

# TB in the Mining Sector Programme. (TIMS)

## For the period June to December 2016



## **Submitted to**



**Norway** 



Name of the project: TC TB - TB in the Mining Sector Programme (TIMS)

Organization: ADPP Mozambique
Report period: June to December 2016

#### The Project at a Glance

| 1 | Name of the project                          | TB in the Mining Sector Programme (TIMS)   |  |  |
|---|--|--|--|--|
| 2 | Operation area                               | Mozambique, Districts of Xai-Xai and Guija   |  |  |
| 3 | Project Leader                               | Antonio Marcos Macamo  |  |  |
| 4 | Address                                      | City of Xai-Xai, Gaza Province   |  |  |
| 5 | Tel. & E-mail                                | + 258 84 564 3220<br>a.marcos99@yahoo.com  |  |  |
| 6 | The project idea and who the project reaches | a.marcos99@yahoo.com  dea The TIMS Programme is a regionally coordinated response to reduce the tuberculosis burden in the mining sector in 10   |  |  |
| 7 | A brief history                              | Since 2009, ADPP Mozambique has been working with TB projects within Mozambique.  The project in Mozambique started in August 2016 in the Province of Gaza, Guijá District and Xai-Xai City. |  |  |

#### **Introduction to the Project**

ADPP is implementing the TIMS program in partnership with TB Alert that will train project staff and produce material about TB, and Wits Health Consortium that is the holder of the program. The program is funded by Global Fund.

TIMS programme goal is to contribute towards the reduction of the TB burden in the mining sector in Southern African countries. In this particular intervention, the target area is the Mozambican mining sector in the Gaza province.

The programmes' specific objectives include:

- Increase TB case findings among the key population in the mining sector in Southern Africa
- Increase the proportion of key population on TB treatment that complete their treatment
- Increase the proportion of key population with TB that are tested for HIV and taken for ART (antiretroviral treatment)
- Increase access to information and education on TB prevention, care and treatment.
- Improve accountability of key institutions addressing TB, silicosis and HIV in the mining sector

The target groups / beneficiaries of the TIMS Programme include miners, exminers, people from mining communities, Mining Associations and Mining Unions.

The first phase terminates in December 2017, a possible expansion of 3 years is expected depending on the success of the program.

#### **Description of the Program**

According to the International Organization for Migration - IOM (2014), an estimated 1.5 million Mozambicans live in South Africa; of which, up to 60,000 of them are either informal or formal mine workers, most of them come from the Gaza province due to its proximity to South Africa and the job offer opportunities in the mines. Gaza province has the highest HIV prevalence, 25%, compared to the national prevalence of 11.5% in 2014, and this increases the risk of TB for the population in Gaza province. Mozambique boarders with South Africa, Lesotho and Swaziland; these countries are among the top 10 high TB burden countries globally. This puts Mozambique at higher risk, reason why it is part of the regional TIMS programme on TB Prevention.

Mineworkers in the Southern African region have among the highest rates of tuberculosis (TB) in the world (2.500-3.000 TB cases out of 100.000) with 10

times more TB than among general population (250/100.000). Their situation is also aggravated by the high prevalence of HIV. Mineworkers are at higher risk of TB due to high rates of lung diseases because of the silicosis from the mines, long absences from home and its associated challenges; huge sex industry around the mines and poor living and working conditions.

Due to increased TB transmission in mines in Southern Africa, and the growing concern for TB prevention in the affected Southern African countries, the TIMS program started to implement the reduction and control interventions for TB in 10 Southern African countries.

ADPP has been implementing TB projects since 2009, and was chosen to implement the TIMS project in 8 countries, Mozambique, Namibia, Botswana, Zambia, Malawi, Lesotho, Swaziland and Tanzania, while other organizations will lead the implementation in Angola and South Africa.

#### **Start-up of the Project**

In Mozambique, the TIMS programme together with the Ministry of Health decided to implement the program in the Gaza province, in the district of Guija and Xai-Xai City, as Gaza is the province with the highest numbers of mineworkers working in South Africa and thus heavily affected by TB.

The project started in July, with the selection of the project leader and the Program officer. They participated in the initial training and planning for the project together with the project leaders from other TIMS countries.

#### **Initial Training**

The initial training was done at ADPP Mozambique offices, the training took 5 days with participants from Mozambique, Namibia, Botswana, Zambia and Malawi. The opening of the training was attended by the National TB Programme Manager of Mozambique, Ivo Manhiça.

Participants were introduced to tuberculosis as a disease, with a focus on signs and symptoms. A historical perspective on TB and information on the TB burden internationally and within the Southern Africa region was provided. Participants were introduced to the specific challenges miners, ex miners and their families face through a video 'South Africa's Mine Trap' and a session specifically focussed on TB in the mining sector. Participants also carried out a practical exercise in groups on the delivery of key messages to a fictitious miner's wives. At the end of the day, the participants were tasked to review their respective National TB Strategies and present the objectives, indicators and issues the following morning in their country teams.

A recap on the first day demonstrated the participants' familiarity and knowledge of TB symptoms, transmission and infection control measures during field work; speaking to patients in an open space and wearing masks. In addition, they had also learnt the different ways for diagnosing active and latent TB and the difference between biological and clinical diagnosis. Participants showed an understanding of the extent of the TB epidemic in Southern Africa in comparison to other high burden countries such as India and China and the circumstances that made miners more at risk of having TB.

#### Introduction of TIMS Program to Ministry of Health and local authorities

The project was introduced to the Ministry of Health and the Provincial Health Department and it was agreed that ADPP should work in the District of Guija and City of Xai-Xai, as other districts in Gaza are covered by other projects. ADPP is also working on HIV-AIDS programs in the Gaza province, hence there is base for collaboration between the different projects.

#### **Start-up of activities**

Once sentinel sites were agreed, ADPP started several activities in order to start screening in October in the City of Xai-Xai:

- a) Introduce the TIMS Program to the District Health Sectors
- b) Identify a place for TIMS Office in Xai-Xai;
- c) Field officers recruitment process;
- d) Field officers training preparatory activities.

#### Introduction of TIMS Program to Xai-Xai Health Sector.

A meeting was held with the Health Services of Xai-Xai City, with the objective of presenting the TIMS program to the health department. The city's health officials welcomed the TIMS program as Xai-Xai City has no tuberculosis prevention program. The health services recommended monthly information sharing and that the TIMS program should participate in the monthly planning and sharing of results meetings.

#### **Recruitment and Selection of Field Officers**

In September the project launched the recruitment for Field Officers in Xai-Xai City.

In total, 120 candidates submitted their applications and attended the interview where the following was required:

- a minimum of 21 years of age
- 10th class of the National Education System,

- Speak the local language was an obligation,
- Know how to ride a bicycle,
- Declaration of the neighborhood stamped by the competent institutes,
- Detailed Curriculum Vitae,
- Experience in community work in the area of TB and HIV is a great advantage for candidates.
- The project encouraged the candidacy of women.

In this process, 30 candidates were selected and participated in the initial training of Field Officers for 7 days, where they were trained and equipped with tools to carry out tuberculosis prevention and tracing activities in active miners, former miners and their families.

#### **Field Officers Initial Training**

The program trained the 30 field officers for the TIMS Gaza project, of which 21 will be the backbone of the TIMS Program and 9 will be substitutes in the Xai-Xai City on Sentinel sites. The training took place from 17 to 25 October 2016, with the support of the health personnel from the Provincial Direction of Gaza, Xai-Xai City Health Services and PMO.

The Provincial Health Director welcomed everyone to the training, stressing that the field officers are representatives of health in the communities, and he expected good results on how the program will boost the increase in disease results in Xai-Xai City.

The field officers learned about tuberculosis in the world and about how to identify the symptoms of the disease.

To clarify the symptoms and signs the trainer used the simple abbreviation formula which is the FESTA, which translated is an abbreviation of symptoms and signs of tuberculosis, being FEVER, WEAKNESS, NIGHT SWEAT, COUGH for more than two weeks and lack of appetite. The tuberculosis bacillus spreads mainly by coughing without covering the mouth. The most common types of tuberculosis were explained, being Pulmonary, Kidney, Intestine and Bones. It was stressed that the treatment is free for everybody.

#### Sanitary Unit Mapping.

The Gaza project mapped three peripheral health units for the TIMS program. These health units are those with the Microscope and GeneXpert (an apparatus to identify TB), where field officers will refer patients so they can have medical care and follow-up.

A meeting was held with the heads of the laboratory and the tuberculosis program in order to schedule the delivery of samples and purchase of consumables for tuberculosis. This meeting was productive so the project was able to plan the coordination of activities with the laboratory and the tuberculosis program.

#### **Field Officers Mapping**

After the training and the selection of the health units, the field officers were allocated to the 3 health units, 7 field officers at each unit.

At present, all field officers are implementing their TB screening activities among miners, ex-miners and their families.

The field officers are mobilizing people identified with TB to complete the treatment and counselling them to be tested for HIV and if they are tested positive, to enrol for ART (antiretroviral treatment),

## Test Materials for Information Education and Communication in Mozambique.

Part of the TIMS program is to develop information materials and tools for the field officers to use in their daily work. The material is written in Portuguese and Changana – the local language, which helps the field officers in their task to explain the messages to the families. The materials are:

Serial album with general information on Tuberculosis and AIDS. Information leaflet for patients/TRIOs Flipchart for information sessions Posters with key messages

In November, the project in Mozambique received the material to be tested in their daily work and to make comments on their improvement .

#### The effects of the project

The most important effect of the project expected is the reduction of TB prevalence in the miners' sentinel sites. The project will increase the awareness among the miners' population about TB as well as their rights to treatment and compensation.

The project will reduce TB infections in entire families through mobilizing them for screening and treatment.

The TIMS programme will also increase HIV testing within the population, as the community awareness campaigns for TB also include HIV counselling and testing.

TIMS Programme will work with health facilities to promote active search of defaulting patients and their subsequent reintegration, will help to improve the adherence to treatment, both in relation to TB and HIV.

#### **Attachment 1: Project in Numbers**

| ADPP TB in the Mining Sector Programme  | Goals and Achievements |          |          |  |
|---|------------------------|----------|----------|--|
|   | Goal for<br>2016       | Achieved | Variance |  |
| People at the project   |                        |          |          |  |
| 1.1 Project Leader  | 1                      | 1        | 0        |  |
| 1.2 Co-Project Leader   | 1                      | 1        | 0        |  |
| 1.3 Troop Commander   | 1                      | 1        | 0        |  |
| 1.4 M & A Officer   | 1                      | 1        | 0        |  |
| 1.5 Field Officer   | 21                     | 21       | 0        |  |
| 1-Screening programme   | T                      | ı        |          |  |
| 2.1 Total people for TB screening at the end of 2 year program  | 35,000                 | N/A      | N/A      |  |
| 2.2 Total People reached with TB education and sensitization in Mozambique at end of 2 year program   | 14,404                 | N/A      | N/A      |  |
| 2.3 People screened for TB in Gaza province in 2016   | 11,667                 | 7,610    | -4,057   |  |
| 2.4 Volunteers recruited in 2016 for TB prevention and treatment awareness in the communities   | 105                    | 0        | -105     |  |
| 2.5 Presumptive cases identified and referred to the health facility  | 3,266                  | 1,588    | -1,678   |  |
| 2.6 HIV tests conducted in TB patients  | 44                     | 0        | -44      |  |
| 2.7 TRIOs/DUOs created per month and 524 by end of 2016   | 44                     | 0        | -44      |  |
| 2.8 Training of Project management in basic TB aetiology, prevention, screening, sputum collection, contact tracing and treatment adherence | 2                      | 1        | -1       |  |
| 2.9 The TIMS Programme sign a Memorandum of Understanding with Ministry of Health in Mozambique   | 1                      | 1        | 0        |  |
| 2.10 TIMS Mozambique team set up with implementation  | 1                      | 1        | 0        |  |

#### **Comments:**

- 2.3 2.7 The project first started in August and for this reason had a late start of TB screening activities in Mining Population, which is why the production is low.
  - The year had the focus of the memorandum, the presentation of the TIMS program at all levels of the country, mainly in the Ministry of Health.
  - Recruitment of Field Officers and Initial Training,
  - Field mapping and presentation to community leaders,
  - Presentation of Field Officers in the referenced health units for the TIMS Program,
  - Community meetings to present the TIMS Program and Field Officers
  - HIV counselling and testing will start next year, after field officers receive training

### **Attachment 2: Photos from the Project**



The Community Health Officer in Gaza Province, Alberto Macave, speaking at the opening ceremony of the initial Field Officers training



The head of the TB program in the city of Xai-Xai Narciso Mondlane, giving a presentation on the contextualization of tuberculosis in the world.



Dr. Egídio Langa of the PMU, making a presentation of TB in themining sector during the formation of Field Officers



Field Officials Cheila Vilma, Nely José, Efidélia Mambo and Linda Paciência ready for the practical classes in the laboratory.



The technician from the laboratory Acácio, explaining to the Field Officers the operation of GeneXpert during the practical classes of the initial formation



A Field Officer Cecília Maculuve, observing the TB bacillus in the Microscope during the initial training.



The medical chief of Xai-Xai City, giving recommendations to the Field Officers on her first day of work.



Field Officer Nely Joseph, in a TB screening session with a Miner's wife.



Field Officer Hélder, in a TB screening session with a former miner's wife



Olga Gerrero from HUMANA Spain, testing the materials to be used by Field Officers in 10 countries where the TIMS program is implemented.

#### **Attachment 2: Case Story**

**Story title:** From door to door returning hope,

Name and Position of person collecting Story: Nely José, Field Officer

Place and Date of the Collection of the Story: Mariam Ngoabi, 3rd of November 2016

In the midst of routine tuberculosis prevention activities in key populations, I have had a very strong and exciting experience at my workplace at Mariam Ngoabi. I was going to do my activities during the awareness campaigns and information on tracing of Tuberculosis door to door and interpersonal exchange with the miners, ex-miners and their families of my field. November 3, 2016, I visited a family of a former miner, I did the screening and I came across a very critical situation of an HIV-positive couple, where the wife was MDR-TB (Multi Drug Resistant TB), she lives with her family composed of 7 people of which 3 were younger children. Dona Filomena Mahumane, 40 years old, mother of the family, TB (MDR) positive was already taking treatment taking injections and doing ART. She was very debilitated and for more than 15 days she could no longer walk to the Health Center to take the injections, because she lived far from the sanitary unit. I passed the reference guide to the children in the house in order to start with the prophylactic treatment with Isoniazid, since they were under 5 years of age. A mother always has affection for her children whom she kissed, gave hugs and showed love, a desperate mother who was seeing the end of hers and her children's life. The first day I felt the despair of the family, as if life was about to end.

I continued to raise awareness to this family, showing that there is still hope. Finally, there was openness on the part of family members, saying that they would also like to enjoy good health without this illness, they asked for a lot of help in following the case at the Sanitary Unit, because they were no longer able to overcome the problem alone. I went to the TB Program Officer at the Mariam Ngoabi Health Center, asking for the patient's hospitalization, but since there were no inpatient services at that Health Unit, they referred the case to the Chicumbane Health Center or Gaza Provincial Hospital. I made it all possible and fortunately, the mother ended up being admitted at Gaza Provincial Hospital, where she is now continuing the full treatment in order to improve her health.

My arrival at that house was worth it, for it was more likely that Mrs. Filomena Mahumane would lose her life because she could not continue with the treatment, she would continue to spread bacillus to people around her and they would also become contaminated with TB. This was a difficult experience, which I faced right from the beginning of my activities and I am sure that I will still meet others, but this has made me a stronger Field Officer committed to my responsibilities. I am happy that I have been able to give back hope to Mrs. Filomena Mahumane, saving the lives of her family. Finally, I shared this difficult story with my teammates and mobilized them to be proactive and to take the work more seriously, because in the community there are many similar cases.