marketing surveillance for TB medicines.

The TB NFM will contribute to training of 480 healthcare workers on stock management (including pharmaco-vigilance) to complement resources from GF HIV NFM grants and funding proposed under the Malaria NFM Concept Note. This will reduce stock outs, overstocking and expiry of medicines and improve management of Adverse Drug Reactions (ADRs).

A strong laboratory supply chain system is critical for delivery of TB diagnostics. The HIV NFM is supporting training of 50 laboratory personnel on the Zimbabwe laboratory commodity logistics system (ZilaCoDS) at national level. The training includes stock status analysis, logistics decision making on redistributing to avoid expiries, ensuring equity, and emergency ordering procedures. The TB NFM will contribute towards supporting mentorship visits to assess implementation of ZiLaCoDS and training of 300 laboratory personnel on the system.

Above allocated funding request

The above-allocated funding request will support the assessment of the storage capacity and refurbishment of 80 remaining facilities out of the total of 120. Improvement of storage conditions includes expansion of storage space, improving shelving and installation of

burglar bars to improve security and installation of air conditioners to enable storage of medicines at optimal temperatures. This complements the investment for the 40 proposed under the allocated funding request.

Program management Module

Enhancement of the coordination functions of the National TB Programme at national and provincial levels is key to successful implementation of the country's NSP 2015-2017. This informed the recognition of the programme management module as a critical component of the Zimbabwe Concept Note.

Allocated funding

The current grant has been supporting salaries for key staff at central level. It is unlikely that domestic resource will retain and sustain such support. Continued support for these positions will be crucial to safeguard current gains in service delivery. The funding requested will support staff salaries of central level staff and critical laboratory staff at the national reference laboratories. The National TB prevalence Survey data collection will only be completed in December 2014 and funding is requested to support BRTI survey staff with salaries at 50% of initial level of commitment

.

In addition, the need to re-enforce consistent and systematic support supervision and mentorship is considered critical to ensure continuous quality improvement of patient care. Part of the indicative funding is therefore proposed for mentorship visits, support and supervision at all levels.

Regular technical coordination meetings across different levels of service delivery are important to ensure harmonization in the application of national policies and guidelines. Such meetings provide the platform for reviewing programme implementation and interrogating key bottlenecks in service delivery; as well as communicating technical updates. Funding is requested to support technical coordination meetings at national and provincial level. The existing National TB/HIV Partnership Forum has provided a platform for coordination of partner activities to minimize duplication of efforts. The bi-annual Partnership forum is therefore considered crucial for funding under the indicative allocation.

Funding is requested to support and sustain the specimen transportation system currently supported by TB CARE I which comes to an end in 2014. Funding will also support maintenance, insurance and fuel for 110 vehicles and 405 motorbikes procured under TB grant R8.

The need to maintain functional transport for programme activities is also considered a high priority, given the additional workload foreseen to ensure successful implementation of the 2015-2017 TB NSP. Funding will support maintenance costs, insurance and fuel for 110 vehicles and 405 motorbikes procured under TB grant R8.

It is proposed that the implementation arrangements for this funding request are led by the MOHCC as the PR. Grant management costs for the PR have been allocated 6% of the total funding available.

Above allocated funding

The current vehicle fleet procured under the R5 grant is due for replacing to ensure efficient service delivery. The funding will procure 84 new vehicles to replace the current fleet.

To strengthen ongoing decentralization of DR TB services, quarterly DR TB coordination meetings at provincial level will be crucial. Part of the above indicative funding request is proposed to fund these meetings. The meetings will provide a forum to focus specifically on DR TB clinical and programmatic issues with the view to ensure continuous capacity building at district level.

Furthermore, with the pressing need to strengthen coordination of TB-HIV and PMDT at sub-national level, funding support for a Medical Officer position at provincial level has been an important consideration in this funding request.

The country also intends to organize and conduct a National TB Conference every two years with the objective of increasing visibility of both TB and HIV.

Health information (Monitoring and Evaluation) Module

Operations research, as well as findings from routine supportive supervision and data quality audits suggests a considerable gap still exists in TB recording and reporting. M&E interventions have been prioritized for support to ensure all TB patients are timely notified, and monitored

Allocated funding

The programme will conduct regular review meetings at all levels to monitor programme performance. To ensure that TB surveillance reports remain aligned to international reporting standards, funding will support updating of M&E tools.

The electronic TB recording and reporting system will improve patient record management and facilitate timely reporting. To ensure successful roll-out of the electronic TB surveillance system, the funding request will support procurement of computers and relevant software, and training of health workers.

External programme reviews have been used to monitor and evaluate implementation of the National Strategic plan and also to inform the revision of the National TB plan, in this vein an external program review will be conducted in 2017.

Above allocated funding

The country desires to institute a functional routine data quality assurance system for the National TB programme as well as other health programmes. This is intended to strengthen data quality across health facilities, district, provincial and national level levels. Part of the above-indicative request is therefore proposed for strengthening routine data quality assurance system.

The above indicative funding allocation is also proposed to fund procurement of computers for administration to replace those procured under the round 8 TB grant.

NTP intends to conduct an operational research on the short (9-month) DR-TB treatment regimen. This is in view of provisional results from similar studies indicating better treatment outcomes. Generation of credible local scientific data in this regard will inform relevant interventions and possible scale up.

3.4 Focus on Key Populations and/or Highest-impact Interventions

This question is <u>not</u> applicable for low-income countries.

Describe whether the focus of the funding request meets the Global Fund's Eligibility and Counterpart Financing Policy requirements as listed below:

a. If the applicant is a lower-middle-income country, describe how the funding request focuses at least 50 percent of the budget on underserved and key populations and/or highest-impact interventions.

b. If the applicant is an upper-middle-income country, describe how the funding request focuses 100 percent of the budget on underserved and key populations and/or highest-impact interventions.

½ PAGE SUGGESTED

Not applicable

SECTION 4: IMPLEMENTATION ARRANGEMENTS AND RISK ASSESSMENT

4.1 Overview of Implementation Arrangements

Provide an overview of the proposed implementation arrangements for the funding request. In the response, describe:

a. If applicable, the reason why the proposed implementation arrangement does not reflect a dual-track financing arrangement (i.e. both government and non-government sector Principal Recipient(s).

b. If more than one Principal Recipient is nominated, how coordination will occur between Principal Recipients.

c. The type of sub-recipient management arrangements likely to be put into place and whether sub-recipients have been identified.

d. How coordination will occur between each nominated Principal Recipient and its respective sub-recipients.

e. How representatives of women's organizations, people living with the three diseases, and other key populations will actively participate in the implementation of this funding request.

1-2 PAGES SUGGESTED

a) Zimbabwe has been operating under the Additional Safeguard Policy (ASP) for the past 5 years. Under this policy, the Global Fund selected United Nations Development Program (UNDP) as the principal recipient (PR) for the TB Global Fund grant since Round 8. Following the annual review of the ASP in February 2014, and discussions with the CCM on removal of additional safeguard measures, the Global Fund and the CCM have agreed that the MOHCC would serve as the PR under this funding proposal. The MOHCC previously served as the PR for the Malaria Round 5 Grant and it has all the desired requisite potential capacity and coverage. The MOHCC has also been the sole implementing SR for both Round 5 and Round 8 of the Global Fund TB Grants and has demonstrated overall good results on the agreed performance standards. A fund administrator will be appointed to manage and secure the funds.

The PR (MOHCC) will implement activities through its decentralized structures nationwide. Some sub-recipients will be selected to implement some of the

activities. Dual-track financing remains a challenge in view of the ASP and the fact that MOHCC has been the sole SR in the existing grant. However the PR (MOHCC) will work with the selected SRs and build capacity for them to potentially serve as PRs in the future.

b) N/A (only one PR has been nominated).

c) Implementation of the activities proposed in this funding request will be coordinated through the national structures of the MOHCC (in its capacity as PR). This funding request also provides support to government and civil society staff involved in the implementation of this grant, either as sub-recipients or sub sub-recipients.

The chart below summarizes the proposed implementation arrangements for this funding request.

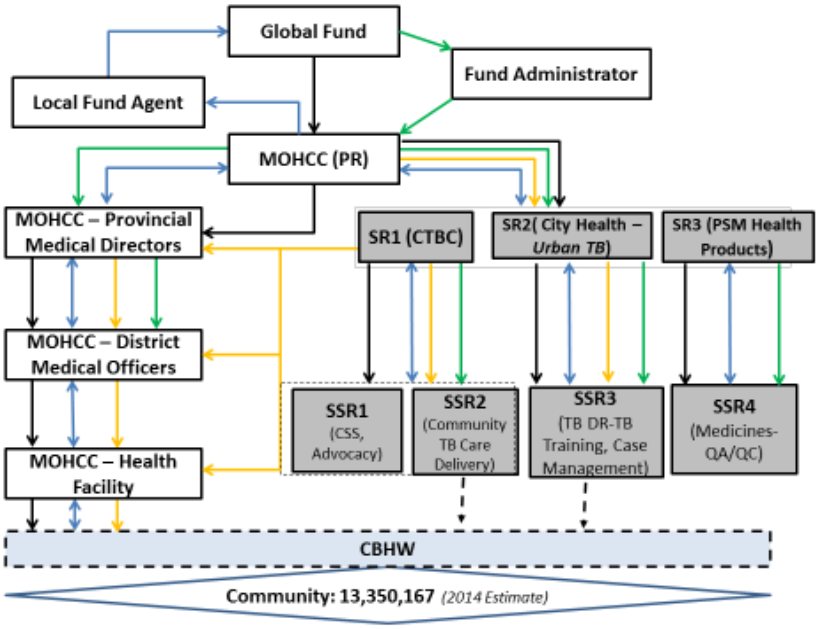


Fig. 7: Proposed implementation arrangements for this funding request

At the time of submitting this funding request, Sub Recipients (SRs) and Sub-Sub Recipient (SSRs) have not been selected. The SRs and SSRs will be selected following the recommended procedures on transparency and fair selection laid down by the CCM. However, *Figure 7* above highlights some preliminary thinking on the broad categories of implementation partners that would be required. As the PR, the MOHCC will develop broad implementation plans for the execution of activities included in this funding request, and will sign SR agreements with specific responsibilities and activities to be managed by SRs. The SRs, on the other hand, will go through a transparent process to select SSRs and sign grant agreements with them.

Following selection, MOUs and grant agreements that specify and outline the expectations in programme implementation will be signed, and rigorously monitored to ensure successful implementation and contribution to the overarching country goals and targets. While the PR will lead the monitoring of effective and quality implementation of Global Fund resources, financial management will be supported by the fiduciary agent and the LFA. Supervision and accountability shall be enhanced through review meetings, joint preparation of progress updates, and joint verification of grant implementation.

At this point, only broad responsibilities have been identified for the PR, SRs, and SSRs and these will be refined at a later point. Preliminary roles are as follows.

- PR: programme management, monitoring and evaluation, financial management, implementation of activities
- SRs: procurement, storage and distribution of pharmaceutical and non-pharmaceutical products, community based activities, trainings
- SSRs: community mobilization and community based TB care and prevention, quality assurance

d) The MOHCC – in its capacity as PR - will provide overall management and guidance to the SRs and SSRs. The MOHCC will manage each SR individually on the basis of the standard conditions defined in the SR agreement that will be signed with each SR. The SR will in turn manage and coordinate SSRs under them. The MOHCC will have the responsibility to; (i) manage the grant and provide technical guidance to SR/SSR (ii) coordinate with the fund manager and ensure timely disbursement of funds for the implementation of the approved activities; (iii) ensure budget monitoring of the SR/SSR activities and ensure that the funds are used as per the approved plan, (iv) coordinate and consolidate the periodic programmatic and financial reports, and (v) provide quality assurance on the periodic reports (both programmatic and financial) received from the SRs

The coordination between the MOHCC and SR/SSR shall be enhanced through scheduled monthly and quarterly meetings where progress and challenges in implementation are reviewed and remedial measures agreed upon to improve grant implementation and performance. As part of programme and financial monitoring and capacity building, joint on-site data verification (OSDV) and supportive supervision and mentoring will be carried out with SRs and SSRs. At grant initiation, and at periodic intervals, the PR (MOHCC) will conduct capacity assessments of the selected SRs and work with them to address identified gaps.

The CCM will continue to perform its oversight role and will approve all major changes. Regular updates on grant implementation will be provided to the CCM monthly.

e) Key population groups face an increased burden and/or vulnerability to TB and TB/HIV co-infection. This grant`s design is accommodative of human rights issues, the basis of community engagement, in partnership with CSOs and the community at large. Community health workers and CSOs cascade implementation to PLWHV, children and other vulnerable groups, while prisoners will be reached with support from UNODC. Current effort through IOM targeting migrant populations will be sustained and scaled up.

4.2 Ensuring Implementation Efficiencies

Complete this question only if the Country Coordinating Mechanism (CCM) is overseeing other Global Fund grants.

Describe how the funding requested links to existing Global Fund grants or other funding requests being submitted by the CCM.

In particular, from a program management perspective, explain how this request complements (and does not duplicate) any human resources, training, monitoring and evaluation, and supervision activities.

The existing Round 8 Grant implementation was informed by the Zimbabwe National Tuberculosis Strategic Plan (NSP) 2010 -2014. The NSP has undergone review and new strategy to run from 2015- 2017 has been adopted and was used to guide the prioritization of interventions in this current proposal. This application is more focused as it prioritizes high impact interventions identified in the NSP. There are linkages which currently exist and the current grant will build on these.

In addition to the TB, Zimbabwe is currently implementing three other Global Fund grants namely; Malaria, HSS (under the Round 8 Phase 2), and New Funding Model HIV grant. This proposal will support human resources costs which are specific to this grant and will in addition complement HIV HSS and CSS activities as well as Malaria CSS activities and HIV grants will support the other HSS/CSS component. At a high level the Principal Director Preventive Services oversees the implementation of all the Global Fund grants and conducts joint regular reviews with all Programme Heads. Implementation efficiencies will occur through the following approaches:

Planning and Supportive Supervision. MOHCC will harmonize and integrate supportive supervision at all levels of care, procurement and supply activities (storage and distribution, LMIS etc.). The MOHCC will conduct coordinated planning meetings, such as MODO, PHTs, DHTs, etc.

Monitoring and Evaluation. Zimbabwe is currently implementing the DHIS-2, which the TB programme also benefits from in terms of M&E and surveillance. The HIV programme is currently rolling out the e-PMS which has incorporated a TB/HIV module and this platform will link with the electronic TB Recording and Reporting platform enhancing further the M/E system. The Zimbabwe DHS (not funded through this funding request) will be also be leveraged by the NTP to generate information on coverage and impact for particular TB indicators.

Training. Training of community health workers will occur through an integrated approach to enable them to provide services to all three diseases. It is acknowledged that community-based health workers trained under the HSS grant have not been effectively used for TB activities. The NTP and the HIV programme have adopted a joint TB and HIV training programme for Health care workers as a step to strengthen a coordinated approach to training and improve efficiency of resources utilization.

Grant Coordination. The coordination of the grant will be done by MOHCC through a Grant Management Steering Committee chaired by the Permanent Secretary monthly. The Donor Coordination Unit of the MOHCC will report to the GMSC on Financial Performance and the NTP will provide Programmatic Update. On a quarterly basis the Permanent Secretary will invite the implementing partners and the PMDs for progress review meetings.

4.3 Minimum Standards for Principal Recipients and Program Delivery			
Complete this table for each nominated Principal Recipient. For more information on minimum standards, please refer to the concept note instructions.			
PR 1 Name	Zimbabwe Ministry of Health and Child Care	**Sector**	Govt.
Does this Principal Recipient currently manage a Global Fund grant(s) for this disease component or a cross-cutting health system strengthening grant(s)?		☒ Yes ☐ No	
Minimum Standards		**CCM assessment**	
1. The Principal Recipient demonstrates effective management structures and planning		*Yes. The MOHCC will use national systems and structures to implement the proposed activities.*	

	Although the OIG report of 2013 revealed weakness in coordination and management, these are being addressed (See Section 4.4 below).
2. The Principal Recipient has the capacity and systems for effective management and oversight of sub-recipients (and relevant sub-sub-recipients)	*Yes. MOHCC has the requisite experienced human resources and, systems for effective management and oversight of SRs and SSRs. MOHCC has been PR under round 5 the sole SR under SSF malaria. The Ministry has also been the sole implementing SR for the TB Round 5 and Round 8 Grants*
3. The internal control system of the Principal Recipient is effective to prevent and detect misuse or fraud	*Yes. In 2013 Capacity Development activities to strengthen the MOHCC Internal Audit Unit were implemented that resulted in successful formation and training of a Working Committee on internal audit.*
4. The financial management system of the Principal Recipient is effective and accurate	*Yes, in addition a Fiduciary Agent will be recruited to strengthen the financial management of the grant.*
5. Central warehousing and regional warehouse have capacity, and are aligned with good storage practices to ensure adequate condition, integrity and security of health products	*No. A plan to strengthen the supply chain management is being implemented to address the weaknesses identified. There is budget to strengthen Supply Chain Management through the HIV/AIDS grant. This proposal also sets aside additional resources for PSM.*
6. The distribution systems and transportation arrangements are efficient to ensure continued and secured supply of health products to end users to avoid treatment/program disruptions	*Yes. NatPharm is the implementing agency for storage and distribution.*
7. Data-collection capacity and tools are in place to monitor program performance	*Yes. Standard reporting tools for data collection and templates for reporting have been developed and are being used.*
8. A functional routine reporting system with reasonable coverage is in place to report program performance timely and accurately	*Yes. A robust DHIS-2 has been rolled out nationally and provides the platform for all public health reporting systems to submit timely routine quality data from health*

	facilities, through to districts and provinces and the national level.
9. Implementers have capacity to comply with quality requirements and to monitor product quality throughout the in-country supply chain	*Yes. A QA Programme has been developed, including activities to strengthen the current capacity and quality requirements.*

4.4 Current or Anticipated Risks to Program Delivery and Principal Recipient(s) Performance

a. With reference to the portfolio analysis, describe any major risks in the country and implementation environment that might negatively affect the performance of the proposed interventions including external risks, Principal Recipient and key implementers' capacity, and past and current performance issues.

b. Describe the proposed risk-mitigation measures (including technical assistance) included in the funding request.

a. The following risks to program delivery have been identified, and risk mitigation plans are as outlined or under development.

National Economic Context. Zimbabwe is emerging from a decade of hyperinflation and weak economic performance. However, since 2009 the economy has stabilized, and is registering considerable economic growth annually. Growth in national income has been registered, and a continued upwards trend is projected. Whereas hyper-inflation of the local currency previously eroded the value of external resources, the Government aims to maintain economic stability through maintenance of the USD currency in the medium term; it is therefore anticipated that over the duration of this grant, the USD will remain as the principal currency in use. The Government has also developed an economic blueprint to guide the growth of the economy in a sustainable manner – Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET).

Human Resources for Health Financing and Retention. The Health Workforce Retention Scheme – supported by the Global Fund and Health Transition Fund- has been an effective tool for lowering staff attrition in the health sector, but the potential termination of this scheme may become a risk to the human resource situation. The retention scheme has contributed immensely to arresting the problem of staff attrition as Government has been unable to support competitive salaries for health professionals. The OIG report of 2013 noted that termination of the retention scheme before Government is able to support salaries at competitive levels has the potential of reversing current gains. Government has been consistently increasing salaries of civil servants. In 2014, civil servants were awarded a salary increment of almost 26%. Government is also working with partners to look at other options to deal with potential brain drain, and proposals of non-financial incentives to motivate and retain health workers are being considered.

1. Integration of the patient level systems between AIDS and TB and HMIS

The HIV/AIDS has already launched the Electronic Patient Medical Record System (EPMS) in 85 sites and the National TB Programme is also now planning to ride on this system's infrastructure. The EPMS has TB/HIV module which will enhance integration of the two programmes. Lack of integration of patient level systems would affect continuum of care, monitoring and reporting on indicators for TB/HIV integration. Additionally, TB data is now integrated in the DHIS2. The TB Electronic Recording will utilize the existing hardware infrastructure at Primary care Facility procured for DHIS and e-PMS rollout.

2. Weak Community DOTS and Community Health Systems

There is a weak community DOTS programme, lacking clear supporting tools and systems. There is inadequate coordination among different departments within MOHCC to support implementation and standardisation of community based health interventions. The availability of over 11,000 community health workers trained under the HSS grant present an opportunity to strengthen the community based TB case management. However, CHWs are not fully integrated in the Ministry's disease program activities, resulting in their services being fragmented and poorly coordinated, and their effectiveness questioned. The role of CHWs will be optimized and strengthened so that they can contribute significantly towards improved TB outcome indicators. This will be achieved through undertaking the following key actions:

a) Central Level- Director of Nursing will play an increasing leadership role and coordinate more effectively with the Programmes and Provinces. The post of Village Health Worker Coordinator, within the Directorate of Nursing Services will be filled during the course of 2014. The coordinator will oversee the implementation of Community Based Activities and regularly report on progress to the Disease Programmes.
b) Community health systems will be strengthened by developing capacity in the existing CSOs in TB programming and M/E. One CSO with National coverage will be identified to be a Sub-recipient to develop capacity for province/district level CSOs.

3. Strengthening collaboration and coordination with stakeholders to improve Programmes and surveillance among special groups

Different TB high risk groups exist in Zimbabwe such as prisoners and workers in the mines. There is a substantial mining and commercial agricultural sectors such as sugarcane in the country where TB among workers could potentially be higher. There is also substantial migration for work to South Africa especially around the border provinces potentially bringing back MDR-TB and HIV. TB data is now disaggregated by risk group to facilitate better understanding of the extent of the problem and outcomes for these high risk groups. Although passive case detection of TB takes place in prisons, it is likely the burden is underestimated. TB in high risk groups is of deep concern and the following interventions will be undertaken some with the support of other partners.

a) Capacity of Zimbabwe Prison & Correctional Services (ZPCS) developed: NTP will support the Prison Health services with technical assistance to develop A Policy, Strategy and Operational for TB prevention and care services within the Prisons. This all-encompassing policy and guidelines will include TB/HIV and DR-TB and funding support has already been secured from UNODC.
b) Addressing TB in in Mines and Mining Communities: The NTP has initiated dialogue with Stakeholders involved in both formal and informal Mining activities to identify key actions towards formulating an effective response to TB and TB/HIV in this Risk group. In addition the NTP is involve in Regional activities facilitated by the SADC Secretariat which will inform regional responses to this key issue.
c) Other Risk groups which include Refugees and People Living in Overcrowded Conditions- This target group will benefit from targeted Mass Screening utilizing the vehicles procured in Round 8 for the National TB Prevalence Survey. This vehicles will also be fitted with GeneXpert Machines to facilitate early field diagnosis and treatment initiation.

4. Monitoring, Evaluation and Surveillance

Implementation of the National TB Prevalence Survey experienced challenges that were timely resolved. The coverage of drug sensitivity testing is low because of inadequate numbers of HCW trained in MDR and weak technical support supervision. A number of actions are being proposed to strengthen TB M/E and surveillance:

a) Support is being sought in this request to cover TA required for data analysis and compilation of survey report.
b) The activities for the prevention, care and treatment of Drug Resistant TB are one of the main pillars of the National Strategy for TB.
c) The Programme for management of Drug Resistant TB needs a focal person at National Level within the NTP. The activities at the Implementation level also requires strong technical leadership as well whose focus would also include TB/HIV. This request seeks the salary support for these posts to quick start the effective implementation of the DR-TB programme activities.

5. TB/HIV collaborative activities

As noted earlier, in 2012, 88% of TB cases had a known HIV status, however only 26% of HIV positive TB patients were reported as having been enrolled on ART in the 2013 Global TB Report. Additionally, the screening for TB among people under HIV care was very low at 46% by end of 2013 according to the LFA verified progress update report from the PR. These worrying results reflect the need for the program to intensify its TB/HIV collaborative activities which would be revamped as follows:

a) One of the main reasons for the poor TB/HIV results reported is because of some inherent shortcoming in the TB Recording & Reporting (R/R) system design. A new TB R/R system was introduce in 2014 which should see an improvement in the reporting though the burden of the paper based tools remains a challenge for the HCW at the facility. The introduction of the e-PMS will be a major step towards improved reporting for TB/HIV.
b) TB treatment initiation is decentralized to the Primary Care Facility but ART initiation has mainly been at the Secondary Care Facility or Outreach clinics. The HIV NFM will make significant impact in ART decentralisations with renovations of over 400 Health Facilities and training of HCW so that they meet the accreditation criteria. This proposal seeks to add an additional 40 facilities. The decentralisation of ART initiation will make access easier for TB patients to get ART.
c) The proposed ART decentralisation will be facilitated by the proposed recruitment of the Provincial TB/HIV and Drug Resistant TB Medical Officer.

6. Supply Chain Management System of TB medicines, laboratory equipment and reagents

Storage: The anticipated increase in TB case detection and subsequent number of people to be treated presents challenges to the health system, due to the expected need for additional storage space for health products and health equipment. The implication of this can be better appreciated when considered along with the exponential increase in patients enrolled in antiretroviral therapy (ART) following new WHO guidelines. From the latest assessment report, up to 50-75% of spaces are being taken up by ARVs and related products based on current enrolment rates despite there being no significant increase in storage space prior to the significant scale up of ARV coverage. Previous assessments have shown that the conditions under which health products are being stored at all levels of the supply chain are significantly below the minimum standards. This situation is capable of compromising the quality of medicines administered to patients and consequently producing undesired treatment outcomes.

Distribution: NatPharm, the national entity responsible to distribute health products to all health facilities has not fully delivered on this responsibility due to lack of adequate funding. This has led to six parallel distribution system operating, with five being heavily development partner dependent as of 2013. Thus, withdrawal of funding from development partners is a significant risk to the distribution system. The distribution is undergoing harmonization to reduce the number of parallel systems with the aim of eventually creating one distribution system.

Logistics Management Information Systems (LMIS): This has been mostly manual with only two hospitals having an electronic inventory management system. This coupled with low quality and quantity of staff at service delivery levels has created data quality

challenges and low reporting rates. These factors impact on the quality of forecasting and quantification and consequently procurement.

Quality Assurance: Despite being ISO certified, the Medicines Control Authority of Zimbabwe (MCAZ) has faced challenges in the area of routine post-marketing surveillance due mainly to human resources and funding constraints. This is a significant risk to public health in a situation where health products are stored in sub-optimal conditions, often in high temperatures, but with an impaired capacity to detect product deterioration and loss of quality.

Laboratory supply chain: This has not received the due attention and support over the years with frequent stock outs and expiries of laboratory commodities which has impacted quality of health service provision. Past assessments also indicate sub-optimal distribution of laboratory commodities and equipment with some equipment and reagents lying at NatPharm for long periods despite health facilities not having adequate quantities. Added to this is the requirement for optimization in the equipment mapping and sample referral system to facilitate better access to TB and HIV testing and monitoring services to patients. With increasing need for TB/HIV collaborative activities to achieve synergies, the harmonization of the laboratory systems for both disease components becomes inevitable and a vital component of TB/HIV collaborative activities.

Waste management system: Virtually all assessments of the supply chain have identified waste management as a challenge with some facilities holding over 10 years of expired drugs thereby further reducing the space to store health products. The situation calls for a review of the policy environment and perhaps waste disposal infrastructure to facilitate accelerated disposal of medical waste.

In this funding request the CCM seeks to get support for the resuscitation of NatPharm's role in quantification, procurement, storage and distribution of health products. This funding request seeks to contribute towards addressing the critical shortage of storage space in the public health facilities. The parallel medicines and laboratory commodities distribution systems will be harmonized into unitary systems in 2015 after pilots currently running end in 2014. The funding request seeks to support MCAZ to conduct post-market surveillance activities with fuel and per diem funds.

7. Programme Management

The June 2011 external review report for the TB program raises concerns about management of the national TB program at both central and subnational level. At central level, lack of clearly defined roles and responsibilities were highlighted and at provincial level, lack of ownership of the programme was evident, resulting in absence of meaningful support and supervision and absence of use of TB reports or TB data for planning and decision making. These challenges continue to be evidenced in anecdote reviews by the LFA and therefore the concept note provides an opportunity for the CCM and partners to identify and include approaches that will strengthen ownership of the program at subnational level with clearly delineated roles and responsibilities at central level.

The central level management capacity taking into account observations from the external review done in 2011, will be strengthened through the full adoption of a Results Based Management (RBM) approach as this assists in identifying clear roles and responsibility for both individuals and departments i.e. NTP and PMDs and fosters accountability. All staff will need to undergo orientation and training on RBM.

As the PR of this grant, the MOHCC will receive support in financial management systems through a fiduciary agent. The costs of engaging this agent are included as part of the administration costs of the grant.

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.

- ☐ Table 1: Financial Gap Analysis and Counterpart Financing Table
- ☐ Table 2: Programmatic Gap Table(s)
- ☐ Table 3: Modular Template
- ☐ Table 4: List of Abbreviations and Annexes
- ☐ CCM Eligibility Requirements
- ☐ CCM Endorsement of Concept Note