REPORT
ON THE
EVALUATION OF THE GLOBAL FUND
TB PROGRAM
IN
SOMALIA

AN IMPACT EVALUATION OF THE WORLD VISION MANAGED TB PROGRAMME (2013)

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## II. Glossary of Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AFB</td>
<td>Acid Fast Bacilli</td>
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<tr>
<td>ACSM</td>
<td>Advocacy, Communication and Social Mobilization</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
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<tr>
<td>ARI</td>
<td>Annual Risk of Infection</td>
</tr>
<tr>
<td>CFR</td>
<td>Case Fatality Rate</td>
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<tr>
<td>CCM</td>
<td>Country Coordinating Body</td>
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<tr>
<td>CCM-Italy</td>
<td>Comitato Collaborazione Medica-Italy</td>
</tr>
<tr>
<td>CISP</td>
<td>Comitato Internazionale Servizio Volontario</td>
</tr>
<tr>
<td>COOPI</td>
<td>Cooperzione Internazionale</td>
</tr>
<tr>
<td>COSV</td>
<td>Comitato Coordinamento Servizio Volontario</td>
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<tr>
<td>DALY</td>
<td>Disability Adjusted Life years</td>
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<tr>
<td>DOTS</td>
<td>Directly Observed Treatment Short-course chemotherapy</td>
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<tr>
<td>FDC</td>
<td>Fixed Dose Combination</td>
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<tr>
<td>GF</td>
<td>Global Fund</td>
</tr>
<tr>
<td>GFATM</td>
<td>Global Fund to For Aids, Tuberculosis and Malaria</td>
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<tr>
<td>GDF</td>
<td>Global Drug Facility</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>HSC</td>
<td>Health Sector Committee</td>
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<tr>
<td>I.E.C.</td>
<td>Information, Education and Communication</td>
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<tr>
<td>IGAD</td>
<td>Inter-Governmental Authority and Development</td>
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<tr>
<td>INGO</td>
<td>International Non-Governmental Organizations</td>
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<tr>
<td>IPD</td>
<td>In-Patient Department</td>
</tr>
<tr>
<td>IUATLD</td>
<td>International Union Against Tuberculosis and Leprosy</td>
</tr>
<tr>
<td>LFA</td>
<td>Local Fund Agency</td>
</tr>
<tr>
<td>OPD</td>
<td>Out-Patient Department</td>
</tr>
<tr>
<td>M &amp; E</td>
<td>Monitoring and Evaluation</td>
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</tbody>
</table>
MCH: Maternal and Child Health Clinic
MDR: Multi-Drug Resistance
MOH: Ministry of Health
MOHL: Ministry of Health and Labor
NGO: Non-Governmental Organization
NTP: National Tuberculosis Programme
PHC: Primary Health Care
PR: Principle Recipient
SACB: Somali Aid Coordinating Body.
TB: Tuberculosis
TFG: Transitional Federal Government
TBCT: Tuberculosis Coordinating Team
UN: United Nations
UNDP: United Nations Development Programme
VCT: Voluntary Counseling and Testing
WFP: World Food Programme
WHO: World Health Organization
WVI: World Vision International
III TB FACILITIES IN SOMALIA
IV EXECUTIVE SUMMARY

The impact evaluation of the Global Fund TB Programme in Somalia was conducted between August and September by a team of three consultants. The main purpose of the impact evaluation was to determine whether the programme has impacted positively on the socio economic situation of the population of Somali, and how much has this contributed to the reduction in the TB disease burden on the general population of Somalia. The evaluation also examined how the Grant Recipients at various levels have manage the programme given the gender and age issue/concerns in the Somali socio cultural milieu.

The evaluation was implemented as a multi modal survey type study that both used quantitative and qualitative approaches, using purposive stratified sampling technics to identify respondents. The sample contained 40 % of all the TB health facilities and 334 individuals as well as more than 52 Focus Group Discussions (involving more than 400 persons) were the main methods used to collect data for the impact evaluation. The data that was collected was compiled, processed and analyzed accordingly using SPSS comport analysis package. The evaluation was conducted on the background that WVI had been managing the Global Fund TB Programme for Somalia as a Principal Recipient for Round 3 since 2003-2004 managing a total of more than 16 International and local NGOs and with technical and policy guidance support from WHO. WVI was appointed as a Principal Recipient through the now defunct in the absence of suitable qualified government institutions to assume the role of Principal Recipient for the Global Fund TB Programme in Somalia. Participation and involvement of local governing authorities in the TB programme was guaranteed by the establishment of National TB Programme entities within the Ministries of Health and Labor in the self-declared autonomous regions in Puntland and Somaliland and the transitional government in South Central Somalia to coordinate and monitor the implementation of the programme. Currently WVI is working closely with the Ministries of Health in each zone to build the capacities of NTPs to carry out training, local level monitoring and evaluation and assist in the community mobilization for ACSM programme. Other capacity building activities include strengthening of operational capacities of NTPs by the establishment of office space and equipment as well as providing salary support to staff and logistical support through provision of vehicles. Senior staff have been sent abroad for short term training in leadership skills and technical staff sent to neighboring countries for capacity building training in various technical fields including monitoring and evaluation, capacity, community advocacy and mobilization.

The Global Fund TB programme in Somalia has now expanded from the initial 33 TB centers in 2003 to the 64 mainly stand-alone Tb centers and hospitals by 2013 covering all the three zones. However, two TB centers managed by Medicines Sans Frontiers in the Islamic held Galagdud region have been closed down due to insecurity.

The evaluation findings were determined by evidence from both primary and secondary data sources that consisted of direct observations of the TB service delivery centers, interviews of respondents using the TB services and community leadership and other sources. Based on the analysis of the collective intelligence on the status of the TB programme in Somalia we came to the logical conclusions that the Global Fund TB Programme in Somalia is significantly contributing to
the reduction of the TB burden of disease and improvement in the wellbeing of those affected by TB in Somalia. The study was, however, unable to identify tangible evidence of the impact of the TB programme on the socio economic wellbeing of the beneficiary population. Anecdotal evidence of socio psychological and economic gains attributed to the study by all the respondents interviewed in the study. The respondents contended that the easy access to TB services and information has led to significant saving of expenses that families used to incur to access TB services previously;

One respondent made the following remark in support of the impact of the programme on the psych of a former patient:

“……the availability of early detection and free treatment of TB at the TB centers has reduced suffering and possibility of death due to TB. I do not have to worry about finding money to feed my family when I am undergoing treatment because they even give me food for me and my family while undergoing treatment.”

The impact achievements of the TB programme in Somalia have been backed by the finding that geographical access to TB services has been increased by more than 65. % since the launch of the programme in 2003-2004.; an increase in the detection of sputum positive cases of TB; and maintenance at the 89% of successful cure of SS+ve cases of TB; an increase in the detection of SS-ve cases; a reduction of cost of treatment of TB to the households as a result in the reduction of transport costs. Other contributions include the creation of jobs for health cadres amount to more than 4,000 thousand; contribution to the general synergistic improvement in the quality of health care systems and the ability to detect and manage emerging health challenges such as the MDR.

All the above have directly or indirectly contributed to the betterment of health status of the Somali communities by reduction of mortality due to TB, increased information about TB among the population and ultimately reduce the TB disease burden through reduced Years Lost due as a result of ill-health due to TB among individual members of the community.

A number of challenges to higher programme achievements were also identified by the study. The main challenges found related to the design and implementation management strategies and structures as well as external threats to expansion of the programme to all sectors of the population in Somalia. The approach that the programme had adopted for implementation still had significant elements of emergency, relief and rehabilitation and less of development. and has not put the purse strings in the hands of beneficiaries to make them take greater responsibility for management and provision of equitable and quality health care services. Experience from other regions and has shown that better and sustainable results are obtained when beneficiaries are allowed to determine programme priorities. Efforts are being made to further strengthen MOH involvement in the programme in the 2nd phase of R10 proposal, to strengthen capacities of NTPs in planning and management of the programme.

The Global Fund TB programme in Somalia was found to have significantly contributed to the general betterment of the health status of the population by reducing the impact of TB on the population. The reduction in the level of TB disease burden is being felt and appreciated by the population as was indicated in the FGD discussions and the maintenance of high successful treatment rates in the programme. The potential for even higher successes may have been limited
by the slow and late advocacy and social mobilization for action against TB. The implementation of the ACSM strategy would have accelerated community actions towards actualization of preventive and supportive actions to reduce the spread of TB in Somalia. The challenge of insecurity and lack of strong government social programmes will, however, continue to militate against the attainment of comprehensive control of TB in Somalia.

The evaluation has identified a number of areas in the programme where modifications and/or strategy realignment would improve programme performance and lead to higher socio economic impact of the programme on the beneficiary population. The vertical nature of the programme has excluded it from gaining on potential synergies obtainable from collaborating with other social service delivery programmes, which we believe could have led to achieving even higher impacts. Based on the findings and the need for increased impact of the programme on the socio economic wellbeing of the population in Somalia, a number of recommendations were made.

And these are:

1. WVI should consider working with other development and relief organizations in Somalia establish a national sector wide caucus to develop a coordinated joint development approach to maximize synergy and ensure equitable sector-wide and equitable development for better socio economic impact. (The current Health Sector Committee could be the catalyst for such a forum)
2. WVI should consider conducting a programme strategy review to consolidate on the current successes and find solutions to issues related to strengthening performance management of both the PR and SRs.
3. Review the Terms of Reference for the M&E Sub Recipient to include both Programme and Programme Management to assist the PR to monitor performance and compliance of SRs in terms of their performance and adherence to the grant management requirements.
4. Integration of TB services as part of the Primary Health Care Mechanism to utilize the community based synergy to increase Tb information awareness among the communities. PHC has already established structures in the communities that could be harnessed by the TB programme using the outreach strategy.
5. Creation of guidelines and establishment of mechanisms to ensure that only the appropriately and relevantly qualified personnel are employed in the programme and requirements for capacity building of local personnel to progressively manage the programme at both the PR and SRs levels. This could lead to the creation of dedicated local cadres to manage the programme sustainably.
6. MOHs in all the zones should be encouraged to integrate TB services into general Primary Health Care to economize on the use of shared available resources. This would require collaboration with SRs providing TB services at the stand alone centers.
7. The M&E Section of WVI should develop a research agenda that should be directed at providing evidence for decision making and identification of solutions to operational problems. These should include the undertaking of socio economic and epidemiological studies to determine impact of the
programme. Joint ventures and collaboration with other development organizations in the field will be needed to pool resources for these studies.

8 Current training programmes should be reviewed and the curricula appropriately adjusted to respond more effectively to better respond to the performance requirements.

9 A SR to manage the training should be identified to develop and conduct training programmes with WHO to provide technical oversight to ensure quality training and ensure greater accountability for training and capacity building.
1 INTRODUCTION

This is a report on the Impact Evaluation of the Global Fund TB program in Somalia which is managed by World Vision International (WVI). The purpose of the evaluation was to determine the progress made and assess the impact of the programme on the general socio economic status of the beneficiary in reducing the burden of TB and improving the wellbeing of the beneficiary population. The evaluation was also expected to provide evidence on lessons learned and guide the management of subsequent phases of the programme. Furthermore, the evaluation did identify several areas of success as well as challenges that had limited the full potential for success at various levels of implementation and has made specific recommendations for improvement of the programme.

This report is organized into seven sections that consist of the following: (i) Executive summary; (ii) Introduction and Background Information, (iii) the Methodology including study design and data collection instruments and development; (v) data collection and analysis; (vi) discussions of study findings and; (vii) Conclusions and Recommendations.

It is necessary familiarize the reader of this report to the evolutionary development of TB programming in Somalia as well as the socio economic and politically challenging environment within which the programme has been implemented over the years.

2 BACKGROUND INFORMATION

The impact evaluation study was commissioned by World Vision International for the purpose of identifying the impact of the Global Fund supported TB program on the socio economic wellbeing of the beneficiary population in all the three zones of Somalia; and to determine the reduction in the TB burden of disease on the same population.

The World Vision International was appointed as the Principal Recipient of the Global Fund TB grant for Somalia for R3 and subsequent awards for R7 (in 2007) and R10 (2010) enabled the organization to continually manage the programme for the past 10 years. The selection of the WVI as the Principal Recipient for Global Fund TB programme was carried out through the selection process within the SACB (now defunct and replaced by the Health Sector Committee) in consultation with and concurrence of the zonal governments. In the absence of central government in Somalia, SABC had acted as coordinating advisory authority for all humanitarian interventions in Somalia. The appointment of WVI as the Principal Recipient was based on the organization’s solid worldwide track record on programme management culture, its participation in TB control programme (managing TB centers) and reputation for frugal financial management. The fact that Somalia has no central government or institutions that qualified for the role of Principal Recipient for Global Fund grants made the choice of World Vision as principal recipient justifiable, given its experience working in Somalia with both local and International partners in the implementation of humanitarian programmes. WHO Somalia Country Office (EMRO) took the responsibility of providing technical and policy guidance and assistance to the Program. As part of the strategy to address patient nutritional and food security issues while undergoing treatment. WVI made arrangement with WFP through an MOU for WFP to provide food packages to patients on TB treatment. However, WFP has not been consistent in supplying food parcels to patients.
regularly. ECHO on the other hand provides logistical support through special arrangements in form of air transportation of personnel and supplies to all humanitarian programmes in Somalia.

Since the award of the first Global Fund TB Grant (Round 3) which was operationalized in 2004, WVI has been implementing the programme through sub grants contracts with a plethora of Sub Recipients, many of whom had already established themselves in Somalia as programme managers for TB and other health services. The majority of Sub recipients provide TB services at health facilities that they were already operating from or newly established. The sub recipients submit quarterly reports to WVI as a requirement and participate in joint quarterly meetings where there is often exchange of experiences and lessons learned across the programme. NTPs participate in the quarterly meetings representing their respective governments.

2.1 Evolution of TB and TB Programme in Somalia

TB is endemic in Somalia, affecting an estimated total 581 people/100,000 population annually according to WHO figures for 2012 (WHO_HQ_Reports/G2/PROD). Measures to control TB have existed since the colonial times and the last central government era. After the civil war and collapse of the central government in 1991, TB programme activities continued but on a limited scale from TB facilities scattered over a few urban areas. The programme was managed by a few organizations supported by WHO and other humanitarian organizations interested in TB control. During the period of heightened conflict in Somalia the incidence of TB increased due to the disruption of health services resulting from wide scale looting of health facilities and displacement of health workers. The treatment and management of TB was significantly compromised and the incidence of TB in the country began to rise as insecurity in many parts of the country escalated. Somalia was split into three clan based territorial enclaves, two of which (Somaliland and Puntland) established government structures and functions that provided basic security and other public services. In the South Central region however, continued inter-clan leadership wrangles between Islamists and appointed central government body led to continued fighting that prevented establishment of public services. The creation of formal government systems in Puntland in the North-East and Somaliland in the North-West have led to the establishment of government institutions that have facilitated the maintenance of peace and security and the resumption of the National TB Programme. A similar structure was also been established in the South Central Somalia despite the ongoing civil conflict between the Islamists and the Interim Central Government authorities. The Establishment of National TB Programme units are acting as the focal points for TB management in the three zones and catalytic to the participation of government and communities in the implementation of the TB programme. However, the lack of resources and weak government systems has left the implementation management of the programme in the hands of external organizations through Principal Recipient and Sub Recipients. Local participation in the implementation management of the TB programme is carried out through the NTPs who are representatives of MOH in each zone.

The continuing insecurity and social conflict curtailed the development of the national economy and has thrown the country into a tailspin of unprecedented political turmoil and economic crisis
that continues to drive the majority of the 10,195,000\(^1\) million Somali population into abject poverty and increasing levels of disease and ill-health. In addition, the country has been plagued by unfavorable climatic conditions of cyclical drought and floods that have, further, increased the vulnerability of a vast majority of the population to famine and disease. The continued ideological differences between the different political groups in the country has led to existence of insecurity which has further exacerbated the humanitarian crisis, characterized by persistent internal population displacements, increased outward migration of large population groups into refugee camps in neighboring countries. These conditions have provided favorable environment for development of increased prevalence of communicable diseases and increased prevalence and incidence epidemics of malaria and TB. Food insecurity was also increased by the losses of livestock, due to draught and disease, upon which the mainly nomadic population depends for their livelihood.

The prevalence of TB significantly increased during the post central government collapse in 1991 as diagnosis and treatment of TB was limited to a few specialized TB centers and hospitals in the divided country. WHO, working with dedicated local and international organizations provided TB services to communities within the vicinity of the TB centers and to those who could afford to travel from far for treatment. A number of international agencies contributed to the financial support needed to run the programme. The available TB centers were however, not accessible to the greater majority of population due to lack of reliable and safe transport and the poor transport and road infrastructure. And the continued inter-clan skirmishes and mistrust created an environment of insecurity that prevented free movement of people to easily access TB and other health services. Those who contracted TB and were not in the vicinity of TB centers were forced to utilize private practitioners and traditional healers at a great financial cost and medical safety.

The absence of adequately funded and properly coordinated and managed TB programme in the country before the Global Fund support led to fragmented implementation efforts that could have contributed to population using private practitioners where treatment of TB was not regulated and largely unaffordable and expensive for majority of patients. This could have led to incomplete dosing and possible misuse of anti TB drugs for other ailments providing the basis for the development of multi drug resistance TB.

Before the Global Fund TB Programme in 2004, TB services in Somalia were provided by a number of INGO and local NGOs through the humanitarian global emergency and relief assistance. The TB services then were characterized by the provision of services from health facilities that had to be rehabilitated after they were abandoned after the collapse of the government. The organizations that provided TB services had to rehabilitate and/or establish new TB centers and employed local personnel to manage service delivery. Due to loss of trained health personnel many of the local personnel that were employed as service providers had no formal training and had to be trained as most trained. The TB services that were on offer then, were limited and confined to a few urban areas. Quite often these TB facilities had no formal referral arrangements with the other free standing primary health care facilities (MCHs) even when they were in the same regions/district. Although TB services were commonly provided from stand-alone facilities, a number of organizations adopted strategies that provided integrated health care services from

\(^{1}\) WHO population estimates 2009
the same facilities. These included the following: Coopi, CISP, COSVI, World Vision, Merlin, FinSoma, Mercy USA, Intersos and many others including the World Vision through its primary health care programme. At the advent of the Global Fund TB programme support, almost all the organizations involved in TB service delivery applied for grants to implement and expand TB services as Sub Recipients of the programme. The common range of TB services provided consisted of passive case detection through sputum microscopy and treatment with first line anti TB drugs using the DOTs method. Since the advent of the Global Fund support to TB Programme in Somalia in 2003, TB services throughout the country have been strengthened at all levels. The increase in the capacity of the TB programme is shown in the increasing trends of TB case notification graph below:

![Notification Trend of TB cases (1990-2009)](image)

*Fig 1: Notification Trend of TB cases (1990-2009)*

*Abstracted from the Global Fund R3 evaluation report 2009.*

The advent of the GFTAM Funding for TB in R3 in 2004 provided the much needed support to strengthen existing efforts by increasing access and improved management of TB cases in Somalia. The Global Fund support provided financial support that made it possible to expand the number of TB centers to increase coverage through the opening of more TB facilities from 37 TB centers in 2004 to 52 by end of 2009. The programme also set targets of increasing case detection rate from 28%\(^2\) in 2002 to 35% in 2005. Other programme targets were the initiation and strengthening of

\(^1\) Adjusted Case Detection Rate after the 2005/06 Tuberculin Survey
the public/private partnership in referrals of TB cases from private practitioners to TB centers/hospitals, and improvement of local partnerships with communities and zonal governments. A TB strategic plan was developed in the year 2010 to guide the implementation of TB interventions in the country.

The evaluation of Global Fund R3 TB programme in Somalia in 2009, found that here were achievements made since the programmes inception in 2004. The achievements consisted of the geographical expansion of the programme to areas that had limited access to existing TB centers and the establishment of additional centers and the improvement in the quality of TB diagnostic and laboratory detection services. One of the cardinal achievements, perhaps, has been the establishment of the National TB Programme units through which the Ministries of Health have been able to coordinate TB programme activities at each zonal level with technical and financial assistance from the World Vision in its role as the PR. The extent of the achievements found were remarkable given the severe challenges experienced by the programme in the forms of weak government support, lack of policy enforcement capacity and expensive logistical support for movement of supplies and personnel. The deteriorated public health facilities and poor transport infrastructure and continued political strife especially in the South Central Somalia, between the Islamists imposed restrictions on the presence and operations of foreign organizations provided a challenging environment for survival and growth of the programme. The evaluation made the observation that there was an increasing trend in the number of people presenting themselves for sputum examination and treatment for TB than previously and that participation of the private practitioners in management of TB cases through referrals was increasing.

2.2 Epidemiology of TB in Somalia

TB is a major health burden in Somalia, contributing significantly to the reported high morbidity and mortality among the population. The epidemiology of TB in Somalia is similar to that found in many other developing countries where the disease is closely associated with widespread poverty, poor living conditions and reduced immune state especially those living with HIV and AIDS. According to WHO, TB in Somalia is the leading cause of morbidity and mortality among the adult population, contributing to significant loss in work productivity and increased household expenses in support of affected member of the household during the long treatment of TB. HIV and AIDS is a major emerging cause of increasing disease burden especially due to its association with TB. Although the incidence of HIV in Somalia is relatively low in comparison with its neighbors such as Ethiopia and Kenya, its advent in the country has added some level of urgency for more vigilance in the detection and treatment of TB. The association of TB and HIV and AIDS imposes even a higher disease burden on the population of Somalia due to the observed high morbidity and mortality (WHO Somalia Annual Report of 2009 estimated the HIV incident cases at higher than 4.5%3). According to the WHO HIV is closely associated with TB is well documented where 4.5% of TB had a co-infection with HIV, contributing to significant increase in the disease burden in terms of loss of productivity and increased household expenses in support of the affected member of the household.

33 This figure is reported to be rising due to the better diagnosis resulting from the integration of HIV services in TB programme.
The incidence of TB in Somalia is estimated to be 290/100,000 persons annually (WHO Global TB Report 2008). The 15-49 years age group is largely affected. It is reported that the incidence rate of TB in Somalia is among the highest in the world, and is known to have been exacerbated by the collapse of the country’s health system, the continued conflict with high displacements of people and overcrowding in camps for internally displaced persons as well as lack of appropriate health services. TB in Somalia is considered a major public health concern, affecting the individuals who are in the economically productive age groups of 15 to 44 years. It is in this context that TB is seen as a major disease burden as it impacts on communities that are struggling to survive in a harsh socio economic environment.

Although all forms of TB are found in Somalia, the pulmonary type disease is the commonest form of detected there is a significant prevalence of other forms of TB. As the Somali population is mainly pastoral, other forms of TB such as bovine TB tuberculosis is likely to occur. In the early stages of the programme before other methods of TB detection were introduced, non-pulmonary cases of TB were under diagnosed and therefore under reported.

The incidence of TB in Somalia is driven by several identified factors of poor nutritional status of individuals and high risks of transmission in overcrowded dwellings as well as the low level of awareness of TB transmission and prevention among the population. Other factors including socio cultural beliefs and practices that contributes to delayed health seeking behavior. The continuing socio political instability in many parts of the country has significantly contributed to the spread of TB through concentration of large numbers of people in overcrowded IDP and refugee camps. The evaluation also found specific socio cultural factors that contributed to the maintenance of TB transmission in the community. Stigmatization of the disease continues to impact on potential early health seeking behavior of Tb sufferers due to fear of being ostracized from the household, thus contributing to delayed diagnosis and treatment and consequences thereof.

2.3 THE GLOBAL FUND TB PROGRAMME SUPPORT IN SOMALIA

The Global Fund Tb programme in Somalia has received three funding phases of R3 in 2003, R7 in 2007 and R10 in 2010, and has over the period achieved some significant achievements in terms of increasing access to TB services for a greater portion of the population in urban areas. From the planned targets within the performance Framework of the grant TB case detection rate has been more than 65% with treatment cure rate of over 85%. In spite of these achievements by the GFTAM grants, TB continues to be a significant disease burden in Somalia as shown by WHO estimates that puts Somalia’s case detection rate at currently below 50%. In preparation for the submission of application for the next grant cycle the WVI commissioned this evaluation to determine the level of success achieved as well as lessons learned for the purpose of improving on the next round of implementation.

World Vision was given the mandate of Principal Recipient for the Somalia TB Programme due to the absence of strong and functional central government authority and systems to manage the programme. National TB Programme Units were created at each zonal level to provide local coordination management units that were to work with the selected Sub Recipients to provide

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4 TB patients tend to seek treatment from traditional healers first, then private practitioners before they finally seek proper treatment from the TB centers.
quality TB services at every TB center in the programme. The NTPs are the direct representatives of the government in each zone, have been assisted to develop appropriate implementation plans for the global strategic plans developed by the programme. of central government authority and systems, the role of World Vision has been to manage the programme in liaison with existing local authorities and subcontracting INGOS and local NGOs to manage TB programmes from specifically assigned health facilities. The existing government structures of Ministries of Health in each region were assisted to establish National TB Programme units (NTP) to provide coordination support to TB programme activities in each zone. The NTP were strengthened by the capacity building support that provided infrastructural, training and institutional development. The PR has provided institutional development support that included office supplies, vehicles for support supervision transportation of staff and commodities, administrative and technical training to enable NTPs to coordinate the management of the programme at the zonal level. The WVI working in collaboration with WHO has provided guidance in technical and management support as the WHO on the other hand, in its role as the Sub Recipient for technical support, training and policy guidance has continued to provide updated information on evolving technical policies and management of TB. Furthermore, WHO, continues to provide information on new developments and provision of global data on indicator performance from data compiled from world wide data sources.

In the December 2012 report to the Global Fund, the PR reported that there were more than 64 operational TB centers in Somalia with more than 12, 300 persons undergoing TB treatment. The programme had during the time expanded TB screening was expanded with the introduction of *Florescent Microscopy* to increase the accuracy of sputum examination, and the introduction of *gene Xpert* for diagnosis of extra pulmonary TB. Although these new additional arsenal against TB were only available at selected facilities, there are plans to make them available to more referral facilities.

Other new developments in the programme are the recognition of the advent of the MDR TB in Somalia. This had led to the establishment of the MRD TB unit at WVI which has resulted in the recruitment of a Medical Officer and a Laboratory consultant to determine programme implementation requirements and to develop MDR operational processes and procedures. The MDR programme consists of capacity building for the detection and treatment of identified cases and the capacity for referral of such cases to the designated centers (hospitals) for treatment. Currently there are limited special hospitals for inpatient treatment of MDR cases and only one MDR TB culture laboratory situated within Hargeisa TB Hospital. There are plans to establish similar facilities in each of the zones within the phase 2 of R10 TB programme. The MDR TB treatment hospital wards in Hargeisa have been completed and are expected to be operational within the course of the year. Capacity of the TB culture laboratory in Hargeisa is being developed to undertake culture of sputum for MDR. In the meantime, culturing of sputum for MDR TB will continue to be done by the regional referral laboratory in Uganda until such a time that adequate
local capacity has been developed in Somalia. However, all the necessary preparations for management of MDR TB are being taken or have been planned for in the three zones of Somalia.
3. The Impact Evaluation Study

The World Vision International has been managing the Global Fund TB Programme in Somalia since 2004 when it was awarded the Round 3 Grant. WVI applied for renewals of the grant in subsequent Rounds of 7 and 10 which were granted. The country assessment report graded the performance of the programme at B+ according to the latest Global Fund reports. In September 2009, an end of term evaluation of Round 3 was conducted. The results of the evaluation indicated that significant programmes achievements have been made, especially in the area of expansion of access to TB services, improvements in the quality of TB case detection and treatment. The evaluation also found that capacities at existing and newly established TB centers had been strengthened in terms of increased personnel numbers and skills, equipage and services. However, the evaluation was not able to establish how much the programme has impacted on the wellbeing of the beneficiary communities. The impact of the programme on the reduction of the burden of TB on the general health of the population could therefore not be determined.

One of the major goals of the Global Fund Tb Programme was to reduce the TB burden of disease indicated by the high prevalence of morbidity and mortality accorded to TB, and the loss in productivity associated with debility resulting from chronic ailments. The other aims were to determine social and economic impact of TB on the community and how this information could be used by WVI as evidence to improve the management of the programme. WVI believed that the increased access to TB centers, and the increasing number of TB cases detected and put on treatment is likely to have positively contributed to the reduction in the level of disease burden. TB, as a disease, imposed significant level of disability on the individual sufferer as well as his/her household and community through the loss of productivity and disruptions of personal and inter-household relationships due to possible stigmatization. The achievements of increased access to TB treatment services has contributed to reducing level of disability due to chronic ill health and the cures achieved have impacted on the level of disease burden in Somalia.

The Global Fund TB programme achievements in establishing quality TB services to provide early detection and treatment for TB have contributed to improvement in wellness of the population in general. Although the current level of Disability Adjusted Life Years (DALY) has not been specifically determined for TB in Somalia, current information indicate that TB burden contributes to the high mortality and morbidity states in Somalia. The reduction of prolonged suffering from TB disease through the availing of easy access to quality diagnosis and treatment of TB is likely to have directly and indirectly impacted on the individual and household affected by TB the ability to live a better life.

The commissioning of the impact evaluation was intended to gather evidence on how much the programme has impacted on the lives and wellbeing of Somalis. WVI had, in mind, the need to generate evidence and lessons learned on the programme contribution to the general reduction of the socio economic burden that TB imposes on the population of Somalia. The information was

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5 Disease burden is defined as the sum effect of lost years(days) due to ill health, disability or death that an individual suffers due to specific or combination of disease/s.

6 The Disability Adjusted Life Years (DALY) is a common measure of the disease burden expressed as number of years (sum of time) lost due to ill-health or disability.
needed to determine what needed to be done to ensure effective and efficient performance of the programme towards the reduction of the TB health burden.

Although the ToR had demanded the undertaking of an impact evaluation, evaluation of the impact of the programme was limited by the non-availability of data on DALY indicators in the programme. The requirement for determining impact of the programme include the assessment of the relevant socio economic data, household surveys and information from other programmes such as the poverty reduction and other development programmes, which being sector wide programmes had not been implemented yet. Some elements of the MGD programmes were being implemented as stand-alone projects as part of relief to rehabilitation process assistance.

3.1 Methodology

The consultancy team consisting of one international and two national consultants was selected to undertake the impact evaluation, in all the three Zones of Somalia. The evaluation exercise was conducted over the period of 38 days between August and September 2013.

The consultancy team held preliminary meetings with the project evaluation task team to agree on the methodology and logistical arrangements for the study. Thereafter, the consulting team carried out extensive document reviews as well as preliminary interviews with heads of health departments within the Global Fund TB programmes Sub Recipients based in Nairobi. Based on the document review and preliminary interviews of programme managers, the team developed an inception framework and generated a report that was submitted to the WVI evaluation team.

The implementation plan for the evaluation was arranged into four key deliverable areas of (i) Inception Report; (ii) Field Preparatory Plan; (iii) completion of data collection report; (iv) Draft Data Analysis Report and; (v) Final Report

3.1.1 Inception Activities

The review of documents and reports on the Global Fund TB programme in Somalia was undertaken and SRs TB programme managers were interviewed. The purpose of the review and interviews were for the consultants to acquaint themselves with the status of the programme to enable the team to determine an appropriate evaluation design, and develop appropriate data collection instruments and select a relevant data collection strategy. An inception report was developed in which the proposed study design and implementation methodology were developed and submitted to the WVI Evaluation Task Team for approval and authorization for implementation. The implementation plan clearly recognized the critical role that NTPs were to play in facilitation of the evaluation study in the field. NTPs were to provide logistical support and organizing the consultation/training workshops for data collectors; and obtaining of permission from local authorities to allow the collection of data from community members and TB centers.
3.1.1.1 Study Design

The design of the study comprised of a survey type evaluation study that utilized a multi modal data collection methods. The decision to choose multi modal data collection methodology was guided by the need to carry out a wide socio-economic impact evaluation that included intangible issues of community wellness. Quantitative and qualitative data collection approaches were adopted to collect information from all the programme stakeholders (PR, SRs, Donors and communities).

A purposive stratified random sampling was used in determining the sample selection of respondents for both IPI and FGDs. Given the relatively low probability level of someone having been screened and treated for TB in the general population, the use of this sampling methodology ensured the inclusion of people with different levels of knowledge and experience with the TB programme. This sampling frame was designed to maximize on the variety of information collected from the small sample size selection in that was limited by the time given to the study.

3.1.1.2 Field Activities Carried Out

The evaluation team was accompanied by two senior members from the WVI TB program persons, although one of these was on a concurrent but separate mission for the strengthening of the MDR TB programme. Before starting any activities the team paid courtesy call to senior officials at the Ministries of Health in each zone. Thereafter, the NTP teams were to provide logistical support to the evaluation team, including inviting participants from selected TB centers for the consultative workshop and training of those selected to collect data in the field.

The zonal consultative workshops were held in each zone and were attended by participants chosen from selected TB centers, and other stakeholders in the TB programme. The purpose of the evaluation workshop was to inform the TB stakeholders on the goals and objectives of the evaluation and to consult and request them to support the data collection process. The workshop was conducted and was also used to refine the evaluation plans as well as initiate the Focus group discussions on the state and performance of the TB programme in Somalia.

The NTP in each zone had been asked to make prior arrangements of inviting stakeholders to attend the evaluation consultative and training workshop before the arrival of the team. Preparatory activities carried out in Somaliland were utilized as pilot activities for other zones, where the two national consultants proceeded to initiate data collection preparatory activities, at the completion of the pilot activities in Hargeisa.

3.1.2 Consultative Workshop

The workshop involved extensive discussions on participants' views regarding the Global Fund TB Program in Somalia covering “on the ground” issues (i.e. how is the program working in reality, human resource issues, challenges, opportunities, strengths and weaknesses as well as getting them to discuss how the programme has contributed to reducing the TB burden and to get them to provide specific recommendations on how the programme could be improved to strengthen the control of TB
in Somalia). The workshop format consisting of presentations on the rationale for the impact evaluation of the TB programme in Somalia, and the principles of **results based monitoring and evaluation** methodology that were going to be used in the evaluation study, as well as general presentation and discussion on TB control in Somalia. Participants were challenged to think out-of-the-box and suggest effective ways on how to effectively control TB despite the socio cultural and economic challenges that they have identified. Following the presentation, participants were divided into groups for **Focus Group Discussion** on what is known about TB among the population of Somalia covering such issues as traditional beliefs and practices, stigmatization and current perceptions on detection and treatment of the disease. In addition, participants were challenged to identify how the current TB programme has impacted on the population as a whole. The outcomes of the consultative workshop included the full understanding of the evaluation process, which formed the basis for the TB centers’ staff to participate and collaborate in the data collection. Other outcomes were the better understanding on the different types of evaluation and differences in the data collection methodologies to suite the objectives of each evaluation study.

The consultative workshop was followed by the training of selected data collectors picked from selected TB centers (two from each TB center). The two day classroom training and the one day field testing were aimed at refine data collection methods and the tuning in of data collection instruments. At the completion of the training the data collectors were sent back to their stations to start the data collection. NTPs and the consultant in charge of each zone provided support supervision during the data collection phase. Each data collection team carried out a minimum of two Focus Group Discussions with staff of TB centers, community members and their leadership. In addition each data collector carried out a direct assessment of the TB centers and programme activities using the **Facility Check** List Instrument, and a minimum of ten (10) in-depth interviews of randomly selected respondents (using exit and intercept selection method) at the TB center or hospital as well as community areas over the data collection period.

### 3.1.3 THE DATA COLLECTION PROCESS.

<table>
<thead>
<tr>
<th>Data Collection Instrument Used</th>
<th>Total Responses Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Check List assessment done</td>
<td>34/64</td>
</tr>
<tr>
<td>Focus group discussions carried out</td>
<td>56</td>
</tr>
<tr>
<td>Personal Interviews carried out</td>
<td>334</td>
</tr>
</tbody>
</table>

The data collection process was carried out successfully in each of the three Zones, with minor variations to respond to local exigencies. In all the zones the local NTPs coordinated the recruitment of data collectors from the selected TB centers and hospitals and provided logistical support to the process, the consultants carried out follow up checks on about 10% of randomly selected completed questionnaires to ensure that quality and standard procedures for data collection were correctly carried out by each data collector. Where physical cross checking could not be carried out telephonic recall interviews were made. Cross checking and validation of facility assessment was carried out on an average of 53% of facilities assessed by data collectors.
Table 2a. Summary of respondents for each Instrument used

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>196</td>
<td>58.7</td>
<td>61.6</td>
<td>61.6</td>
</tr>
<tr>
<td>Female</td>
<td>122</td>
<td>36.5</td>
<td>38.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>318</td>
<td>95.2</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Histogram 1: Gender Distribution of Respondents

The profiles of the respondents to the IPI are indicated in the Charts 2a to 2c. The charts indicate that age and gender distribution of the sample used, and it a balanced gender and age mix of respondents. The gender differences in the sample did not have any significantly different to affect the outcomes of the interviews

Histogram 2: Age Distribution Range of Respondents
The age distribution of respondents indicated that people of all ages were interviewed with a slight focus on young adults.

### 3.1.3.1 Focus Group Discussions (FGDs) and In-depth Interviews

Focus group discussions (*FGDs*) were conducted as part of the stakeholder’s consultative workshop as well as at all the selected health facilities with patients, service providers and community leaders using a standardized guideline. Care was taken to ensure that at least 50% of respondents were women. The FGD discussions covered practical issues relating to the respondents’ experiences and perceptions on TB and how it was perceived and managed in the communities in Somalia, as well as their views on the performance of the current TB services and impact on their communities. The discussions were recorded including personal reflections and testimonies. A minimum of one (2) Focus Group Discussion was conducted at all the select TB facilities.

### 3.1.3.2 In-depth interviews

Individual In Depth Interviews were conducted on selected individuals from among the current and former TB patients at each TB facility, staff at the various levels of the TB programme, and all the NTP personnel and local authorities as well as randomly selected community members. A decision to conduct a maximum of twenty (20) IDIs was decided upon based on cost and timely considerations. Standard procedures for conducting FGDs and IDIs were followed based on the training and orientation of the data collectors. A total of 56 FGDs were conducted in the three zones.

The conduct of the Focus Group Discussions was carried out by two field workers working in pairs, with one serving as a *moderator* and the other as a recorder. Each focus group had an average of 10 *participants* and the discussions lasted an average of forty (40) to fifty (50) minutes. All the proceedings were recorded after consent was obtained from participants.

### 3.1.3.3 Facility Check List
The Facility Check List instrument was a tool that was designed for the assessment of both the physical and operational aspects of the TB Centers. It was administered to the in charges of the TB center as well as used in the inspection of the TB center building, equipment and general operations. The tool was used to assess the physical structures for compliance with the minimum WHO recommendations for ventilation and natural lighting of all working spaces, and for safety features to prevent infection from contaminated materials in the laboratories. It was also used to collect operational information, one facility check List was administered for each TB center.

3.2 Dealing with Data Collection Challenges to

Data collection was delayed in a number of centers due to the fact that almost all the selected data collectors were employed at the TB centers and could not dedicate five consecutive days to data collection as they had to carry out their normal duties. The data collection was therefore carried out after they had completed their duties at the centers. A number of the data collectors had difficulties to get time off from work to collect data. Instructions were given through the NTPs to request TB center in charges to allow staff allocated to collect data some time off to complete the data collection.

We had expected to have some problems with the use of data collection instruments written in English, but this was overcome by training and agreements on the meanings of the questions and the field testing of the instruments ensured that the data collectors were appropriately prepared. In some areas where data collectors could not record responses in English, they were allowed to record responses in Somali which were later translated in English for entry in the SPSS for analysis.

The main challenge encountered in the data collection was the supervision of data collection by the consultants due to the vast distances between the TB centers where data was being collected. This lead to the selection of those centers that was easily accessible. The vast distances also led to the delay in the collection of completed questionnaires before the consultants scheduled departure from Somalia. The questionnaires were later collected by the NTP teams and sent to WVI Nairobi.

3.3 Observations

The data collection was carried successfully in all the zones and selected respondents were found to be very keen to participate in the personal interviews or in focus group discussions. The staff who carried out the TB facility assessment were quite through and objective as proved by the crosschecking assessment done by the consultants in 40% of Facilities in Somaliland and more than 50% in the other zones. NTPs were key to the guidance of data collection especially in those centers that the consultants could not access.

The consultants noted that NTPs in the three zones had close working relationships with the SRs operating in their zones and collaborated with the M&E SR, (CCM Italy) who carries out clinical and laboratory performance assessment at TB centers, except in Somaliland. The PR's Field Monitoring and Evaluation Coordinator who had been unwell for long period had not been able to develop an executable monitoring and evaluation plan to ensure coordinated support supervision in all the TB centers. Given the volatile security and political situation in the South Central Somalia and isolated parts of the Puntland, monitoring
and support supervision to these areas could not be regularly carried. The NTP support supervision visits to TB centers in Somaliland were not as regular as expected and some centers complained about not being visited for support supervision in months. In South and Central Somalia and Puntland, NTP staff conducts regular joint monitoring and supervision with CCM-I on a quarterly basis as expected.

The standard of service delivery at each of the TB centers visited, by the consultants were varied across the Sub Recipients. The varying standards in the quality service delivery across the different SRs call for regular direct support supervision from the Principal Recipient and NTPs. More than 70% of the facilities in the sample were found to have structures that were below the WHO minimum standards in terms of ventilation and lighting and waste disposal.

Service delivery personnel were all local Somalis directly employed by SRs or government or seconded from government. There are few local Somalis at the programme management level and the majority of technical and senior level programme management personnel based in Nairobi Kenya were foreign nationals; who visited the field at infrequent intervals for support supervision. In some exceptional cases where there are foreign nationals stationed in the field, their stay in the field is dependent on the prevailing security situation in the particular area. Furthermore, the contribution of foreign workers is further curtailed by the practice of R&R where they go on recuperation for two weeks at the expense of the programme every 6 weeks. Use of capacitated local staff would greatly reduce expenses.

NTPs demonstrated how critical their role was in the management and coordination of programme activities at zonal levels, by the way they organized and coordinated support to the organization of the workshops and data collection exercises in the field.
4 DATA ANALYSIS

The combined total of 66 FDGS, 334 personal interviews, and 34 TB center assessments were carried out. The data that was collected was processed, cleaned and entered using the SPSS data analysis package according to the method of data collection. Focus group discussion records were transcribed and coded according to agreed thematic trends and analyzed separately. The analysis of the data took longer than anticipated due to problems with retranslations from Somali into English for those questionnaires that were whose responses were written in the Somali language.

4.1 THE ANALYSIS FRAMEWORK

Trial analysis of quantitative data was carried out to determine the consistency of data by running dummy frequency tables which indicated some significant data quality problems, which had to be sorted out before proper analysis could be carried out. 2.7 % of the data sets were found to be inconsistent and these were excluded from the final analysis. Data analysis was carried out using frequency tables and cross tabulations, though cross triangulation attempts were made to determine the contributions of identified factors to the observed impact on TB burden on the community health status and/or change in the quality of their lives. However, due to limited socio economic data in Somalia, this proved difficult and was not pursued as part of the analysis but inferred to in the discussions of results.

The analysis of the qualitative data however provided a wide range of findings that were translated as common perceptions of the stakeholders and beneficiaries on the status and performance of the TB programme in different parts of Somalia.

In the combined analysis of data and information from the focus group discussions, a number of issues that were germane to the performance of the program but not part of the TOR were found. These findings that included programme management and performance factors that we perceived to impact on the overall performance and achievements of the programme were included in the discussions. In analysis of the TOR we had indicated that we would identify and comment on all or any factors that we deemed likely to impact on the performance of the programme to achieve results as evidence for lessons learned.

4.2 LIMITATION OF THE DATA

Determining the disease burden is determined by estimating the number of days (years) lost from being well as a result of suffering from TB. The disability adjusted life years (DALY) is an indicator of how illness (TB) affects and impacts on the quality of life of the infected individual. Quantifying the TB burden of disease required the determination of the reduction in disability that TB infection imposes on the sufferers and their families. To determine the reduction in the disease burden we needed to have information on the total duration of TB in an individual from onset of symptoms to end cure or death. Available data was limited by lack of relevant baseline data to calculate DALY which would have enabled the determination in the reduction of the TB disease burden in Somalia. The TB programme in Somalia focusses its information collection on activities
of screening of sputa for TB and treatment of infected individuals and not formally collect information on the individual related to socio economic and cultural variables that are necessary for determining the level of disease burden. Information available on the socio economic situation of the population was not adequate enough to permit the determination of the impact on the programme in reducing the disease burden of TB in Somalia.
5 Key Findings of the Study

The main findings of the analysis focused on answering the evaluation questions that demanded answers to whether the Global Fund TB program in Somalia has in any way impacted on the wellness of all sections of the Somali population by reduction of the morbidity and costs associated with TB illness. Our findings have indicated that the programme has directly and indirectly positively impacted on the communities' wellbeing, given the significant reduction in the number of Years of life lost and Years lived with Disability due to availability of early detection and treatment as well as exposure to preventive health information. The establishment of additional TB centers has increased awareness of availability of TB services in communities that had no access to such services.

The expanded TB services has provided potential use of these services by vulnerable groups such as women, children and poor families to seek medical treatment whereas they would not have been able to do so if the services were in a distant location. Further evidence of the impact of the programme on the disease burden and other associated issues will be presented in the next sections.

Although some of the evaluation questions could not be specifically answered due to lack of adequate information, attempts were made to provide as much evidence as possible to respond to the questions raised in the TOR. The analysis includes the assessment of output based performance indicators of the programme.

5.1 General Findings on

The Global Fund TB programme in Somalia was found to have made significant achievements in terms of increasing the geographical access and visibility of the programme through the expansion of TB centers from 30 units at the beginning of the R3 to 64 functioning TB units in R10 (2013), an increase of more than 213% in ten years. Figure Below abstracted from the 2009 evaluation of the R3 TB programme indicates the rapid rise in the establishment of TB centers thus increasing the geographical access to TB services. Although the expansion was intended to increase equity in the provision of TB services to all population, due to security and infrastructural deficiencies, the establishment of new TB centers could not fully respond to the need to cover all the remote areas.

The increased numbers of TB centers have led to an increase in the numbers of sputum cases screened and increase in the diagnosis of TB. It can be inferred increasing numbers of patients screened...
and diagnosed as sputum positive is an indication increased access as well as increased programme capacity to manage TB.

Statistics from the 2009 evaluation indicated that the numbers of positive sputum smears increased was significantly increasing on annual basis until 2007 when there was a dip in the rise and thereafter smaller increase was observed. The increase access to TB services has significantly increased the capacity of the programme to screen more cases of TB and to put them on appropriate TB treatment as was observed by this remark in a focus group discussions where one discussant made the following remarks; “…. it’s now cheaper to have TB treatment as the TB clinics are nearer and we can complete treatment without leaving our families”. It would appear that patients and their communities are more appreciative of the improved availability of free diagnosis and treatment services for TB. FGD discussants frequently referred to the convenience of not travelling long distances to access TB care, and the rapid return to full health once the patient suffering from TB is put on treatment.

The provision of food parcels by WFP was another part of the programme that was appreciated by majority of former TB patients; who felt that it encouraged TB patients to stay as inpatients in the first phase of the treatment requiring inpatient stay. Other major achievements include the establishment of the NTPs at each zone to facilitate and coordinate the implementation of the expanded TB services, and to identify geographical areas where new centers could be established.

The Chart 4: Rising Trends in TB Detection

The chart above (abstracted from Programme performance reports WHO 2009) illustrates the rapid increase in the number of sputa screened and TB cases notified. It should be noted that although WVI Global Fund programme is the main provider of TB services since 2004, there are other organizations providing specialized technical inputs to the programme. New technologies
that have since been introduced to strengthen detection of TB is the florescent microscopy as a more effective methodology to detect TB micro-bacillus in sputa and the gene expert for all forms of TB and the gene X-pert.

Although the FGD discussions did not clearly identify specific TB associated socio economic factors impacting on the wellbeing of communities in Somalia, they had a good understanding of the concept of disease burden. They understood that early detection and treatment of TB cases lessened the impact that TB imposed on their communities through the reduction in the patient's potential to economically contribute to family and household income. In addition they understood that TB posed a real risk to other members of the community given the culture of members of the family living in crowded conditions and the difficulties of isolating the affected member of the family while undergoing treatment. The FGD discussants all agreed that the Global Fund TB programme has substantially reduced the threat of increasing incidence of disease through detection and treatment of cases as well as through the raising of awareness of TB among the immediate members of those infected with TB. They also noted that less people died as a result of TB since the free treatment was availed. One discussant remarked that;” Now I am not likely to die of TB as I can get treatment from the TB center”. Other major programme achievement perceived by the respondents were that it was now more likely for vulnerable members of the community (women, children and the handicapped) who, in the past, could not have afforded or be provided with transport and in-patient upkeep costs to complete treatment.

Analysis of other programme outcomes based on the questions raised in the ToR identified the following achievements which are answered under each question. The achievements that were identified were perceived to have contributed to the both short and medium term reduction in the level of the burden of TB in all the regions of Somalia.

And these are explained in the following section, where the significance of each achievement is defined in terms of our observations and evidence from the data collected from key informants.

1 Increase in the level of access to TB services for a significant population that had no access to services before the programme was established

Access to TB diagnostic and treatment services had increased more than 200% since the inception of the programme in 2004.
a) There has also been increased access to a much improved quality of TB care management through improved skills level of TB center staff. The improvement in quality is indicated by the increase in the accuracy of laboratory staff in detecting positive sputa and the reduction of false positive and negatives and the increasing rate of successful cures at every TB center in the programme. According to CCM Italy, the clinical and laboratory M&E Sub Recipient, the performance of staff at the TB centers have shown some improvements after each support supervision visits and the training that staff undergo. However, CCM Italy in most of their Quarterly reports have regularly reported on the poor quality of the physical aspects of the TB centers that poses risks of TB infection to staff and personnel working in them. The current standards of examination rooms, laboratories and waste disposal systems were insufficient and of poor quality that was way below the minimum standards recommended by WHO (see Quarterly Report QI and II of 2013). Notwithstanding, the shortcomings identified at the TB health facilities, accuracy in the detection and of TB is constantly being monitored through the work of CCM Italy and EQA programme with the Agha Khan Hospital laboratory done by WV Somalia Laboratory Consultant.

b) Improved capacity of TB centers to early detection and treatment of TB cases.

Chart 6: Overall TB Notification Trends

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7 This chart is abstracted from the WVI, July 2013 QR Report presentation.
The TB notification trend, indicate that there was high rate of notification at the beginning of the programme which later troughed down in 2009 but has since been rising steadily since towards the highs of 2005. The variance in the notifications trends before 2009 may not be statistically significant given the uncertainty of staff capacities then; but after 2009 the steady trend may indicate the growing accuracy of the TB early detection and reporting in the programme. Information from CCM monitoring and reports seem to collaborate the above observations.

b) The reduction in the cost of travel for treatment by establishing TB centers in several population centers.

More than 73% of respondents that were asked how much it cost them to access services to the nearest TB center indicated that they did spend between 100,000 to 1,000,000 Somali Shillings per episode on transport to and from the TB center. Among those who quoted high figures were those in mainly nomadic areas such as BaleGubdle, Afgoi and others. Less than 27% indicated that they did not need paid transport to get to the TB treatment center or DOTS corner. Even with the establishment new TB centers and DOTS corners, majority of patients still needed to pay an average of US$20. This may not seem much but in a country where average incomes are less than a day this may be a significant factor that could influence the attendance at the TB center or DOTS corner for treatment. In this study only about 66% of respondents indicated that they were able to pay the transport costs for treatment without support from relatives and/or friends.

c) Increase in access to information on TB that seem to have increased the level of TB awareness in the communities through facility based health education talks

The KAP survey of 2013 indicated that there is still a significant high level of awareness of TB among TB patients. The level of TB awareness in the community is not precisely known but from our limited enquiry in our study we found that there was still a significant low level of awareness on TB among the general population. Using the findings of the 2013KAP survey to estimate the level of awareness may be misleading as the sample used was of TB patients only who should have complete knowledge of the disease but did not. The finding of high awareness among TB patients does not reflect that of the general communities and we therefore cannot infer that to the awareness level in the population. Our assessment of the level of TB awareness based on the crude inferences from FGDs was that TB was still not so well known in the general population, as there were still some significant level of myths and erroneous beliefs about TB causation, treatment and transmission.
d) The strengthening of involvement of government authorities in the management of TB through the capacitation of NTP units to oversee programme implementation in their zones.

The involvement of government authorities has progressively been maintained through the participation of NTPs in the overall coordination management and support supervision at the zonal level as well as at National Level through representation of Health authorities in the HSC. As NTPs are the representatives of the government authorities in the programme their active involvement in the quarterly review and planning meetings with the PR and SRs are direct indicators of government involvement. The PR continues to capacitate NTPs as a way of strengthening government authorities’ participation in the implementation management of the programme.

The capacity building programme for NTPs has consisted of expansion of staff numbers by supporting the recruitment to support ACSM, M&E, PPM/PAL and Capacity building. In addition, NTP offices in Puntland and Somaliland were renovated, appropriate office equipment provided and training of staff has been carried out. NTPs have been provided with various technical training locally by WHO and PR has supported also international training. All the NTP managers attended leadership training course in Malaysia this year. Logistical support in the form of vehicles has been procured for general use as well as support supervision visits to TB centers.

e) The increase in numbers of children and women treated for TB in the programme over the years

The current consolidated summary on TB attendances were initially not into different age categories but the new SS+ve cases are now segregated by age and gender in the current reporting format. However, this data can be obtained from registers at source (at TB centers) but due to time constrains we were unable to do so. However, through focus group discussions participants indicated that numbers of women and children now being treated are raising due to the ease of access to TB centers and the fact that quality TB treatment is free⁸.

⁸ Spending family meager family resources on health care needs for vulnerable groups may be a problem in a heavily male dominated culture.
f) *The programme’s contribution to job creation - has contributed to provision of employment to several professionals that would otherwise not be employed*


![Chart 7: Employment Status Among Respondents](image)

The programme a large number of professional and support staff have been employed contributing to job creation, as the Global Fund Tb programme directly and/or subsidizes salaries and/or incentive of workers involved in the programme. Among those interviewed more than 60% indicated that they were not employed. In such a situation every job created is significant for the community. The establishment a number of TB centers and DOTS corners provides opportunities for job creation in Somalia. The percentage of unemployment could even have been higher if casual workers were taken out of the equation. The programme does however contribute indirectly to job creation through other activities such as training at hotel venues, transport hiring, security hire etc., which is difficult to directly quantify. According to the programme documents more than 4000 staff is employed by the programme at various technical and support levels.

g) *The contribution to the reduction in the level of disease burden – by reducing costs associated with the detection and treatment of TB on family income*

![Pie Chart: How much did you are you generally spending on transport to access TB treatment? (in Somali shillings)](image)

The programme contribution to the reduction in the level of disease burden of TB in Somalia is difficult to quantify, but as this is given by determining the disability imposed by the TB on an individual as lost opportunity for wellness we can see that TB therefore deprives the sufferers a significant part of their time. Considering the time of treatment, the
possible stigma and the lost opportunity for income generation and costs of travel for treatment; the programme has greatly contributed to the reduction of the burden of disease by providing cure through quality treatment and prevention of possible death from the disease. Based on the findings many of the patients that were able to access TB services spend an average of US$20-25 for the whole treatment. Those from distant areas paid a lot more previously on transport and to access services.

h) **The assurance of quality drugs for the treatment of TB - through the strengthening of policies to discouraging the use of poor quality drugs from private pharmacies thus providing community safety and prevention of possible drug resistance TB.**

The provision of quality drugs for treatment of TB is a major contributing factor to the reduction of the burden of TB, as this has led to higher cure rates and reduced relapses as well as prevention of the onset of MDR TB.

i) **Reduction in morbidity levels of infected individuals by early diagnosis and treatment through the screening of sputa of suspected cases and treatment of those found positive as well as the provision of INH prophylaxis treatment to contacts of open cases of TB.**

The reduction in morbidity of individuals infected with Tb can only be inferred from the success of the treatment given in the July 2012 PR program report that indicated that treatment success rate had reached 83%. There was however no reports on the period needed to convert to negative sputum. Since the reporting format does not include clinical changes that occur in individual patients. The provision of INH prophylaxis is not regularly reported and therefore cannot comment on it. Given the short time of project implementation it would be too early to see the long term impact of reduction in morbidity and mortality as these are often long term impacts.

j) **Introduction of more sensitive TB detection methods (gene Expert and Florescent Microscopy) to detect non pulmonary TB cases and avail them appropriate treatment.**

Introduction of FM and gene Expert has been done in a limited number of centers. Personnel have been trained in the use of FM but it seems like this would require the Ministries of Health and the WHO to fully buy-in into the approach and support the introduction of the method in the programme on a wider scale. Gene Expert machines have been bought and are being used to make diagnosis of MDR TB without the use of the costly culture method.

k) **Contribution to raising the level of TB awareness among increasing numbers of communities and especially among those living with HIV.**

The programme has initiated VCT services in the detection and management of TB as a strategy to increase the management of the impact of HIV on TB. The integration of HIV and TB services has already began at several centers, but due to inadequacy of the collaboration strategy with UNICEF, which is the PR for HIV, the initiative has had some
teething problems in terms of running out of HIV testing kits, and difficulties of referrals to ART centers that may not be so accessible. The practical difficulties may also be due to the fact that TB services are provided in stand-alone TB centers that would require the referred patient to make an effort to go to for test.

1) Reduction in morbidity and mortality to TB and HIV/AIDS

There are no formal records on morbidity and mortality on TB and HIV/AIDS, as there are no formal births and deaths registration. There may be a significant numbers of patients dying from HIV and TB related deaths that may be recorded as lost from treatment due to absence of formal death notifications. Current figures used for mortality are estimates based on modelling for developing countries.

The evaluation can only allude to the anecdotal observations from communities that indicate that less people are now dying from TB than before due to availability of treatment.

5.2 FINDINGS TO SPECIFIC EVALUATION QUESTIONS

This section constitutes the analysis findings related to the responses to the evaluation questions. However due to the nature of the evaluation carried out, some specific elements of the questions could not be answered fully.

5.2.1 ECONOMIC USE OF RESOURCES

1. The objective was to determine whether the resources have been used economically, effectively and wisely for the benefit of the TB patients, their families and the community.

Determination of the economic use of programme resources could not be specifically determined due the following considerations:

Economic use of resources is subjective and cost effective assessment of interventions is determined by the establishment of unit costs of service delivery as compared to other similar programmes. In the case of Somalia, the cost of service delivery to prevent, detect and treat one case of TB has not been determined although some efforts have been made, which indicated that the costs are inordinately high given the very high cost of managing the programme from Kenya and the logistical costs or air transport for delivery of commodities and personnel travel. Given the limited time of the study (evaluation) the wise and economic and effective use of programme resources could only be crudely estimated indirectly through the number of cases that have been detected and treated or being treated for TB. The findings from the evaluation inquiry were that it

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9 According to Bleichrodt H et al (December 1999 Journal of Health Economics 18(6)681-708
was not possible on the basis of lack of information to ascertain the unit costs of service delivery in the programme. It is, however, fair to state that there were some lapses in implementation of certain activities especially those related to ACSM where significant delays in implementing various elements of SDA were observed.

Other difficulties in determining the effective use of resources in the programme was also difficult, given that several activities especially those related to rehabilitation of TB centers conform to the basic standards recommended by WHO.

It should however be noted that the use of resources for implementation of activities were all planned for in the implementation framework. The wise use of resources could only be determined through the assessment of the programme design to determine whether the strategies employed were the most appropriate and effective. Programme implementation costs of the Global Fund TB programme in Somalia might have a higher cost for every case of TB detected and treated than in other areas in the world. However, it should be noted that these costs are due to number of necessary activities needed to operationalize the programme. These precursor activities include the following (i) rehabilitation of the damaged health infrastructure (ii) construction of new TB centers; (iii) establishment of functional organizational structures and systems such as the NTPs; (iv) capacity building training for local personnel; (v) airfreight of commodities and supplies from Nairobi, (vi) management of the programme from Nairobi and costs of flights to the field for externally based technical and administrative programme personnel.

The assessment of the programme design did indicate that the Somalia TB Program was still largely using the relief model strategy instead of moving towards the development model strategy which would have embraced some forms of service integration and sector-wide collaboration with other development and service delivery programmes in a more formal and comprehensive manner. For example, the WFP food support to patients and specifically to inpatients should have been formalized in the WFP budgetary planning to prevent gaps as has been the case currently and in the past.

2. To determine how the TB program involved the targeted beneficiaries in planning, implementation, monitoring and evaluation of the programme.

Involvement of beneficiaries was one of the key intentions of the programme, but the results of our inquiry has clearly indicated that although Ministries of Health were involved in the program planning and design, they also played a role in endorsing the programme implementation framework, their involvement has not been proactive but reactive. This could have been as a result of lack of adequate skills in programme planning as well as the use of the relief model where those with the means to mobilize resources generally determine what is to be done and beneficiaries are made to endorse the plans.
The NTPs, that are representing the Ministries of Health, did lament that their capacity to undertake these has been undermined by inadequate capacities, lack of resources and authority to make such decisions on their own. The performance of NTPs was found to be limited by their lack of own resources and access to information on how the different Sub Recipients has allocated their resources to activities. Impressions from the focus group discussions supported the assertions that NTPs (MOH) were not fully in control of the design and implementation management. This was further supported by their assertions that they did not have full access to use and allocation of resources to different Sub Recipients.

3 To determine the effect of the program on the households’ expenditure on TB treatment

The determination of individual and family expenditure related to accessing TB services had not been established when there were few TB centers. A majority of respondents in focus group discussions expressed the views that costs of accessing TB services have largely reduced since the expansion of the program through the establishment of several new TB centers. The cost incurred by families or individuals to access qua

Based on information’s from FGD there are three main cost centers in accessing TB treatment: - the cost of travel to TB center from the patients rural home, the food cost for those admitted and caretaker as well as the daily transport to avail for DOTS.

Based on the interviews undertaken it was found that a significant proportion of TB patients are not able to work and earn income while suffering from TB.

Chart 6: Potential to Earn Income while suffering from TB

The loss of earning where the family bread winner becomes the patient was a major concern, as most of them indicated that they would be too weak to work. Some of them observed that many employers or clients would not want someone suffering from TB to work alongside them.
4 To establish the effect of the program on beneficiaries’ quality of life in general and on females in particular?

The programme has indirectly contributed to the improvement of health seeking behavior and indirectly could have increased access to service to groups who might not have done so before. Male participants/respondents when asked whether they would be more willing to allow family members including women and children, to go for TB screening indicated that they would as it would not cost them much. The increased access to TB services and information may have contributed to increasing access to TB services to vulnerable groups that would not have done so due to resource limitation.

Differentiation of the program impact on gender could not be determined because there were not Gender-specific interventions, However the perceptions of the community as presented in the FGD were that:-

- There was Improved access to TB information and services that in the long run would contribute to increased health seeking behavior for TB among the population;
- That early TB detection and improved treatment was contributing to the reduction of the TB related morbidity and mortality. The reduction of morbidity levels through successful treatment was appreciated by the population and strongly attributed to the TB programme.
- The role of women as part of service delivery in the TB programme was found to be significant especially at the service delivery level.
- The level of stigmatization of persons suffering from TB, especially women was said to be reducing with the increase in the level of awareness of TB in the communities. Although a certain level of stigma still existed the realization that TB was an infectious disease and was treatable may have led to the reduction of the belief that TB was a curse. The TB successful treatment rate of more than 85% and the knowledge of how it is transmitted provided evidence among the community that TB was a curable disease that did not need sufferers to be ostracized from their communities and households.

5 To determine if the program was having an effect on the general health situation of the targeted communities?

The program was found to have impacted on the behavior of the community towards the sufferers of TB evidenced by the increasing numbers of individuals completing treatment, and the community member’s participation in encouraging TB sufferers to continue treatment. The acceptance of the dameen system of support is another example of community acceptance and growing support to TB sufferers.

The respondents in focus group discussions and personal interviews expressed their gratefulness to the programme for having had given hope for a cure and better health to those suffering from TB in the populations. The programme was perceived to have had impacted on the whole community in general including women and children.
There was a realization among the care givers that the increased detection and care of people suffering from TB has increased their risk of contracting the disease. In all the TB centers that were sampled, both the laboratory and nursing staff complained of not being insured against contracting TB. The laboratory personnel complained about the lack of appropriate basic risk reducing facilities. Caregivers were demanding for insurance of monetary compensation for exposure to the risk of getting the disease. The demand for better protection has further been increased by the emergence of MDR TB, given the inadequately equipped workstation and the low lack of appropriate preventive healthcare education among the care givers.

6. Identify any other factors that might contribute to the improvement/success of the program in future

A number of factors that would lead to the improvement and success of the programme were identified at different levels of the programme management. These included factors that ranged from the design and implementation management to performance monitoring of the programme as well as to the need to strengthen involvement and participation of beneficiaries than is currently the case.

The design of the programme is still largely based on emergency and relief model, where external agencies provide service directly with involvement of beneficiaries mainly at the implementation stages. This model has unfortunately the potential to reduce the level of buy in and induce and perpetuate dependency of beneficiaries on external assistance. Involvement of beneficiaries in taking the responsibility for the programme management under strict oversight of the PR could induce a better and more responsible and accountable involvement of local authorities in the programme. Current strategies have tended to instill a sense of “this is a Global Fund programme” instead of “this is our programme in which the Global Fund is helping us to implement”. Development oriented design would lead to less wasteful strategies where strengthening of local capacities would avoid the high costs of programme management from eternal bases.

One of the major shortcomings of the programme is its focus mainly on the detection and treatment and less on prevention aspects of the programme. The implementation of the ACSM programme components has been delayed and this has significantly impacted on the TB awareness creation needed to reduce the socio cultural inhibitors to health seeking behavior of TB patients in the communities. The delay in the implementation of the ACSM component of the programme has limited the potential degree of success of the programme, given that prevention actions are potentially likely to contribute more to the overall reduction of the burden of the TB the disease by averting the advent of new TB cases.

One other major factor limiting the successful degree of achievements is the inadequate level of skills in programme management at the zonal (national) level; whereas several technical skills trainings have been undertaken for the service providers, training in programme management, strategic planning, research, monitoring and evaluation has been limited. Skills in management of programme activities and resources are critical to the successful performance of programmes, and development of skills in development management is needed at all levels of the programme.
5.2  CROSS-CUTTING ISSUES RELATED TO PROGRAMME PERFORMANCE

These are issues that were found in the analysis and were not necessarily requested for in the TOR. The discussion of these was found to be necessary as they contributed to the impact of the programme.

5.2.1  SERVICE DELIVERY
Delivery of TB services was found to have continually improved over the years with significant increases in numbers of cases detected and put on treatment. See the charts. The improvements in service delivery were evident in the increase in the programme indicators that are almost matching the targets set in the programme proposal.

5.2.2  CASE DETECTION
Case detection has continued to improve in almost all the TB centers. It is not clear whether this is due to better diagnostic skills of both clinical and laboratory services or due to increased better education and increase in health seeking behavior of the public. Cross triangulation of data (Chart) indicates that a combination of factors that include reduction in the stigmatization of TB in the communities, improved diagnostic skills of laboratory workers and increased awareness of TB and other have contributed greatly to improved health seeking behavior in the population. Based on the available data the number of slides processed and examined is greater for this 2013 compared to the same period last year.

The increase in the number of TB centers may have contributed to increased numbers of cases detected. Current statistics indicate that the detection rate has remained at less than 50% despite a more than 50% increase in the number of TB centers established. The numbers of cases detected using the passive detection method is very much dependent on the number of factors that are beyond the control of the Service delivery facilities. For incidence, the low level of TB awareness in the community is likely to impact on the number of patients likely to seek treatment for chronic cough or weight loss. Furthermore, current TB detection is largely sputum based and would therefore miss non pulmonary cases of TB. Case detection rate at this stage would only increase if active case detection methods are employed and other TB detection methods such as gene Expert are employed to detect non pulmonary cases.

5.2.3  CASE TREATMENT AND SUCCESS LEVELS
The numbers of cases completing treatment at each center seems to have increased towards the stated target of 85%. The exact reasons of the rapid increased of patients successfully completing treatment are not apparent but it looks like better health education and the raising of awareness of the seriousness of uncompleted treatment and the use of a sponsor for each patient may have ensured adherence to treatment. The role and impact of the damiin system cannot be determined
as there have not been operational research studies to establish the benefits of the system in ensuring patient adherence to treatment. Treatment success has rapidly risen over the past years to around 85%. A number of factors may be attributed to the increasing levels of success. The possible success factors may include the constant availability of anti TB drugs in the centers, the increased quality of drugs, improving follow-up of patients on treatment through a range of strategies including the dameen/sponsor strategy and increasing awareness of the availability of TB services. The increasing numbers of successful TB patients in the communities provides visible testimony of the success of TB treatment and positive advocacy to draw more patients to the programme.

5.2.4 Treatment Success Levels

![Trends of TB treatment outcomes in Somalia from 2000-2008](chart.jpg)

Trends of TB treatment outcomes in Somalia from 2000-2008

Treatment success levels have been pegged at more than 85%, since the early 2000s and have hardly changed significantly since (See Chart 7 quoted from WHO information used in the development of the Strategic Plan 2011 to 2016. The treatment level seem to have reached an operation peak and not likely to go any higher at current levels of efforts due to unpredictable inherent factors related to human behavior and the operational environment. Treatment success has plateaued at around 90% and would be difficult to achieve higher results without further investments as the programme has addressed most of the directly impacting on treatment success but may not have been able to impact on those variables requiring different strategies of service delivery. The advent of MDR TB, and deaths of TB patients due to other conditions such as HIV and AIDS, are barriers that cannot be addressed only by the provision of DOTs treatment. With the HIV co infection estimated at 4.5% and mortality that is higher than that due to TB alone. Currently,
the community aspect of TB management has not been seriously addressed in the programme, and could explain the reasons for the plateauing of the levels of success achieved by the programme. Greater involvement of the communities in the prevention and management of TB could lead to achievements of greater results given that socio cultural factors that may promote transmission of TB have not been addressed effectively in the current programme strategies. ACSM activities would be critical to recruit effective community participation to strengthen TB programme activities.

5.2.5 Treatment Defaulting

There were reports on treatment defaulting in a small number of patients estimated at less than 4%. There are many reasons cited for defaulting. Several defaulting patients cited the inconvenience of the DOT method that requires patients to go to the TB center or DOTS corner to take their daily dose. This was found to be inconvenient especially when the patient is getting better after the start of treatment.

The introduction of the “DOTS corners” for the treatment has made it even easier for patients who live far from those living far from the TB center. There were many reasons for TB patients defaulting on completing their course of treatment; and these were reported to include fatigue due to taking medication over a long period, migration out of the catchment area, weak community adherence enforcement mechanisms, inadequate awareness of the need for long-term treatment and inadequate patience follow-up. Although a number of measures to reduce patient defaulting on their treatment have been put in place in the project, the lack of adequate numbers of staff and poor resource base has not allowed for a robust programme of patient follow-up. Currently information on the effectiveness of the Damiin system introduced to ensure patient treatment adherence is not documented. Perceptions from the service delivery personnel in the field have tended to indicate that the Damiin system has not been widely adopted. There are informal reports indicating that there were contentions between the guarantors and patients when it came to the payment of funds at the end of the completed treatment. It will be necessary to undertake operations research to understand the conditions under which it would be successfully adopted and to determine factors that leads to patient defaulting.
5.2.7 **STIGMA AND TREATMENT**

Stigma against those suffering from TB was found to exist to a significant degree across the whole of Somalia. And this was closely associated with delay in health seeking behavior of patients due to fear of being known to have the disease. One of the former TB patient admitted that “….I dreaded to go to the center for TB screening because I did not want my neighbors to know that I had TB, because it is a disease of the poor or the cursed and I was not one of them”. In our enquiry existence of stigma was reported to have existed by more than 45% of those who have had TB and only by 8% among those who never had TB.

<table>
<thead>
<tr>
<th>Table 4: Stigma: Ever had TB and Discriminated Against</th>
</tr>
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<tbody>
<tr>
<td>Did you feel discriminated against by your family and neighbors</td>
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<tr>
<td></td>
</tr>
<tr>
<td>have u ever had TB</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Percentage %</td>
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It is important to realize that stigmatization exists and is likely to impact on the overall health seeking behavior of patients. A great effort would be needed to reduce stigma against patients suffering from TB in the community.

- **Bar Chart**

Stigmatization is based on inadequate understanding of the causation and transmission of the disease. We believe that research is needed to establish the impact of stigma on health seeking behavior and maintenance of TB treatment among female and male patients.
5.3 **Prevention and Transmission**

Knowledge of prevention of TB among the community members (inferred) from IDPs and FGDs data collected indicated that there was a significant difference of knowledge and understanding of TB prevention between those undergoing or involved with patients on TB treatment and the general community. The community has less understanding of the disease prevention, which could be ascribed to the absence of definitive ACSM activities at community level in most TB centers. There were however a few exceptions such as the World Vision programme in Gabiley district in Somaliland. Generally most of the current Sub Recipients have confined their health education and advocacy activities at the TB centers level. Limiting health education talks to TB patients is not the most effective approach to increasing TB awareness in the community! The continued lack of robust advocacy and communications and social mobilization activities continue to limit the opportunities to create TB awareness which is crucial for the prevention of the disease.

5.3.1 **ACSM Activities**

ACSM activities are found to be part and parcel of the programme strategies but the implementation of the SDA has been delayed. Currently there have been concerted efforts to kick start the programme with the completion of the KAP survey in July 2013.

The immediate implementation of this crucial part of the programme is important as increased community awareness would significantly contribute to increased involvement and participation of the population in the prevention and support of TB programme activities.

5.4 **Emergence of MDR TB**

Emergence of a low but significant level of TB resistant to general TB treatment has been found to exist in Somalia. Although the prevalence of MDR TB is still low, the conditions driving the emergence of MDR are prevalent. According to the latest WHO figures the incidence of MDR in Somalia is estimated at 5.2% in new TB cases and 40.8% in previously treated cases (WHO reports 2011). The Global Fund TB programme is putting in place a number of measures to manage the emerging threat of MDR in Somalia. The measures being undertaken include the establishment of laboratory capacity to detect MDR TB through laboratory culture. A reference laboratory for sputum culture has been established in Hargeisa is in the process of being operationalized under the supervision of the Uganda regional laboratory. Currently all sputa for sensitivity culture will be sent to Uganda until the capacity of the local culture laboratory is established. Capacity building for MDR is a major feature of the next phase of R10 and WVI with technical support from WHO have established MDR-TB treatment center in Hargeissa. An MDR-TB management committee has been established, and a medical officer and staff to manage MDR activities have been hired. Other measures to develop the capacities of MDR management include the projected establishment of MDR treatment centers and culture laboratories in each of the three zones are to be implemented in phase 2 of R10 grant.

Other interventions in the management of MDR through the control of the rational use of anti TB drugs are being implemented. In Somaliland anti TB drugs are slowly being removed from drug shops, and a fledgling partnership between the private sector and government is being developed with the establishment of referral relationships between the private and public sector in management of TB patients. Legislation to control against the importation of sub-standard drugs has been developed but is inadequate and the systems to enforce compliance are weak or absent.
Importation of drugs from uncertified sources will continue to be a problem as long as it remains weak.

5.5 **The Role of NTPs in the Programme**

The NTPs were established to coordinate the TB programme activities in each regional zone. However, we found that the NTPs still require capacitation in a number of programme management areas. Given that NTPs are largely dependent on resources from the programme due to inadequate resource allocation from “local” governments, they have not been able to be proactive in their coordination management of the programme at the zonal level. The lack of own resources has led to the state where their activities are serving the objectives identified by the PR. A significant level of skills capacity building has been undertaken by the PR in leadership and technical skills training of personnel. Specific training has been provided for personnel in specific areas of M&E, ACSM, and financial management. However, our observation on the current capacity of technical areas are that more needs to be done to increase the competency of staff especially in M&E, ACSM and capacity building skills.

There is a need for selection of appropriately qualified and trainable individuals for these posts. Results from our assessment has indicated that there may be a need to review the continued relevance of the current training programmes and to carry out a definitive capacity and training needs assessment to clearly identify programme specific capacity development to fully address the operational needs for ACSM, M&E, Strategic Planning skills. NTPs need to have technical capacity to analyze data collected and use it as evidence for to make decisions that would lead to development of appropriate business plans to implement their strategic objectives. Based on the observations in the field and at the Quarterly reporting meeting in Kampala in October (2013) the NTPs have not demonstrated their capacity to provide leadership in the implementation of the programme in their respective zones. NTP reports were routine repertoire of performance figures with no efforts at analyzing the data sets to identify performance issues. NTPs are supposed to provide information of the training requirements in their areas based on analysis of performance reports, but instead they rely on set training programmes that many participants have regarded as being repetitive and not directed to solving capacity and skills requirements of the programme. In FGDs with the TB programme staff in the field one staffer made the following remarks about the training programmes. The majority of the trainings conducted have not been found useful by a majority of participants interviewed. Many of them have termed the various refresher courses conducted over the period as, “refreshment trainings where participants attend for the sake of refreshments they provide and per diems”.

The role of NTPs in determining and managing the training programmes should be based on evidenced observed programme needs obtained from analysis of performance data. Capacitation of NTPs in results based monitoring and evaluation will go a long way in addressing operational performance issues and will strengthen effectiveness and efficiency of programme management in the field. This will lessen the need for management of the programme by managers based in Nairobi, as is the case now with some of the SRs in the programme.
5.6 Summary of Population Perceptions About TB

TB is a well-known disease in Somalia and has several names. The general community understands the causes of TB as many including trauma, exposure to cold, a curse or hereditary.

Persons with TB are subjected to some level of stigmatization as a result the disease is disguised in a number of ways. There is some knowledge that the disease is transmissible and in some communities and households the TB patient is isolated including avoidance of use of same cutlery and sleeping arrangements. However, there are norms in the way the general population perceives TB, more especially in urban areas where there is greater awareness and knowledge about TB. However, the increasing population movements and migration to urban areas are imposing new realities on how communities respond to the threat of TB transmission; the overcrowding in urban areas, the practice of chewing qat in confined poorly ventilated rooms; the overcrowding in boarding schools and prisons have increased the risk of transmission which the communities have not found solutions to.

Health seeking behavior to TB has still not changed significantly and continues to lead to delayed detection and treatment. For a variety of reasons, treatment seeking behavior for a cough starts with self-medication, where the patient goes to a drug store where he/she asks for advice on which medicine to buy for a cough. We have been told that the one of the commonly prescribed medicines prescribed by drug store owners is Rifampicillin for common cold and streptomycin for diarrheal diseases. The dosage prescribed is often not adequate and if symptoms persists the next preferred place of call will be a traditional healer whose commonest form of treatment is trunk and chest, and when that fails private doctors are the next preferred service providers and TB centers as the last resort when they cannot afford the private treatment or their condition has deteriorated. The low awareness level of TB in the general community may be partially responsible for the late presentation of TB cases at TB centers/hospitals. Significant portions of the population are still not aware of the advantages of getting early treatment for TB and that the TB treatment is provided free of charge at TB centers throughout the country. However, growing number of population are becoming aware that there is a TB programme that provides free treatment to those found to have TB The lackluster efforts made on implementation of ACSM has not helped much in creating adequate awareness of the programme to the general public.

Other findings were that GFTB programme in Somalia is perceived to have significantly eased the negative impact of TB on communities by increasing access to TB services to greater number of people through the expansion of TB centers which had none before. The increasing level of treatment success is perceived as a major success to those we interviewed.

5.7 Factors Impacting on Successes of the Programme

These consist of factors that were found to have has some constraining influences on the overall management of the programme at different levels. Their mention is intended to raise
a flag for the programme to responding to the observations as a way of moving towards
greater successes.

5.7.1 PR Related Issues
The preliminary impressions on the perceived performance of the TB Sub Recipients have
indicated that WVI has managed the programme adequately. Perceptions of beneficiaries and
SRs testify that the PR (WVI) has met all its obligations to SRs and has provided adequate
management oversight of the programme diligently. Delays in disbursements of funds that is
generally a problem in similar programmes has not been an issue with WVI as the Principal
Recipient. The organization has continued to provide adequate oversight on its entire sub
Recipients through regular Quarterly Meetings as well as through the TB working group.

According to the last Country Team Pre Assessment report of December 31 December 2012 the
Somalia Global Fund TB programme was graded at B1 level of performance with an average top
 ten indicator performance of 83% and the average all indicator performance of 80%. The
summary Indicator achievement against targets showed that the programme had met or exceeded
in 7, substantially met in 3, and partially met in 2 and not met in 2.

A. Main achievements were in the following areas
i) “2012 Treatment success rate (new smear positive TB cases) >87% - approaching the
global target of 90% by 2015.
ii) High Notification Rate, 90% for the reporting period January -December 20122.2.

iii) “Number of TB suspected cases referred to NTP facilities from the private
Sector” (1314% of target achieved) – the numbers of referral from private practitioners
to TB centers had increased significantly compared to the projected targets. The high
percentage increase may not be that significant given the numbers of TB patients that
still do not access free treatment at TB centers. The programme might need to adjust
the target levels upwards. The high achievements are however commendable and more
efforts to strengthen private/public partnerships should be encouraged.

B. Moderate Performance
i) “Number of Health Facilities implementing PAL” (58% of target achieved) – the
definition of what constitutes a facility (i.e. private/public); consistency in the
number of facilities between indicators; effectiveness of the roll out of PAL and
actions that have been taken/will be taken to improve performance;

C. Partial achievements
i) “Number and percentage of TB centers reporting no stock-outs of first-line anti-
TB drugs lasting more than one week at any time during the past three
months” (46% of target achieved) – the current supply chain management system,
any gaps identified in the supply chain and the proposed actions to address these
gaps;

ii) “Number of private and public health facilities involved in implementing the
National TB program” (19% of target achieved) –the definition of what constitutes a
facility, provide a breakdown of private versus public facilities, the plan to increase
iii) “Number of TB suspected cases referred to the NTP facilities from health facilities implementing PAL” (5% of target achieved) – the definition of what constitutes a facility (i.e. private/public); consistency in the number of facilities between indicators; effectiveness of the roll out of PAL and actions that have been taken/will be taken to improve performance; and

iv) “Number of TB patients who had an HIV test result recorded in the TB register” – revised targets based on the results of this implementation period.

The above performance helps to indicate where the programme needs to focus in the next phase. However, there were other issues impacting or likely to impact on the overall performance of the programme. These are discussed under each area in the next sections.

5.7.2 Sub Recipient Related Issues

Sub recipient related issues impacting on the potential success of the programme include the different levels of management capacities and the high management staff turn overs. These were found to impact on the quality of support supervision provided to the field staff. The high turnover of senior level staff and the placement of staff with little or no experience in TB programme management have had some impact on the quality of services delivered.

The consultants found that there were inadequate mechanisms’ perceptions based on interview discussions and direct observation of the project operations areas confirmed that there is a wide range in capacities and competences among the different SRs. However, there was a realization that there were inadequate mechanisms to monitor management capacity of SRs to ensure quality in the implementation of the programme. For example although several trainings have been carried out to develop specific skills among the service delivery personnel, the training reports were concerned with numbers trained and no mention of training evaluation by participants. Some of the training participants expressed their views that the trainings were not very useful and frequently attended by people whose jobs to monitor the performance of SRs except through the quarterly reports that they provided. These reports do not include management performance indicators which are crucial to identifying performance problems.

We were made to understand that NTPs have been responsible for selection of individuals for training without due consultation with SRs. NTPs’ selection process has been known to be arbitrary and does not relate to appropriateness of the training to the individual participant’s roles and responsibility in the programme. SRs should be the ones to decide on the relevant staff for training and should be consulted before the invitations are sent out by NTPs.

5.7.3 NTP Related Issues

The roles of NTPs in the management of the programme are confined to coordination and provision of technical support. Given that NTPs are supposed to lead and guide the programme according to the needs identified in the field, their current responsibilities need to be expanded to include identification of operational programmes requiring research to
provide evidence for development of appropriate solutions, and the establishment of robust TB surveillance programme. The establishment of an appropriate M&E system and the undertaking of operational research studies are likely to lead to improvement in planning and decision making processes and will enable the programme to better respond to implementation and service delivery issues or problems.

The lack of own resources and the dependence on financial support and technical assistance from the PR appears to have impacted on their ability to be proactive in the execution of their mandate. Although current efforts are being made to strengthen NTP staff capacities, these efforts are mainly directed at infrastructural and equipment issues, and mainly need to strengthen and address managerial and administrative skills training. The need for management development training for NTPs is reflected in the inability to manage selection of trainees by objectives. There were reports that indicated that selection of trainees was quite often not decided on who is best suited for the training according to the skills gaps identified. Although there is specific programme management capacities have been established within the NTPs, they have not been able to demonstrate these capacities by utilizing the data collected on monthly basis to improve the programme.

The prescriptive framework that the PR and WHO have used to work with NTPs may have contributed to their being reactive as they do not have control over the programme resources.

5.7.4 Inadequate Resource Contribution from Government
The inability of Government to adequately mobilize resources towards the control of TB may have limited the governments’ authoritative participation in the planning and management of the TB programme. However due to limited resource generation to the programme, government’s commitment have been limited to providing service delivery personnel and policy support and participation in TB programme activities such as the commemoration of World TB Day and such events. They are also involved in the planning and management of the program even though this is done through NGOs.

5.7.5 Community Contribution to TB Programme
Community support to TB programme was not as consistent with the observed level of TB awareness. The greater community involvement is required to ensure greater buy-in and ownership of the programme which is a key ingredient for sustainable results. We believe that the Global Fund is planning to make community participation as a strategy for greater programme performance\(^\text{10}\). The current programme design does not adequately bring-in the idea of involvement of the beneficiaries of the programme. The minimum ACSM activities have not been adequate to educate them on their roles and responsibilities in the prevention and support of TB related activities.

\(^{10}\) GF is rolling out a new funding method that will make community engagement part of the programme. There are templates for community engagement which has been circulated and I therefore think the future programme of GF will have greater community involvement. So this will be addressed also in the long term.
5.7.6 Programme Design Issues

The design of the TB programme in Somalia was based on provision of TB services from stand-alone facilities that provided only TB detection and treatment services. Most of the TB services in Somalia are provided through stand-alone TB centers (95%) and only a few are provided through integrated facilities. This has limited the opportunity for the general population to access basic health care in an environment where accesses to basic health care services are severely limited. This could also have impacted on the number of TB suspect accessing the services in areas where the stigma for TB is still high, for fear of being known that they have TB.

Other important programme design limitations found were that the programme focus has been largely on case detection and treatment and less prevention awareness creation. Although the majority of personnel are aware of the drivers of TB transmission in Somalia, there are pitiful few interventions to address the known drivers of TB. The focus of the programme has been on those activities that indicate achievements in form of outputs that responds to the donor requirements that include achievements of output indicators of number of TB cases detected, percentages of sputa found positive, numbers of cases on treatment and percentage of treatment success etc. These indicators reflect the performance of the organization but are not sufficiently reflective of the overall impact on the beneficiaries or the reduction of TB transmission in the population.

5.7.7 Programme Management Structures

The programme implementation management structures at the PR, which we found was inadequate for level of responsibility of managing various aspects of the programme.

Programme management structures were found to be typical of those used in typical relief programmes where multi-tasking is required to respond to emergency interventions, but not suitable for development programmes such as the TB programme in Somalia where consolidation and development should be the focus. The basic requirements is to establish appropriate programme management structures that would effectively manage specific programme activities and provide regular technical and management support supervision to the grantees. Separation of roles and responsibilities among the senior level programme management would lead to improved focus and monitoring of activities in specific program areas.

The evaluation has pointed out a need to strengthen the PR capacity for better delivery through strengthened monitoring and evaluation as well as provision of technical assistance services to ensure quality outputs at the SR levels. A suggested organogram is presented below.
Monitoring and evaluation is a critical function in programme implementation and management, and this has been carried out adequately at the clinical and laboratory levels by a designated M&E SR. However, the monitoring and evaluation of the clinical and laboratory functions and activities were found to be not adequately contributing to success of the programme because the findings were found not to be adequately addressed at the planning and management levels.

The M&E Unit at the PR level should closely form close working relationships with M&E functionaries at the NTPs levels, CCM Italy and EQA programmes. The establishment of such working platform will be in a better position to identify weaknesses in M&E and provide solutions. It’s through such associations that skills development needs at field levels will be identified, and appropriate orientation of all M&E personnel in the programme to results base monitoring and evaluation instituted to increase efficiency and effectiveness through provision of proper evidence for decision making purposes.

The increased collaboration of the M&E functionaries in the programme will lead to development of an appropriate research agenda given that appropriate evidence would have been adduced from the data being collected from operational areas in conjunction with the NTPs would further lead to better alignment of programme to respond to identified needs at the operations level. The establishment of this collaborative mechanism will not remove the need for External Quality Assurance through the current arrangements with WV consultant who is working with Aga Khan Hospital for the laboratory aspects.
Monitoring and evaluation at the TB center levels requires that NTPs carry out frequent joint support supervision with CCM Italy, to ensure that issues that have been identified are factored in the zonal plans and reports. In the long run, we see the role being performed by CCM (Italy) being elevated to look at other performance issues including management performance and carrying out forensic audit of interventions at SR level on behalf of the PR. This would provide the PR with up-to-date information on performance of SRs and provide the basis for continued selection for subsequent phases of the programme.
6 DISCUSSIONS AND CONCLUSIONS

The findings of the study need to be understood in terms of the enormity of the challenges facing the Global Fund TB programmes in reducing the burden of TB on the population of Somalia through socio economic impact offshoots of the programme. We should bear in mind that the TB project’s main aim is to reduce the impact of TB disease burden on the population. Given the statistics on the very high levels of disease burden expressed as Disability Adjusted Life Years (See chart below) it would require direct sector-wide development approach that would require increased collaboration with other sector development programmes to provide synergy for wholesale development.

Chart was abstracted from the Global Health Observatory data base 2012 indicating the impact of TB on the African populations which Somalia is among the worst affected. The chart above indicated that TB exerts 60 times more negative impact on the population than in developed countries. The reduction of TB burden is therefore likely to free significant level of human potential towards socio economic development that would lead to improve wellbeing and productivity the population as a whole.

The findings of the impact study have confirmed what earlier evaluations of the programme had found. The Somalia Global Fund TB programme has achieved a number of performance successes in terms of meeting set output targets. Although there are areas where the programme has not achieved the desired targets, the reasons for the non-achievements have been identified and appropriate recommendations made to address the challenges. The assessment of the impact of the programme on the TB burden of disease has, however, could not be determined based on the data collected only. As there have not been previous studies or baseline data on the subject, the findings of this evaluation could be regarded as the baseline for future impact assessment of the programme. The findings has also identified lessons learned which could be utilized to strengthen current and future planning and implementation of the next phase of and remainder of R10 and subsequent Rounds.

Although the findings have not been exhaustive, the study has provided evidence on what has and how they have contributed to the reduction of the burden of TB disease in Somalia through the provision of quality TB services in most parts of the country despite the generally negative socio political and security situation in the country. This experience of the Programme could be used as lessons learned in the transformation of implementation strategies from relief and rehabilitation towards development.
support in fragile and conflict states. The experience in implementing and managing the TB programme in the different socio political and security environments in the three zones has provided World Vision International with valuable programme management experience.

Whereas, the Somalia Global Fund TB programme has scored notable successes in expanding access to TB services to a greater number of population and communities in the last years, this act alone has immeasurably contributed to the reduction of the TB burden in Somalia. The provision of accessible quality TB detection and treatment services has saved a significant number of disability adjusted life years (a measure of the impact of disease and/or disability on an individual). Although the impact of the reduced life years lost due to disability and/or disease on the general population might not be so ‘visible’ it has had greater visibility at the household level, where costs and related lost job and income generation opportunities are felt. The cost-free TB treatment has saved sufferers of disease significant amount of money that would have been paid to private practitioners or traditional practitioners for lesser quality treatment.

The success and achievements have been possible due to the effective management of the programme by the PR as well as the cooperation and political will that the regional governments have continued to provide to the programme.

However, despite the success achieved, the programme still needs to tweak a number of issues that have been identified as limitations in the programme implementation and management to maximize achievements. One of the major limitations of the programme is the delay to address the TB prevention aspects, and the need to base programme implementation decisions and planning on evidence from the data collected routinely or through research. Other major concerns are that there is a need to strengthen the performance monitoring of all implementing agents to ensure that planned activities are implemented appropriately and in timely fashion. This may require the establishment of appropriate programme management structures and culture among the SRs to increase efficiency and effectiveness. Integration of TB with other health care services and private public mix will also contribute to greater success of the program in future.
7 RECOMMENDATIONS

The recommendations made in this report are derived from the findings at each critical area of the programmes. Recommendations are intended to add to the lessons learned in the implementation management of the TB programme in Somalia, and the use of the evidence to increase performance and increase achievements that will appropriately impact on the wellbeing and quality of life of the beneficiaries.

The recommendations made are:

1. WVI should consider working with other development and relief organizations in Somalia establish a national sector wide caucus to develop a coordinated joint development approach to maximize synergy and ensure equitable sector-wide and equitable development for better socio economic impact. (The current Health Sector Committee could be the catalyst for such a forum)

2. WVI should consider conducting a programme strategy review to consolidate on the current successes and find solutions to issues related to strengthening performance management of both the PR and SRs.

3. Review the Terms of Reference for the M&E Sub Recipient to include both Programme and Programme Management to assist the PR to monitor performance and compliance of SRs in terms of their performance and adherence to the grant management requirements.

4. Integration of TB services as part of the Primary Health Care Mechanism to utilize the community based synergy to increase Tb information awareness among the communities. PHC has already established structures in the communities that could be harnessed by the TB programme using the outreach strategy.

5. Creation of guidelines and establishment of mechanisms to ensure that only the appropriately and relevantly qualified personnel are employed in the programme and requirements for capacity building of local personnel to progressively manage the programme at both the PR and SRs levels. This could lead to the creation of dedicated local cadres to manage the programme sustainably.

6. MOHs in all the zones should be encouraged to integrate TB services into general Primary Health Care to economize on the use of shared available resources. This would require collaboration with SRs providing TB services at the stand alone centers.

7. The M&E Section of WVI should develop a research agenda that should be directed at providing evidence for decision making and identification of solutions to operational problems. These should include the undertaking of socio economic and epidemiological studies to determine impact of the programme. Joint ventures and collaboration with other development organizations in the field will be needed to pool resources for these studies.
Current training programmes should be reviewed and the curricula appropriately adjusted to respond more effectively to better respond to the performance requirements.

A SR to manage the training should be identified to develop and conduct training programmes with WHO to provide technical oversight to ensure quality training and ensure greater accountability for training and capacity building.

8 ANNEXES

8.1 Inception Report

8.1.1 In-depth Interview Questionnaire

8.1.2 Focus Group Discussions Guidelines Questionnaire

8.1.3 TB Facility Check List
8.1 INCEPTION REPORT

INCEPTION REPORT ON THE IMPACT EVALUATION OF

THE GLOBAL FUND

SUPPORTED

SOMALIA TUBERCULOSIS PROGRAM

Submitted

THE PROJECT STEERING COMMITTEE

of the

THE WORLD VISION SOMALIA

THE GLOBAL FUND TB PROGRAMME

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1 Introduction

This is an inception report detailing the rationale and methodology for conducting impact evaluation of the Global Fund supported Tuberculosis Program in Somalia that is being implemented by several sub recipients reporting to the World Vision in the three regions of Somalia. The report forms the basis for the authorization of the evaluation implementation proposal, based on the acceptance of the consultant’s suggested implementation plans and methodology, including the evaluation instruments by the Project Steering Committee (PSC). Following the presentation of this report to the PSC and its acceptance the consultant will proceed to the field to train the data collecting team and start the data collection simultaneously in the three regions of Somalia.

2 Background Information

The national program to manage and control the spread of TB in Somalia is supported by the large grant from the Global Fund, administered through the World Vision International (Somalia) as the Principal Recipient of the Global Fund and implemented through a total of sub recipients implementing different components of the program in the different regions of Somalia. The Global Fund Program support to TB has been done in the three funding rounds of 3, 7 and 10, with new proposal for further funding being prepared for submission.

The preparation for the proposal for further funding from the Global Fund has been prepared on the basis of information from field activities carried out, evidence from monitoring and evaluation activities carried out as well as information on performance and challenges from operational reports submitted by sub recipients over the period of program implementation.

According to available information the Global Fund Support to the NTP in Somalia has strengthened the provision of TB detection, treatment services and expanded access to a greater number of people than before, and has developed the capacity of the program to manage. However, reliable information on the performance of the program in terms of reduction of the prevalence and incidence of TB is not available and the requested evaluation is intended to provide evidence on the achievements made and challenges affecting the performance of the program. The evaluation is also a requirement of the Global Fund to determine performance of the program and identify lessons learned with the view of using this evidence to support further funding.
The evaluation will also provide WVI with information on what has been achieved and how each
sub recipient has performed including the identification of challenges impacting on the
performance of the programme. Given that the current TB Control programme in Somalia is being
implemented mainly by several different NGOs due to absence of effective central government
authority, the evaluation will provide WVI with evidence for reviewing performance of current
strategies and realign the strategies to better serve the expanded TB programme services, with
critical technical support from WHO.

According to the project proposal document the main strategic thrust of the TB programme was
provide additional resources to support on-going TB activities ensuring the expansion of the DOTS
increase good quality of care and services in the country. It was also to consolidate the level of
services provided by the facilities to yield gains in the reduction of new cases, increase the
detection and cure rates of TB. Although the different Rounds of funding had different objectives,
the successive Rounds have continued to focus on: (i) Increasing access to TB facilities, increase
case detection rates from 47% and improving on the quality of TSR; improving the management of
DOTS; contributing to strengthening of TB service delivery systems; building of capacity of health
care providers; and increasing participation of communities in the management support of TB
programme. Round 10, particularly was aimed at increasing the diagnostic levels to at least 65%
of estimated TB cases, and maintaining treatment success rate above 85% by sustaining high
quality DOTS, strengthening Multi Drug Resistant TB (MDR TB) Services and TB/HIV collaborative
interventions and program management.

2.1 Evaluation of the TB program

Determination of the impact of the project on the socio-economic and infrastructure development
was part of the requirements that was stated in the in the initial project proposal in 2003. Based
on the information from document review, the evaluation consultants is of the view that the
suggested implementation methodology presented in the evaluation proposal still stands as the
most appropriate approach for the evaluation with modifications.

Modifications to the methodology is the carrying out of the data collection in the three regions
simultaneously by regional based national consultants with the lead consultant directly involved
in the data collection in Somaliland (due to time constraint and security concerns in the South
central Somalia.
The stated purpose of the evaluation still remains the same focusing on determining the socio-economic contribution made by the TB Program to the Somali population in general with special emphasis on individual, households, and communities.

The overarching objective of the evaluation still remains as determining the efficiency and effectiveness of the programme implementation efforts and results of the program on TB and population wellbeing. In addition, the evaluation is also expected to determine whether there has been equity in access to TB services across the various groups and communities as well as determining the sustainability of the Somalia TB Programme in general.

### 2.1.3 Specific Objectives

The evaluation will attempt:

*To determine whether the resources have been used economically, effectively and wisely for the benefit of the TB patients, their families and the community.*

*To determine how the TB program involved the targeted beneficiaries in planning, implementation, monitoring and evaluation of the program.*

*To determine the effect of the program on the households’ expenditure on TB treatment.*

*To establish the effect of the program on beneficiaries’ quality of life in general and on females in particular?*

*To determine if the program having an effect on the general health situation of the targeted communities?*

*Identify any other factors that might contribute to the improvement/success of the program in future.*

*To determine the effect of access to TB health services in the lives of children and caregivers.*

*To Analyze the relevance of the grant objectives and their feasibility on the period remaining to cover (Phase II)*

### 2.2 Expected Deliverables

The expected deliverables apart from those stated in the evaluation request will include those elements that have been identified in the discussions with the various sub recipients. An appropriate analysis framework modified from that proposed in the TOR will be developed.

### 2.3 Justification for Selection of Evaluation Methodology
The selection of the particular methodology that will be used to collect the data for the evaluation of the TB program is selected on the basis of the following factors. The information needed to determine achievements made by the TB program in Somalia will have to be both qualitative and quantitative in nature and therefore a multi modal stratified data collection will be the most suitable. The stratification of the data will be necessary given that there are several elements of the Somalia TB program that are being implemented by different sub recipients in the three zones of Somalia. In addition, the need to evaluate all aspects of the programme requires use of different instruments and modes of data capture.

The nature of information gleaned from the document review and interviews of staff from the different sub recipients based in Nairobi, I am further convinced that qualitative and quantitative methodologies would be needed to collect data for this evaluation study.

Given that the Global Fund TB program strategy was aimed at filling in the gaps and strengthening existing NTP programme activities and services, the evaluation study would have to focus on examining both the design, implementation, outputs and outcomes achievements made over during the first round of the grant. In the attempt to have representative sample of respondents a compromise would have to be made by using purposive sampling technique to ensure focusing on those accessing TB services and those identified as most likely to have contracted TB. All sources of available information TB detection, treatment and advocacy and communications outcomes reports and anecdotes, health facility reports and registers will be utilized to provide evidence on the performance and impact of the TB program on the population of Somalia. In addition, it would be desirable to assess sub-recipient capacity and performance to provide basis for establishment of technical support services to improve on implementation effectiveness and efficiency.

Although it would be desirable to undertake an economic impact study of the program, this would be difficult to undertake given that there might not have been a baseline data available for comparison.

Finally I surmise that challenges posed by the uncertainty of the security situation in Somalia, and the continued fragmented governing authorities will be handled by the use of local staff to collect data.

**Summary Table of Planned Activities for the Evaluation**
<table>
<thead>
<tr>
<th><strong>PURPOSE...</strong></th>
<th><strong>DATA SOURCES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>To critically determine achievements of the Global Fund TB Program in increasing access to TB information, detection and treatment services in the different regions of Somalia since inception</td>
<td>Desktop review of Global Fund TB Program reports, Mid-term evaluation and interviewing of participating partners, TB patients, community members, migration authorities. Mapping of TB services and facilities and services available to communities in each region. Determine the challenges that have impacted on the operationalization of the program.</td>
</tr>
<tr>
<td>To critically analyze the Global Fund TB Program strategy to determine the roles of different partners and stakeholders in relation to provision of TB services to the communities.</td>
<td>A Desktop review of program implementation conducted using a critical evaluation framework. Review of project management structures and coordination framework. Consultative Workshop with key stakeholders from different World Vision and Partners participating in the program. Review literature &amp; on International Best Practices in TB program management. Diagnostic evaluation of the program design by critically interrogating the intervention logic used to determine whether it would yield the expected results.</td>
</tr>
<tr>
<td>To assess how program resources were utilized resource gaps (financial and human) in the implementation of Global Fund TB Program</td>
<td>Review of financial and human resource reports to identify gaps. Assess the sustainability of the Global Fund TB program by determining how much the local area authorities are involved in the implementation management of the program. Examine and assess the current financial and human resource model with respect to sustainability.</td>
</tr>
<tr>
<td>To critically evaluate and analyze the effectiveness of Global Fund TB Program</td>
<td>Survey conducted with World Vision partners and beneficiaries to assess their awareness and their general opinion of the program. Focus groups and In-depth Interviews with key informants on the program (including service providers implementing partners).</td>
</tr>
<tr>
<td>To map out the number of active sites (regions /districts) that are providing full or part services TB services and their capacities to do so.</td>
<td>Sample sites will be selected for onsite visits to the active program sites. Review of global (three regions) may also be useful, augmented by site visits/inspections. Mapping of Stakeholders undertaken through a variety of approaches including interviews of relevant Key informants, review of project documents.</td>
</tr>
<tr>
<td>Interpret and analyze the data and compile a report with recommendations</td>
<td>Analysis of all statistical information obtained from various sources using appropriate data analysis techniques for qualitative and quantitative data.</td>
</tr>
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</table>
3. Proposed Methodology

The table above gives a summary of the planned implementation framework. It identified possible sources of information to be collected. The data collected from these sources would be compiled and analyzed using both methodological and data triangulation procedures to identify important relationships between the different variables on the program. The process to be used will ensure that data obtained from the different data collection methodologies is complementary in serving the overall aim of the project. The analysis frame that is to be used process the data will be guided by a clearly articulated conceptual framework developed to provide comprehensive evidence on the design, implementation and performance of the TB program in Somalia.

3.2 Proposed Activities

The key activities that have been identified for implementation include the following:

- **Review of program documents**
- **Formulation of the evaluation and implementation strategy.**
- **Development of data collection instruments**
- **Training of the data collection personnel.**
- **Field data collection process**
- **Focus Group Discussions with different teams of implementers and beneficiaries**
- **In-depth Interviews with all level of program personnel**
- **Direct inspection of TB health facilities**
- **Telephonic Interviews (where available)**

Before data collection begins, all procedural and access issues will be discussed and finalized with the PSC. These include ethical issues, implementing strategies for ensuring buy-in by
gatekeepers (e.g. implementing partner community leaders and authorities in the participating communities, TB patients and donors. Prior authorization and agreement from stakeholders will be important and crucial if a good response rate is to be achieved and will reduce possibilities of undue delays.

3.2.1 Document Reviews

The bulk of the document review has been carried out and this has provided a deeper insight on the design, implementation and performance of the TB programme in Somalia. My partial participation in the review of the Global Fund Proposal for further support from the Global Fund for the next round of funding has provided me with further information on what to look for in the evaluation of the current programme. Other documents reviewed included the Round 7 and Round 10 proposals. These documents provided a useful starting point for understanding important policy, organizational, coordination and expected achievements based on the Global Fund perspective. In addition, a number of Global Fund program management policy and procedures documents related to the management of supported programs in particular to sub recipients are reviewed in order to identify synergies and incompatibilities that may be present in the program implementation structures and processes.

Review of sub recipient proposals and other international and regional best practices documents will be done in the course of the study. The WHO technical papers of management of TB programs will also be sought for review. The document review will be guided by a clearly articulated conceptual framework that identifies the core issues to be harnessed from the reviews, as well as issues in need of flagging for particular attention.

3.2.2 Consultative Workshops

These will not be held as planned; a presentation meeting with the PSC will be held to discuss the inception report and the proposed implementation plan. Another meeting will be held in Somaliland with the representatives from the other Zones and the government authorities from Ministry of Health and Labor in Somaliland. Thereafter, a debriefing meeting with the authorities in Somaliland will be held. A 1 day Information Dissemination and Strategy Development Workshop will be conducted in Nairobi at the completion of the data analysis and draft report to discuss findings of the evaluation study with stakeholders and donors.

The results presentation and strategy development (or realignment) workshop will involve extensive discussions on participants’ views regarding the Global Fund TB Program in Somalia covering “on the ground” issues (i.e. how is the program working in reality, human resource issues, challenges, opportunities, strengths and weaknesses as well as specific recommendations from participants). The workshop proceedings will be documented and the outcomes used to inform the
development of subsequent strategies to strengthen the implementation and impact of the programme.

Proceedings of the workshop will also be documented and the data used to enhance the draft report before submitting a final report.

3.2.3 Focus Group Discussions (FGDs) and In-depth Interviews

Focus group discussions (FGDs) will be conducted at selected health facilities with patients, service providers and community leaderships. A guideline on selection of respondents for FGD that would have been field tested will be used. The FDG groups will be gender balanced. An FDG guiding instrument has been developed for use in the field and will cover practical issues relating to their experiences in dealing with communities participation in the program. Personal reflections and testimonies will be encouraged to provide deeper insights from participants regarding the program’s challenges, strengths, weaknesses, opportunities and threats.

At least 1 Focus Group Discussion will be conducted at select TB health facilities.

3.2.4 In-depth interviews

Individuals for IDI will be purposively selected from among the current and former TB patients at each TB facility, programme staff at the various levels, NTP personnel and local authorities and community members randomly selected. The numbers of respondents for IDI will be decided in the field after talking to facility managers. A stratified approach to the selection of participants to participate in the IDIs will be decided on the basis of representation of each level of stakeholders and beneficiaries to ensure that such interviews are held with people who can provide important insights into the program’s design and implementation at various levels.

Standard procedures for conducting FGDs and IDIs will be followed in all instances. Senior, properly trained facilitators will be used. In order to ensure that all fieldworkers have a common understanding of the project’s goals and methodology, a one-day training workshop will be held.

The data collection training workshop will be held for the data collection individuals and will involve:

*Familiarizing fieldworkers with the aims of the study.*

*A detailed discussion of the study’s specific objectives.*

*A scrutiny of the FGD/IDI Discussion Guides (including a discussion on the translated versions).*

*An extensive discussion of critical issues to be considered when planning and conducting in-depth interviews and focus group discussions (e.g. seating plan and location of recorder, questioning and listening skills, relationship with participants, observation skills, mental preparation etc.).*
In order to enhance the effectiveness of the training session, each fieldworker will receive in advance and study a detailed training manual on conducting face to face interviews, focus group discussions and in-depth interviews.

During the Focus Group Discussions, the fieldworkers will work in pairs, with one serving as a **moderator** and the other as an **observer**. A **checklist** for use by the moderator will be developed. Each FGD, consisting of **8 - 10 participants**, will commence with the moderator explaining: (i) purpose of the discussion, (ii) ground rules to be followed during the discussion, (iii) confidentiality, (iv) the need to use pseudonyms on “name” tags, (v) the need to audio-record the interview in order to capture views accurately, (vi) completion of consent forms, and (vii) the role of the observer.

Once respondents are ready to begin, and all preliminary questions and issues that may be raised by the respondents have been adequately addressed, the discussion guide questions will be asked, followed by **appropriate probes** as discussed during training. It is expected that each FGD/IDI will last between **40-50 minutes**, although from previous experience, some groups may take longer or shorter to complete. **FGD identification details** will be captured in each audio file immediately after each session (e.g. moderator name, date, time, venue, group composition, etc.). At the end of the discussion, respondents will be **thanked** and **debriefed**.

3.2.4 Surveys

A major component of this evaluation study will be a survey that we propose to conduct among some of the beneficiaries of the program at community level. The specific sampling strategy will be developed once we have gained a clearer idea of the program’s activities from the consultative workshop. The instrument will consist mostly of closed questions, with one open-ended question that seeks to elicit participants’ recommendations on how the program could be made more effective.

3.2.5 Telephonic Interviews (if applicable)

It is planned that telephonic interviews will be used where respondents cannot be reached easily. Although it is not an easy method to use, over the years, I have gained experience in conducting telephonic interviews. However, due to difficulties associated with the method as well as the cost this will be limited to not more than 20 respondents per zone.

**4. Data Processing and Analysis**
The data collected using the above procedures will be both quantitative and qualitative.

4.1 Quantitative Data Analysis

The survey and telephonic interview data will be coded and entered into and analyzed using the Statistical Package for Social Sciences (SPSS). Data entry screens will be designed using CsPro. Data cleaning will involve running frequencies on each variable and making sure there are no “out-of-range” values in the data and running internal consistency checks on the data (e.g. on SKIP questions, etc.). Prior to analysis, it will be necessary to also reverse-code some of the responses from the questionnaire in order to ensure directionality consistency.

The Preliminary data analysis will involve producing frequency distribution tables and computing reliability coefficients. In addition to aiding the data cleaning process, frequency distribution tables will assist in deriving summary demographic statistics. The demographic statistics will be used during subsequent cross-tabulations and chi-square analyses. Reliability coefficients will be computed to evaluate the internal consistency of the responses (i.e. internal validity checks). Differences and relationships between variables will be checked for statistical significance using both parametric and non-parametric statistical procedures, depending on the nature of distributions, and other requirements for different kind of statistical analyses.

4.2 Qualitative Analysis

Standard qualitative data processing and analysis techniques will be used. The transcripts will be analyzed using thematic content analysis. Field notes will also be used to gain a deeper understanding of the issues emerging from the study throughout the fieldwork and consultative processes. The content analysis will be performed using a general analytical framework that is linked to the overall evaluation framework. The qualitative analysis framework will be guided by the research questions and the actual questions asked. Specifically, the structure of the analysis is framed around the questions asked during the FGDs or IDIs. Meaning units that will emerge from the data will be integrated into themes, using a grouping procedure based on both similarities and differences; using the principles of internal homogeneity and external heterogeneity. Use of content analysis will permit the research team to identify theme cores and nodes that emerge from the data, allowing the researcher to proceed from the particular to the general. Software packages such as ATLAS that will be used to facilitate the analysis of the interview protocols

4.3 The Envisaged Analysis Framework

I envisage an analysis frame that will incorporate all the elements recommended in the TOR and dependent of the data needs identified. In addition to those questions given in the TOR, I suggest the addition indices for the evaluation for each evaluative variable:
4.3.1 Efficiency

Were resources used appropriately and economically to produce the desired results?

Is the program accountable and transparent in the use of resources?

Are there any variances in the cost of implementation among the different implementing partners and why?

Were the funds and commodities for the program received in timely fashion?

4.3.2 Effectiveness

Is the program achieving satisfactory progress toward its stated objectives?

Are selected partnership[s] contributing to program results?

Is the program’s theory of change sound?

What are the key factors that contributed to the effectiveness of the program?

4.3.3 Relevance

Is the program logic adequately aligned to the solution/s identified for the increasing access to TB services in Somalia given the nomadic nature of a significant part of the population?

Has the program strategy factored in the political and social tensions in design and implementation?

Are the program objectives still relevant and attainable?

What is the value of the program in relation to priority needs of key stakeholders?

Is TB transmission and detection still a major challenge compared to 2003?

In what way has the prevention and treatment outcomes benefited the communities in Somalia?

To what extent has the project contributed to the achievements of the Millennium Goals?

At what practical level have the communities accepted their responsibility to get involved in the management implementation of the TB programs?
4.3.4 Impact

What difference has the program made to the improved health in the community?

What specific program activities/interventions led to the increased patient access to TB information and services?

What significant changes in individual and community behavior has the TB program induced that will have long lasting effect on the status of TB in the community?

Which specific program components could have led to the above effects?

What desired outcomes were achieved?

To what extent has the desired outcomes been realized?

What key micro/macro results observed was intended or unintended?

What level of influence did the Global Fund support have on program impacts/results?

What proportion of TB patients in the populations has full access to health information and services?

Guidelines on the provision of TB and HIV related services are produced, including VCT, integrated HIV testing and counseling, antiretroviral treatment drugs and adherence counseling,

What is the level of community awareness of TB achieved compared to 2003?

Have the appropriate monitoring and TB surveillance systems established and functional?

Are there regular monitoring reports on TB from the program?

Are there regular reports and publications of the assessments and research on TB in the program?

To what extent has HIV been integrated into the TB management activities?

4.3.5 Sustainability.

Is there an exit strategy to prepare local authorities to mobilize resources for continued services?

What measures have been put in place for program activities to continue at the cessation of the Global Fund support?

Is TB management fully integrated into the general health care service delivery?

How much have the communities accepted the program, and how far are they willing to participate in its implementation?
Have implementing partners and other key stakeholders developed the capacity and motivation to continue activities/interventions (see key stakeholder list)?

Are the results sustainable given the challenges of the Somalia political environment?

Has the program developed an exit strategy to enable host communities to increase their participation in the implementation management of the program?

What measures have been undertaken to develop local capacity to manage and support the programs?

Health providers have been trained on the provision of HIV services

What tools (if any) have been developed to provide TB/HIV services to mobile nomadic populations?

Have local service providers adequately trained and motivated?

4.3.6 Program Design

Is the program design aligned to address the socio political environmental of Somalia addressing the following cross-cutting programmatic and institutional evaluation questions?

Has the program been gender compliant in its design and implementation?

Are the arrangements between the WV as the Principal Recipient and the sub recipients adequate for effective for program delivery?

Would the program be more effective and efficient if the components were designed differently?

Is the Global Fund TB program functioning in Somalia coordinated effectively at all levels program across the country?

To what extent has Global Fund been catalytic in improving TB services in Somalia?

What is the level of awareness of the availability of TB services in the country’s three regions?

4.3.7 Program Expansion

To what extent did expansion impact on results – intended and unintended/positive and negative?

To what extent were resources, systems and procedures necessary to support expansion in place at the time of expansion?
If they were not in place, how has the Global Fund (World Vision) facilitated the development and utilization of the necessary systems and procedures?"

To what extent did available financial resources in each region, at the start of program, influence programmatic results?

What lessons can be learned from the expansion?

What strategic value, if any can be ascertained by the:

(a) Geographical expansion; and

(b) Substantive expansion?

How has the program evolved from program inception (Global Fund TB program 2003) to present?

What are the major differences in how different communities get involved the program implementation and management?

Were TB prevention and treatment champions created to advance the virtuous of the program in the host communities?

### 4.3.8 Institutional Arrangement

Are the internal structures, policies and management practices of World Vision conducive to efficient and effective to the Global Fund program implementation oversight?

Are the institutional arrangements (MOUs) signed between WV and sub recipients appropriate for the oversight of the expanded program?

How has the World Vision performed in overseeing the program implementation by partners?

How does the World Vision (as the principal recipient) interact with other principal recipients in the health sector?

To what extend did the World Vision structural and operational policies impact on the program implementation?

What mechanisms, other than the Global Fund prescribed ones, did the World Vision put in place to ensure oversight of the program activities design and implementation?

What lessons has the World Vision leaned in coordination oversight of the Global Fund TB program in Somalia?
5. Report Writing

I shall provide the reports for submission on both hard copies and soft copies as instructed in the TOR. A power point presentation of the study’s findings will be presented to the World Vision prior to the Information Dissemination Workshop to ensure that all matters relating to the study’s findings are discussed and jointly prioritized for purposes of the Information Dissemination Workshop.
### INDEPTH INTERVIEW QUESTIONNAIRE

1. | 1 | Region | Zone | Supervising Facility |
---|---|---|---|
2. |

3. **4.** Name of respondent

4. **5.** Age of respondent

5. **6.** Marital status

6. **7.** Level of education attained

7. **8.** Current employment/business status

8. **9.** What do you know about TB (skip 7 – 13 if the respondent does not know)

9. **10.** Have you ever had TB

10. **11.** How was it treated and for how long?

11. **12.** What were you told about the treatment

12. **13.** Does your family and neighbours treat you differently now that they know you have TB?

13. **14.** Were you able to work and contribute to your family’s income while you are treated for TB?

14. **15.** Are you able to easily access the TB facility for treatment?

15. **16.** How much did you/are you generally spending on transport to access TB treatment?

16. **17.** Why do some TB patients not complete their treatment?

17. **18.** What can you do to encourage other TB patients to complete treatment?

18. **19.** What should the community do to:
   a. Prevention of TB transmission
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>b.</td>
<td>Reduce stigmatization of persons suffering from TB?</td>
</tr>
<tr>
<td>c.</td>
<td>Ensure TB patient adherence to treatment until cure?</td>
</tr>
<tr>
<td>d.</td>
<td>Ensure that ant TB services are sustainable?</td>
</tr>
<tr>
<td>e.</td>
<td>Ensure increased level of TB awareness?</td>
</tr>
</tbody>
</table>

20. How do you rate the services you have received from the TB facility

21. How were you treated by the staff at the TB Centre?

22. Were you comfortable to be seen attending a TB clinic given the presence of stigmatization attached to TB?

23. If you were found to have TB did you also undergo testing and counselling for HIV?

24. What do you advise the TB Centre to improve care and support of TB patients and suspects?
8.1.2 **FOCUS GROUP DISCUSSION GUIDELINES**

Focus Group Discussion Guide

Name of Facility: __________________________ Date: __________________________ Interviewers

---

This is a guide for the conducting a focus group discussion designed to obtain information on perceptions and views on the performance and implementation of the TB programme supported by the Global Fund and coordinated by the World Vision International (Somalia). The Focus Group Discussions (FGDs) will be conducted by the trained staff on selected groups of respondents representing TB patients who have had treatment, those on treatment; family members of those on anti TB treatment, programme implementers, donors and the national TB Programme personnel. FGD groups will be constituted by TB status of the individuals; donors, service delivery personnel, community members and matched by gender. A team of two people will carry out the interview, one taking the role of a moderator and the other that of a recorder.

**Section A: Community Members**

1. What do the majority of people in your community know about TB?

2. What is known as the course of TB in an individual?

3. Do you know any person suffering from TB in your community/family?

4. Do community/family members behave differently to a person who has TB than those who don’t?

5. Does the community treat a female TB patient differently from a male with TB?

6. Is your community aware of the Global Fund supported TB programme in your area?

7. Has the TB programme positively improved detection and treatment of TB cases in your area?

8. Have the attitudes of the community towards TB since the programme was initiated?

9. How do you rate the performance of the TB programme in terms of:
   a. Usefulness in the prevention of TB transmission
   b. TB diagnosis and treatment
   c. Care and support of TB patients

10. Has there been any significant change in the way the TB program is being managed in comparison to previous programme efforts? (Please elaborate).

11. What role is your community playing in the implementation and management of the TB programme in your zone?

12. Do you have any other issues regarding the TB programme in Somalia that you would like to discuss?

---

*I would like to thank you all for participating in this focus group discussion. The information that we have obtained during the discussion shall remain anonymous and will not be accredited to anyone but to the group as a whole.*
Section B: Programme Implementers

What is the main focus of the WVI managed Global Fund TB programme in Somalia?

Are the programme activities making significant impacts on the transmission of TB in Somalia?

How significant has the TB patient detection and treatment been to reducing the burden of TB on the Somali population?

Does the programme have adequate structures and implementation capacity to make a significant change in the reduction of TB burden in Somalia?

Has the World Vision provided adequate support to the TB implementing agencies in Somalia?

What could have the World Vision done to improve its coordination and oversight of the programme?

Do you think that the strategies adopted by the programme could lead to significant reduction of TB transmission in Somalia?
8.1.3 **FACILITY CHECK LIST**

**CHECK LIST FOR FACILITY AND PROGRAMME MANAGEMENT**

This check list is intended to guide the evaluator on what should be assessed at the TB facility, Programme Management and Coordination levels.

Section A. TB Facility ID

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of Facility:</td>
</tr>
<tr>
<td>2</td>
<td>Facility In-charge full name:</td>
</tr>
<tr>
<td>3</td>
<td>Title:</td>
</tr>
<tr>
<td>4</td>
<td>Telephone number:</td>
</tr>
<tr>
<td>5</td>
<td>Email address:</td>
</tr>
</tbody>
</table>

6. Type of Facility (mark)

6.1 [ ] TB Centre   6.2 [ ] TB & VCT   6.3 [ ] Hospital based

6.4 [ ] Community based

7. **Number of staff working in the Facility by Genders**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Doctors</td>
<td>7.2</td>
<td>Nurses</td>
<td>7.3</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
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<tr>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
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</tbody>
</table>

8. What is the estimated population served by the Centre

8.1 8.2 8.3

2000-4999 5000 - 9999 >10,000

9. Reported Number of TB Suspect seen at the Centre in the last reporting quarter
10. Numbers of Suspects Subjected to sputum collection and examination in last quarter

11. Percentage of sputum that tested positive for TB in last quarter

12. Supervisory Visits made by the following in last quarter

12.1 WVI 12.2 SR 12.3 NTP 12.4 CCM

13. Does the facility has EQA: Yes No Do not know

13.1 How frequent is the EQA undertaken in a quarter

0 1 2 3

14. What is the Total Number of TB patients (All forms) put on treatment in the Quarter:

15. Supply Management

15.1 Has there ever been any incidence of stock-outs of Anti TB drugs in the
center over the past 6 months?

<table>
<thead>
<tr>
<th>15.2</th>
<th>Has there ever been any incidence of stock-out of laboratory reagents for TB sputum smears in the last six months?</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.3</td>
<td>Has there ever been any incidence of stock-out of HIV testing kits in the center over the last six months?</td>
</tr>
<tr>
<td>15.4</td>
<td>How frequent are drugs and supplies delivered?</td>
</tr>
<tr>
<td>15.5</td>
<td>How many months would the buffer stock of TB drugs cover?</td>
</tr>
</tbody>
</table>

### Information Management and Documentation

<table>
<thead>
<tr>
<th>16.1</th>
<th>Is there a Records Cupboard or Bookshelf in the facility</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.2</td>
<td>Are there patient registers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.3</td>
<td>Are the TB patient registers properly filled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.4</td>
<td>Are the Lab registers properly filled</td>
<td></td>
<td></td>
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<tr>
<td>16.5</td>
<td>Are the monthly/quarterly reports submitted on time?</td>
<td></td>
<td></td>
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<tr>
<td>16.6</td>
<td>Does the center able to analyze and use the monitoring and evaluation results for planning and decision making?</td>
<td></td>
<td></td>
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<tr>
<td>16.7</td>
<td>Does the center get feedback from top level on the reports submitted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.8</td>
<td>Where are the reports submitted to</td>
<td>WVI</td>
<td>SR</td>
</tr>
<tr>
<td>16.9</td>
<td>What kind of feedback (if any is provided from supervising authorities?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 18. Operational and Physical State of Facility

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.1 Was the building specifically designed as a TB center according to WHO guidelines?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.2 Does the building structure adequately ventilated</td>
<td></td>
<td></td>
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<tr>
<td>18.3 Are there sufficient number of rooms to match the minimum WHO standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.4 Is there adequate natural lighting in the rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.5 Does the center have basic minimum equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Examination coach,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Weighing Scale for examination room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Stethoscopes, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Thermometer</td>
<td></td>
<td></td>
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<tr>
<td>18.6 Laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Laboratory Working bench,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Microscope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Safety cabinet,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Reagent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Laboratory micro scale,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Hand washing sink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Proper waste drainage system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.7 Water, Sanitation and Waste management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) piped water/borehole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) clean toilet/latrine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Refuse pit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Incinerator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
19. **Patient Management**

19.1 What are the actual opening and closing hours for the center?

19.2 How long do patients take before they are attended to by a doctor/nurse?

19.3 Are the patients happy with the way they are treated at the center?

19.4 Are patients given enough information on what is going to be done when they first attend the TB center?

19.5 Is HIV counseling and testing part of the process of diagnosis?

19.6 Is staff at the center trained to handle patients diagnosed with TB?

19.7 Is DOTS a likeable method of treatment of TB?

19.8 Is there X-ray facility in the center?

19.9 How far is the nearest X-ray facility?

19.8. Does the TB center carry out contact tracing for all open TB cases?

19.9. How is patient follow-up conducted?

20. **Capacity Building Training attended last year**

How many episodes of training has each category of health workers attended in last year

<table>
<thead>
<tr>
<th>Type of Training</th>
<th>Doctors</th>
<th>Nurses</th>
<th>Home-</th>
<th>Lab tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) No waste management system</td>
<td></td>
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<tr>
<td>18.8 Drug Storage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Vermin screens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Protection from direct sunlight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Protection from moisture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Inventory system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TB detection, Counseling</td>
<td>based care</td>
<td></td>
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<tr>
<td>--------------------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment and care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infection Prevention</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Community TB Awareness</td>
<td></td>
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</table>

21. **Clinical practice guideline**

Does this facility use clinical practice guidelines (CPGs) from any source? If yes, please list and name the source(s).

22. **Staff health**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>22.1</strong></td>
<td>Does the program have a policy in place for providing TB screening to all health care workers</td>
</tr>
<tr>
<td><strong>22.2</strong></td>
<td>Does the facility screen staff for Tuberculosis on entry to practice/workplace?</td>
</tr>
<tr>
<td><strong>22.3</strong></td>
<td>Is a process in place to update staff on infection control practices?</td>
</tr>
<tr>
<td><strong>23</strong></td>
<td>TB Patient Support</td>
</tr>
<tr>
<td><strong>23.1</strong></td>
<td>How many TB patients on treatment have guarantors (Damiin)</td>
</tr>
<tr>
<td><strong>23.2</strong></td>
<td>Are there patients on treatment not responding adequately responding to standard TB treatment regimen?</td>
</tr>
<tr>
<td><strong>23.3</strong></td>
<td>Where are patients not responding to treatment referred to</td>
</tr>
<tr>
<td>23.4</td>
<td>What is the furthest distance a TB patient had to travel to access TB services?</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>24</td>
<td>Patient referral</td>
</tr>
<tr>
<td>24.1</td>
<td>Is the referral system functional?</td>
</tr>
<tr>
<td>24.2</td>
<td>How is the patient referral handled?</td>
</tr>
<tr>
<td>24.3</td>
<td>Is there a formal system of feedback on referred TB patients</td>
</tr>
<tr>
<td>25</td>
<td>Community Participation in TB program</td>
</tr>
<tr>
<td>25.1</td>
<td>What is the level of community involvement in the TB control program?</td>
</tr>
<tr>
<td>25.2</td>
<td>Is there a Community Management Committee for the TB center</td>
</tr>
<tr>
<td>25.3</td>
<td>How does the community contribute to the management of the center? (if at all)</td>
</tr>
<tr>
<td>25.4</td>
<td>Has there been any community TB awareness program?</td>
</tr>
<tr>
<td>25.5</td>
<td>Is the TB awareness in the community significant?</td>
</tr>
</tbody>
</table>