Assessment of Women's Capacity in Mining Groups in SADC region

Two Years Post-TIMS Phase III Interventions

Final Report

Submitted to:



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The review and assessment of capacity of women in mining groups at national and regional levels in SADC was carried out in December 2024. The analysis aimed at taking stock of the impact that the TIMS III project has had on the situation of women in mining, through analyzing the baseline assessment conducted in 2022 and the current status of SADC women in mining and its affiliates through review of available data and information.

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Abbreviations and Acronyms

AMMMI	Association of the Mozambican Women in Mining
ASM	Artisanal and Small-Scale Mining
AZWIM	Association of Zambia Women in Mining
ССМ	Country Coordinating Mechanism
CSO	Civil Society Organization
DFID	Department for International Development
EAC	East African Community
EWIMA	Eswatini Women in Mining Association
ECSA HC	East, Central and Southern Africa Health Community
FGD	Focused Group Discussion
GDP	Gross Domestic Product
IGAD	Intergovernmental Authority on Development
ILO	International Labor Organization
MBOD	Medical Bureau of Occupational Diseases
MDR	Multi-Drug Resistant
NGO	Non-Governmental Organization
PPE	Personal Protective Equipment
RENAFEM	Réseau National des Femmes dans les Mines/ National Women's Network in the Mines
RR TB	Rifampicin Resistant Tuberculosis
SADC	Southern African Development Community
SADC WIMA	Southern African Development Community Women in Mining Association
SIDA	Swedish International Development Cooperation Agency
SOP	Standard Operating Procedure
ΤΑΨΟΜΑ	Tanzania Women in Mining Association
TIMS	TB in the Mining Sector

ТВ	Tuberculosis
ТРТ	Tuberculosis Preventive Therapy
КР	Key Population
UNDP	United Nations Development Program
USAID	United States Agency for International Development
WHO	World Health Organization
WiMBO	Women in Mining sector Botswana
ZAWIMA	Zimbabwe Association of Women in Mining Associations

Executive Summary

The East, Central and Southern Africa Health Community (ECSA-HC) Secretariat commissioned this consultancy aiming at taking stock of the impact that the TIMS III project has had on the situation of women in mining, through analyzing the baseline assessment conducted in 2022 and the current status of SADC women in mining and its affiliates through review of available data and information. Representatives of women in mining groups from Angola, Botswana, the Democratic Republic of Congo, Eswatini, Madagascar, Malawi, Mozambique, Namibia, Kingdom of Lesotho, South Africa, United Republic of Tanzania, Zambia and Zimbabwe participated in the assessment.

The assignment intended to assess and document the progress of the situation of women in mining as well as their level of engagement and participation at both national and regional levels by reviewing the effectiveness of the TIMS III interventions targeted at them over the past 2 years. Specifically, this assessment was intended to document various ways in which SADC WIMA and its affiliates have been engaged at technical and policy level as well as any advocacy efforts conducted and provide sustainable recommendations accordingly.

The review of progress of engaging women in the mining sector in the implementation of the interventions involved countries where TIMS III project was being implemented. It consisted of desk review on the existing literature on the mining sector, women in the mining sector, review of various reports and further inputs were gathered from the consultative workshop which examined the strengths, weaknesses, opportunities and threats of the progress of implementation of TIMS III interventions targeting women in the mining sector.

The findings of this review indicated that there have been establishment of the SADC Women in Mining Association (SADC WIMA) guided by the constitution which was redrafted and signed by all affiliated members accordingly in 2023 and the association was registered in Botswana. Furthermore, during the implementation of TIMS III Project, there has been establishment of four new women in the mining sector associations in those SADC member states which did not have any and a strengthening of those that already existed. The new associations were engaged by building their capacities, participation in different platform sharing experiences and learning from existing ones. The existing women in the mining associations have been strengthened more by building their capacities in advocacy, participating in different and various platforms and in the case of Botswana, finalizing the registration of the association. At the national level, these associations have been involved in different aspects of health issues related to mining sector. Of importance, the associations have greatly been involved in the TB response by raising awareness and training workshops on TB and other occupational lung diseases, engaged in focus interventions such as TB screening of the miners and communities, supplying of female friendly personal protective equipment (PPE) and being included as part of the national technical working groups for TB. At regional level the women in mining associations have been provided a platform to engage with other actors on the regional and international field, oriented on mine health and safety standard operating procedures and on understanding their human rights and the effect of violations to these rights and capacitated on community led monitoring.

A SWOT analysis conducted indicated SADC WIMA is a registered legal entity (with a constitution) which augments on the recognitions of the association at different regional and national platforms. The regional organization has managed to support other countries to establish country-specific associations. In some countries, there are supportive, gender-based policies which encourage women's participation in various sectors including mining and foster economic empowerment among women, boosting household incomes and contributing to local economies. Furthermore, it was revealed that once engaged, women pose an excellent opportunity in supporting community-based interventions whether health related or economic empowering.

In order to improve the current situation of the women in the mining sector, the review identified several areas which include improving resource allocation which will be utilized to strengthen advocacy issues, access to build capacities such as trainings, access to financial support, implementation of crucial interventions (such as TB, Silicosis screenings), conducting community led monitoring interventions and running of the associations among others. There are opportunities for improvement through networking, sharing and exchange of experiences, strong collaborations which exists among the member associations, media as well as national governments and good cooperation from regional bodies such as SADC secretariat and ECSA-HC.

There are different stakeholders who can be engaged in collaborating with women in mining sectors and these are ranging from government entities, private sectors, mining companies, training institutions, CSO and intergovernmental institutions. These should be approached for possible collaboration aiming at improving the overall situation in engaging women in the mining sector.

While the review is appreciating a significant progress made in improving the situation of the women in the mining sector, there are still areas which need to be focused on and strengthened. There is a continued need to empower women in the mining sector to become more visible and to speak with one united voice to strengthen the level of engagement in the sector; stronger and continued engagement of women in health related issues such as TB programming; strengthen advocacy for their inclusion in policy reforms and policy development processes by working together with governments, NGOs/CSOs, regional and international bodies and the private sector to form a comprehensive, multi-stakeholder approach to addressing the challenges faced by women in the mining sector.

SADC Member States should strengthen SADC WIMA to promote the involvement of women in the mining sector in different platforms and fora, such as regional conferences, workshops, and knowledge-sharing initiatives. This will foster solidarity and the exchange of best practices across borders. The anticipated aim is to create an enabling environment where women can participate equally and equitably in the mining sector, improving their livelihoods, fostering inclusive economic growth, and reducing gender inequality in the industry.

Background

Introduction to the Mining Sector

The mining sector is a pivotal component of the global economy, responsible for the extraction of valuable minerals and materials from the earth. The mining sector encompasses all activities related to the extraction of mineral resources from the earth, including exploration, extraction, and processing. The mining sector is a foundational industry that supports economic growth, technological advancement, and material supply across the global economy. Among the benefits of the mining sector include significant contribution to the Gross Domestic Product (GDP) of the countries particularly those rich in natural resources generating revenues through exports and domestic sales. While the mining sector can improve economic status of countries, mining operations can lead to habitat destructions, pollution, and water resource depletion. Managing these effects is crucial for sustainable development. Generally, the mining sector is a complex and vital industry that drives economic growth, supplies essential materials, and faces significant challenges related to environmental and social impacts. Sustainable practices and technological advancements are becoming ever more important in shaping its future.

Despite its central role in global economic development, the sector employs a small number of women compared to men. Historically, women have been extensively involved in mining in different parts of the world, however, with the industrialization and mechanization of mining, they were gradually excluded from mining, as laws to protect women and children emerged.

Introduction to the TIMS III Project

The Tuberculosis in the Mining Sector in Southern Africa, Phase III project (TIMS III), is a Global Fund supported project focused on reducing the burden of Tuberculosis (TB) among the Key Population (KP), i.e. miners, ex-miners, their families, and the mining communities, in the Southern African Development Community (SADC) countries. The TIMS project was conceived as a result of a recognized need by SADC Heads of State and Government for a regionally coordinated response to the high burden of TB and other occupational lung diseases among miners, ex-miners and their families, peri-mining and labour-sending communities. Its implementation commenced in 2016 and ran up to December 2017 in Phase I. Phase II of the project ran from 2018 to 2020, and the current phase, TIMS III, began in 2021 and will run until December 2024. TIMS III focuses on strengthening regional coordination; promoting sustainability of interventions beyond the lifespan of the project through country level initiatives; gathering information for the purpose of advocacy, accountability and better prioritization for TB in the mining sector; supporting countries in strengthening specific aspects in the areas of mine health and safety (MHS), compensation systems, mainstreaming gender and human rights issues

into national TB programs and private sector engagement. Therefore, ECSA-HC has worked collaboratively with key stakeholders, including relevant government ministries, private sector, the KP, CSOs, regional and international partners to establish both national and regional multi sectoral mechanisms to advance TB in the Mining Sector initiatives.

This report reviews and documents the progress of the situation of women in mining as well as their level of engagement and participation at both national and regional levels. It also analyses the baseline assessment conducted in 2022 and the current status of SADC women in mining and its affiliates through review of available data and information. The recommendations obtained from this study will be used as the basis for policy actions and interventions that will address sustainability of interventions addressing issues of women in mining groups.

Women in the Mining Sector

While mining is a male-dominated industry, the presence of women working in mining companies and on mine sites in both large-scale mining and in artisanal and small-scale mining (ASM) operations is growing. Moreover, regardless of the form, the number of women in the mining sector has been steadily increasing over the last decade (Bank, 2022). This has been attributed to engagement of advocacy groups seeking to undertake training, mentorship, networking, and research to attract more women to the industry and retain those already working there (Kansake, 2021). Further, some mining companies are also committed to integrating gender equality, inclusion, and women's economic empowerment into aspects of their operations (Ofosu, 2022). Yet, traditional gender stereotypes and outdated legislation have excluded women from decent employment opportunities in the sector and from representation in decision making structures. Some women in the mining industry, especially in informal ASM operations, face unsafe working conditions and violence and harassment at work (Lauwo, 2018). In recent years, the benefits of greater inclusion of women and diversity in mining are increasingly recognized. Women are a significant and important composition of the key population (KP) and therefore making them one of the key stakeholders particularly under TIMS III interventions targeting removing of human rights and gender barriers. The mining industry in the SADC region has the potential to play a significant role in driving economic growth and reducing poverty. However, women in the region continue to face a range of barriers that limit their participation in the industry, including limited access to education and training, unequal pay, and limited opportunities for advancement. Additionally, the industry is known for its hazardous working conditions, which can adversely impact the health and safety of women.

The need to empower women and reach full gender equality in all spheres of life, including employment, is highlighted in the African Union's Agenda 2063. It is also part of the Africa Mining Vision and seen as a means to creating a sustainable and well governed

mining sector as well as a step towards fostering resilient ASM communities. In the ILO Abidjan Declaration, the African region commits to promoting social dialogue and ensuring gender equality.

The burden of TB in the SADC region

The burden of TB in the SADC region remains substantial, as reflected in the 2024 WHO Global TB report and the SADC TB report. In 2023, an estimated 2.5 million people fell ill with TB in the African region, which includes the SADC countries, accounting for a quarter of new TB cases worldwide (WHO Global TB report, 2024). Approximately 403,000 people died from TB in the African region in 2023, representing over 31% of global TB deaths. In 2023, the African region accounted for 23% of global TB cases and 31% of TB-related deaths, despite comprising only 15% of the global population. This highlights the disproportionate burden faced by the region. Within the SADC region, there are significant variations in the TB burden and progress such as South Africa, Kenya, Tanzania, and Zambia, having made substantial progress, with South Africa potentially reaching the 2025 milestone of the End TB Strategy. Multi-drug TB (MDR-TB) remains a significant public health concern in the Africa region, with an estimated 60,000 cases of rifampicin-resistant TB in 2023.

The mining industry often operates in areas where public health systems and control of communicable diseases are weak hence increasing the vulnerability to infectious disease such as Tuberculosis (TB). The mining sector is hardest hit by TB due to vulnerabilities caused by factors such as workers' exposure to silica dust, poor working and living conditions and a lack of TB prevention and education services. Added to these factors are others associated with migration such as a lack of social support structures and the inability to access or afford health services.

Although the main explanation for rising TB rates has been the growth of HIV, the persistence of TB in countries with low HIV prevalence suggests that TB transmission is related to other factors as well, such as late diagnosis and incomplete treatment, migration, and low socioeconomic status (itself associated with poor detection and treatment outcomes). One group at exceptionally high risk of TB is mineral miners. Many mineworkers are migrants, which may expose them to multiple TB risk factors, including poor housing, HIV, health care disruptions (despite the excellent tertiary health care available to the miners compared with the rest of the population), and low socioeconomic status. Their migration may also facilitate the transmission of TB to the general community.

Tuberculosis is amongst the challenges that the SADC region faces in reaching its vision. The 2024 SADC TB annual report shows that the TB burden in the African region has been declining but still remains high (figure below).

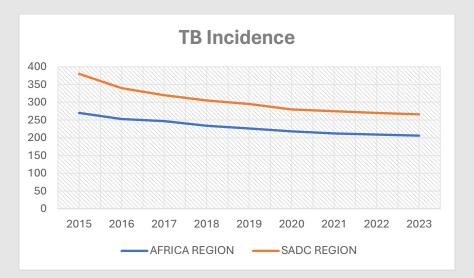


Figure 1: TB incidence Africa compared with the SADC region from 2016-2023

At the international level, Africa had the second largest number of people who developed TB (23%) after South East Asia (46%) as reported by the WHO in 2023. An estimated 1.9 million people fell ill with TB in the African region in 2023 (WHO Global TB report, 2024), and around 400 000 people died (around 31% of TB-related deaths, despite comprising only 15% of the global population) of the disease in the same year. TB continues to be a significant public health problem in the WHO African region, with an overall of the treatment coverage of 74% and TB case fatality ratio of 16%. Of the 1.9 M people who fell ill with TB, 36% were women among new and relapse cases.

The heavy burden of HIV in the region is reflected in the 19% of new TB cases that were reported among people living with HIV and AIDS. According to the WHO Global TB Report 2023, eight SADC Member States are on the list of high TB burden countries, while ten countries are among high TB/HIV burden countries, and six countries fall under the MDR/RR-TB high burden countries.

The total number of people with tuberculosis (TB) reported in the SADC region has shown a consistent increase from 747,283 in 2015 to 921,454 in 2023.

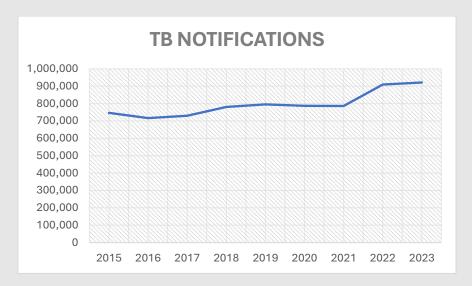


Figure 2: Trend of total TB notification in the SADC region by year

Despite this upward trend, a significant gap remains between TB notifications and the estimated total number of people with TB in the region. There are significant variations in the TB burden and progress such as South Africa, Kenya, Tanzania, and Zambia, having made substantial progress, with South Africa potentially reaching the 2025 milestone of the End TB Strategy. When the notifications are disaggregated by gender, we note a moderate increase in the number of males notified and a noticeable decline in the number of females notified in 2022 compared in 2023. For instance, 465,659 males and 327,521 females were notified in 2022, while 471,876 males and 325,243 females were notified in 2023.

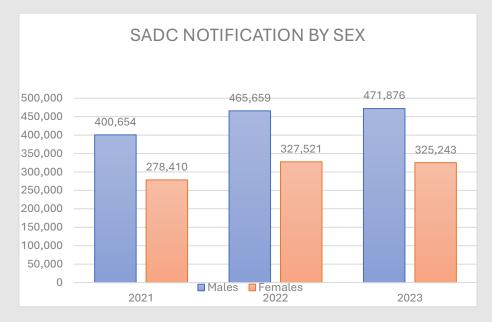


Figure 3: Notifications in the SADC region by sex

While the focus has been on finding more male patients, this may suggest reduced attention to TB detection among females. Sustained and increased attention is essential to finding TB in females, including pregnant women who are at increased risk of mortality and poor maternal outcomes.

The TB incidence among mineworkers in the SADC region is estimated at 2,500-3,000 cases per 100,000 individuals, which is 10 times higher than the WHO threshold for a health emergency and nearly three times the incidence rate in the general population. Approximately 89% of mineworkers are estimated to have latent TB infection. The mining industry in the SADC region heavily relies on migrant workers, with about 40% of the estimated 500,000 mineworkers in South Africa originating from neighboring countries such as Mozambique, Swaziland, and Lesotho.

Women in the SADC region can play a crucial role in reducing this burden and improving the TB response nationally and regionally due to various interconnected factors including:

- Enhanced Health education and awareness
- Increased participation in Health Initiatives
- Addressing social cultural barriers
- Economic empowerment
- Creation of support networks
- Involvement in policy development
- Addressing occupational health risks

For the SADC region to fully respond to TB and eliminate the disease by 2030 as per the ENDTB Strategy, engaging and capacitating SADC women in the mining sector is a critical strategic approach that will improve the overall effectiveness of the TB response whilst also responding to gender equity. Empowerment of women in mining in the region leads to better health outcomes, increased community resilience, and more robust advocacy for necessary health services.

Methodology

The review of progress of engaging women in the mining sector in the implementation of the interventions involved countries where TIMS III project was being implemented. These countries include Angola, Botswana, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Zambia, Zimbabwe and Tanzania. The review used multiple methodologies which included a desk and electronic dashboard reviews, country specific key informants and a regional consultative meeting with women representatives from mining groups in the SADC region.

Desk review of reports

Initially desk review was done on the existing literature on the mining sector, women in the mining sector and how the mining sector is affecting the wellness of women making them vulnerable to diseases such as Tuberculosis (TB) and other occupational lung diseases. The baseline assessment report which analysed the situation of existing capacities of women in the mining sector in 2022, provided an insight on the recommendations and action undertaken in the 2 years which formed the basis of the current assessment.

More information was gathered through reviewing various reports including the WHO Global TB report 2024, the 2024 SADC annual TB report and other activity reports which were tracking the progress of implementation of interventions of women in the mining sector in the SADC region. The global and regional TB reports provided a snapshot on the current performance of the SADC region in TB control while other reports provided information on the progress of the implementation of the planned interventions which were engaging women in the mining sector and the action plans.

A review of the SADC regional Dashboard for TB indicators was conducted to ascertain indicators which are responding to women in the mining sector.

Consultative workshop

Further inputs to this assessment report were gathered from the consultative workshop which examined the strengths, weaknesses, opportunities and threats of the progress of implementation of TIMS III interventions targeting women in the mining sector. The workshop instituted the focused group discussions (FGDs) to ascertain the SWOT analysis on the current situation of the progress in the implementation of TIMS interventions. The FGDs facilitated to get in depth knowledge on issues and challenges so as to identify steps to be taken to address the situation.

Country specific key informants

Moreover, key informants from each of the women association from the participating countries (national level) provided country progress updates as per guide below:

- 1. How the association has been engaged so far at country, regional and international level;
- 2. Highlight how the association has cascaded the information and learning to reach all the women in the association;
- 3. Identify any interventions or actions that were further spearheaded to increase capacity of women in mining in their countries

Findings

Current capacity and level of engagement status of women in mining groups

The baseline assessment was done in September 2022 with the main objective of establishing and/or building the capacity of a SADC regional platform for women in the mining sector through conducting a situational analysis of the existing capacity of women in mining groups at national and regional levels and capacitating them to ensure that their voices are always included in interventions or national strategic action plans, especially as pertains to health and safety for women in mining, compensation and access to health and other social services. Based on the findings, several recommendations were developed and aimed at how women can raise their voices through meaningful participation in women's mining organizations, women's groups, and women practitioners during the preparation of the national action plans focusing on gender equality and equity in the mining sector.

Generally, in order to strengthen women in mining groups in the region, it was recommended to empower them with to become more visible and come up with stories

of women who have excelled through mining to encourage more women to engage in the sector; support them to advocate for their inclusion in policy reforms and policy development processes; develop joint mentorship programs for them to implement together and these could include governance, advocacy, public speaking, fundraising, access to technology and marketing skills; and above all establish a 'Women in Mining Groups Fund' to support their activities and this Fund could be in form of a Basket Fund whereby their respective governments, donors and UN agencies could support.

This report reviewed and examined the progress and current status of each of the recommendation which was developed during the baseline assessment.

Legal and Institutional Capacity Development

While the findings from the baseline assessment indicated variation in registration, membership criteria and other aspects of capacities in the women in mining sector, specific recommendations were developed depending on the specific needs. Below is the table which shows the current status of the recommendations:

Baseline assessment recommendation

Current status

To support empowerment of women with more activities to become more visible and come up with stories of women who have excelled through mining to encourage more women to engage in the sector	There has been strengthening of the existing associations through different aspects of capacity building, establishment of new associations in member states where they did not exist before, participation in different fora and platform, increased visibility and representation in the industry by raising awareness and advocacy, bringing together women who work in the sector
Support the formation of women in mining groups in Lesotho, Eswatini, Mozambique and South Africa.	and allowing them to exchange experiences. There has been establishment of the Women in Mining groups in Lesotho (Lesotho Women in Mining Association - LEWIMA), Association of the Mozambican Women in Mining (AMWM), EWIMA in
Support the alignment of national constitutions of women in mining groups affiliated to Southern Africa Women in Mining Association, the regional platform.	Eswatini and Association of Women in Mining South Africa (AWIMSA) in South Africa All SADC WIMA affiliates are currently required to align their national constitutions with the regional SADC WIMA constitution prior to affiliation.
Facilitate the Southern Africa Women in Mining to change the name to 'SADC Women in Mining (SADC WIM)' through re-drafting their Constitution and reregistering the organization. Strengthen the SADC Women in Mining by	A SADC Women in Mining Association (SADC WIMA) constitution was re-drafted and signed by all affiliated members accordingly in 2023 and association was registered in Botswana. SADC WIMA introduced the SADC
supporting their affiliation to the regional economic community, the Southern African Development Community (SADC). Support women in mining groups to use	A draft SADC WIMA infloduced the SADC secretariat accordingly and engagements are at an early stage.
the Africa mining vision and SADC protocol in developing regional vision cascading from that to national level. Support the formation of committees within SADC WIMA to support specific categories of women in mining within the	developed in 2024 but more support is required to finalize this document and align to broader instruments
organization. Strengthen the capacity of women in mining groups at national level by conducting various trainings on: a) Right to compensation. b) Social protection requirements e.g.,	At regional level 2 workshops have been conducted by ECSA-HC on mine health and safety standard operating procedures and on understanding their human rights and the effect of violations to these rights.

health insurance. c) How to acquire legal licenses/permit for mining and related activities. d) Understanding their human rights and the effect of violations to these rights.	SADC WIMA has started conducting webinars through their digital platform and supports any affiliates that need the platform. AT national level, various organizations have reported conducting training and awareness workshops accordingly. This is work that requires continuous support
Advocate for the establishment of a gender desk in the ministries of mining (where it does not exist) such as Botswana, Malawi, Mozambique and Zimbabwe, to address issues affecting women in mining and serve as a point of contact.	There is no record of engagements made under this section.
Advocate for policy change for formalization of Artisanal and Small- scale Mining (ASM) in countries such as Botswana and Zambia and clearly define categories/sectors of women in mining to ensure that no one is being left behind.	A regional ASM task force was developed to spearhead the process of establishing a permanent ASM structure. This platform is gender inclusive and is anticipated to lead this process.
Advocate for inclusion of ASM miners into national health and safety schemes by providing financial support to SADC Women in Mining Association (SADC WIMA) to support their members to get group health and safety schemes.	At regional level, this could not be supported under the project due to a lack of resources
Support national women in mining associations to advocate for their inclusion in policy reform issues and other policy development structures.	A number of associations have been supported to do this i.e. Mozambique, Lesotho, South Africa, Botswana and Madagascar

National Level Analysis

The following is the status update from the various national women in mining associations on capacity and level of engagement. This is the status as of September 2024.

Angola

Between July 2023 and July 2024, the Angola Association of Women in Geoscience (AAMG) has been actively participating in various national, regional, and international activities. In general, the associated is dedicated to learning about and advocating for the integration of women in the field of geoscience, as well as promoting safe and healthy

working conditions during their activities. Some of the significant activities organized and attended by the association, included attending experience sharing avenues such as conference and capacity building platforms such as workshops, trainings etc. These avenues provided an opportunity of the association to be exposed more on the issues related to the mining sector and also increased their visibility to key stakeholders. Participating in TIMS workshops provided Angola Association of Women in Geoscience (AAMG) with numerous benefits such as:

- Increased awareness and practical experience regarding occupational diseases and related matters that affect the Southern Africa Mining Industry;
- Opportunities to network, share, gain, and strengthen partnerships; Exposure to new ideas and perspectives;
- Reshaping and improving previously established and future strategies and objectives;
- Motivation to actively contribute to addressing social and professional health and safety issues in the mining sector, while also considering gender patterns.

Challenges

- Angola has a large mining sector that includes a wide variety of minerals such as diamonds, gold, iron, and copper. The country is the world's sixth largest diamond producer, with over 50 diamond mining sites, indicating the potential for a significant number of people to be affected by occupational mining diseases.
- 2. The Ministry of Health has statistics (including statistics and gender-based study cases) as well as standard operational procedures (SOP's) ready to be implemented, related to tuberculosis, silicosis, and other lung-related diseases in the mining sector. However, AAMG to access the aforementioned information, requires a formal acknowledgment by the key stakeholders and partners. AAMG is still awaiting this partnership to be materialized so that it can work together on new strategies for mapping, controlling, and eradicating TB and silicosis in the Angolan Mining Sector.
- **3.** The need for securing funds for some plans to be put in practice. In terms of private initiatives, efforts are being made to identify key stakeholders who are combating TB within the country.

At national level, AAMG works closely in connection with various national key partners and continuously seeks potential collaboration and partnership with key stakeholders in the mining sector, for human rights advocacy, from the health sector and civil society. Because occupational diseases in the mining sector have become one of AAMG's priorities. A request to become a recognized member of the working group for TIMS project implementation in Angola was accepted by the national TB Programme. It is envisioned that participating in this platform will enhance integration of association activities in the technical working group overall agenda. AAMG has cascaded the information and learning to reach all the women in the association through a practice of urging members to present reports after participating in meetings. These reports are consequently shared with others so that every member is equally educated in relation to every topic. AAMG as a women's association understands that its role goes far beyond the mining sector, it has a social-based approach. That is, to capacitate women so that the families can be efficiently impacted.

Going forward, AAMG intends to work on its action plan to accommodate the following TB and silicosis initiatives:

- Enlarge the list of key stakeholders on mining occupational diseases, based on the insights gathered from the previous experiences and continuously engaging with them to create a more integrative approach environment;
- mobilize funds from potential stakeholders (Nationally-private companies, government and civil society/ internationally-Stop TB partnerships, UNDP, CCM, etc.);
- Capacitate Association's women to support the activities on TB and silicosis through trainings and workshops;
- Start sensitization campaigns to Communities, ASM, mining companies;
- Request ECSA-HC for technical support and Investigate CCM rubrics for lung related-diseases.
- Continuously seeking partnerships with key stakeholders to advocate massively about TB, Silicosis, and other lung-related diseases among the mining industry and surrounding communities in Angola.

TIMS III project has had a significant impact on the association, helping it to move forward and become more conscious of its mission to fight TB and Silicosis. Despite the challenges, the support from the government ministries (Ministry of Mineral Resources and Ministry of Health) and other partners will enable the association to continue making progress.

Botswana

Botswana's participation in TIMS III project started in October 2022, after being represented by representatives from Women in Mining in Botswana Organisation (WiMBO), at a regional consultative meeting held by ECSA-HC in South Africa. WiMBO has since participated in several workshops and meetings held across the region. Notably, the association has participated in conferences such as the international conference of the African Association of Women in Geosciences, Annual Women in Mining conference, Botswana Mining, Energy and Exhibition (BME) Conference and many more others. This has enhanced sharing of experience, learning opportunities and importantly, increased the visibility of the association.

WiMBO has engaged and worked closely with partners such as UNDP Botswana, and also participated in HIV and TB CSO and community GC-7 grant making consultative meeting. The association also participated in the review meeting on progress made in the implementation of Country Specific Action Plan aimed at strengthening Mine Health and Safety (MHS) in the region.

The association was included as one of the implementers of the **OneImpact** CLM platform hosted by BONELA. They took part in the training and orientation of the electronic app to be used to monitor TB challenges and human rights violations as social determinants of health for key populations in Botswana, sponsored by the TIMS project. The participation was envisaged to be part of sustainability on the strengthening the utilization of the tool. **OneImpact** is the digital tool that enables people with TB to connect with peers, access TB services and information and report problems and challenges faced while on TB treatment. It also enables national TB programs and other health frameworks to gain access to reliable data that helps them understand the need of the people affected by TB which in turn informs services delivery and improves the national TB response.

Following these engagements and encounters, the association has managed to cascade the information and learnings to members by sharing the verbal and written reports with WiMBO Executive Committee members. Going forward, WiMBO plans to have webinars on a regular basis during which members will be given updates.

To increase the capacity of women in mining in Botswana, WiMBO has ensured that workshops and meetings opportunities are availed to members whenever they are available.

Democratic Republic of Congo (DRC)

National Women's Network in the Mines-Réseau National des Femmes dans les Mines (RENAFEM) is an overall structure at national level legally recognized and registered in the country. The association has been engaged at country, regional and international levels and participates in various activities such as workshops and meetings which exposed them to sharing of experiences and learning from other associations in the region. In addition, these engagements have widened the network and increased the associations' works visibility.

The meeting and workshops have provided an opportunity for the association and other organizations supporting women in the mining sector in the SADC region to meet and discuss the implementation of mining plans, actions plans, and policy advocacy.

The association faces a number of challenges such as:

- political situation (post-election situation, change of government, waiting to resume contacts and persistence of insecurity in the east part of the country). This has resulted in non-implementation of the TIMS project activities
- lack of government or partner support (National Government, provincial governments, implementing partners and donors);

The association has the following prospectives for the future:

- Continue partnering efforts and working closely with the government through RENAFEM;
- Strengthen the partnership with SADC-WIMA in the sub-region and in the country;
- Continue to map partners and strengthen resource mobilization activities

Eswatini

Eswatini Women in Mining Association (EWIMA) is a newly established structure in 2024, that was established through implementation of TIMS III; hence the association has been keen to learn more from their peers and from the project.

The association has been engaged so far at country, regional and international level in different ways. The newly established team has begun courtesy visits to introduce the association to the line portfolios in the Government Ministries: The Deputy Prime Ministers Office (DPMo) under the Gender Department; the Ministry of Natural Resources and Energy; Ministry of Economic Planning; Ministry of Health; Ministry of labor and Employment; and Ministry of Education.

EWIMA has also held a WhatsApp call meeting and invited the SADC WIMA Chair and Treasurer from Lesotho. The meeting was well attended and members were pleased to be informed of so many things that they can do in the mining sector and a total of 5 EWIMA meetings have been held since their establishment, both physical and virtual in total. Regarding TB in Mining sector, EWIMA is planning for webinars and workshops, but funding remains a challenge.

The association is strategizing on ways to mobilize resources, in and out of the country so that it can sustain its administration and implementation of activities. The Deputy Prime Ministers office, Gender Department Director, has pledged her ministerial support to host EWIMA's first workshop for developing the Association's 5 years Strategic Plan and put in place other organizational policy documents that will encourage the government and policy makers to realize and positively shift attention to support and adopt policies that promote the inclusion of women in spaces that are male dominated.

Despite funding being the main challenge, the association continues to seek financial support to do the following:

• collect data of females affected by TB in the mines, communities, and relatives;

- promote improved women access to health care through TB case finding outreach activities;
- making it known to current female mine workers on the availability of Occupational Health services to ensure appropriate screening, health and support services provided in operational centers;
- collect data of the number of females who work in the mining companies in the country and
- mobilize funding for implementation of TB, silicosis, and other respiratory diseases interventions.

Lesotho

Lesotho Women in Mining Association (LEWIMA) was also established under the implementation of TIMS III in 2023 and has been actively participating in various activities focused on TB in mining and communities. The primary goal of these activities is to increase awareness and understanding of TB and silicosis as significant occupational health issues in the mining industry, especially affecting women in mining and mining communities. The key learnings for these sessions were to reduce TB among miners, exminers, their families, and mining communities in SADC countries.

The association has conducted the following activities at national level:

- Mine site visits (Lekokoaneng sandstone mines) whereby several challenges were shared. These included PPE which were outdated and uncomfortable, leading to inconsistent use; respiratory health issues due to dust exposure, combined with a lack of regular health monitoring, increases the risk of respiratory diseases like TB; physical strain due to manual lifting of heavy sandstone blocks and this has led to widespread complaints of back pain and musculoskeletal disorders; and the need for more comprehensive health and safety training, noting that the limited existing training is insufficient to protect them from workplace hazards.
- Assisted and guided ex-miners, widows and dependents affected by TB and Silicosis in getting compensation e.g. (Tshiamiso Trust); and Mining Indaba Khotla (Lesotho).
- LEWIMA plays a significant role in supporting Women in Mining and the community through interventions and actions, such as economic empowerment where it supports women miners by advocating for safer working conditions and access to financial resources as well as linking them with relevant Ministries and other stakeholders;
- Enhancing the skills of women miners through training on sustainable mining practices and health and safety protocols.

Regionally, the LEWIMA chairperson gave support to Eswatini Women in Mining Association (EWIMA) and was instrumental in the formulation of its strategic objectives;

participated in the Women in Mining Pitso hosted by Women in Mining Botswana Organization (WIMBO) and together with the secretary participated in meeting aimed to bring various key stakeholders in ASM and establish a regional platform to share progress and reports on ending TB in the region and developed the SADC regional report.

Internationally, LEWIMA has made considerable progress in making international networks and has met with the Chairperson of American Women in Mining Association to strengthen its collaboration and partnerships.

The association has noted challenges which are impairing the smooth implementation of interventions aiming at improving the situation of women in the mining sector in Lesotho. These include:

- Limited resources which have constrained its ability to conduct TB screenings and other activities.
- Limited access to care: far distances to health facilities makes it difficult for some women and their families to access health care.
- Lack of and delays in compensation for widows of Ex-Miners affected by TB & silicosis due to the lack of proper documentation e.g. (death certificates) and inefficiencies at Sankatana Medical Bureau for Occupational Diseases (MBOD);
- Licensing Delays, that despite significant interest from over 200 women in obtaining small-scale mining licenses, the Ministry of Natural Resources has not yet processed these applications, delaying their ability to start operations;
- Funding constraints which hamper its overall mission to implement widespread health and safety initiatives and lack of political will from government in implementing interventions and review of policies hinders progress.

Malawi

The Federation of Women & Youth in Malawi (FWYM) has been engaged at country, regional and international level in different ways:

- The association mobilized ASM and sensitized them on TB and Silicosis in the mines and surrounding communities using their own resources;
- Established collaboration with Ministry of Health, National TB Programme;
- Sensitized women associations on health and safety issues in several mines and communities surrounding mines;
- Continued to strengthen the capacity of women in mining, by raising their awareness on occupational lung diseases, mine health and safety, gender-based violence and economic empowerment.

However, the association has acknowledged that there are several gaps that can hinder progress in these areas. These include: knowledge and awareness gaps, limited access to education and training, cultural barriers, in some communities language and literacy

barriers, inadequate representation in decision-making, mine health and safety gaps, insufficient gender-specific health policies, lack of personal protective equipment (PPE) designed for women, inadequate health facilities, economic empowerment gaps, limited access to financial resources, employment discrimination, lack of support for entrepreneurship, social support gaps, insufficient childcare and family support, social stigma and gender based violence, limited community engagement, policy and institutional gaps, weak enforcement of regulations, lack of integrated approaches, and inadequate data and research.

Thus, addressing these gaps requires a multi-faceted approach that includes education and training, policy reform, multisectoral engagement, and investment in infrastructure and support services tailored to the needs of women in mining communities.

Mozambique

Association of the Mozambican Women in Mining (AMWIM) is also another association whose formal establishment and registration was done under the implementation of TIMS III project in 2023. AMWIM acknowledges that, Mozambique has 229,680 ASM operators, whereby 11.7% are women, which represents 26,872.56. ASM is a sector with alarming level of injuries and diseases. Women suffer for 1 to 5 occupational lung diseases and widows need to be supported with compensation related to the deaths of their mining husbands who died of TB and silicosis, 50% poisoned by mercury. Besides all the challenges, women in mining are still considered as a new concept in Mozambique and therefore still requires a lot of engagement with various national stakeholders for endorsement and support in advocacy.

Since the association was established, it has been able to conduct activities which are essentially aiming at raising awareness and advocacy, participating in meetings, workshops and conferences for experience sharing, engaged in reviewing policies and guidelines for instance mine health and safety SOPs.

The association has been engaged at country, regional and international levels in different ways:

- Advocacy: through mass media approach, the association conducted advocacy for Women in Mining through TV and advocated for support from the Government for an office, and as a result it was granted an office;
- Collaboration with partners: The association worked closely with IOM and the National Directorate of Occupational Health (Mozambique) to conduct a health fair in the mines in Gile and Nhamizi districts – Mozambique;
- Participation in meetings and workshops: Participated different forums aiming at strengthening the response against Tuberculosis through Community-Led Monitoring, sensitization of ASMs on occupation diseases, etc;

Resource mobilization approaches: Established partnerships with UNDP, USAID, Foundation of Community Development

The association needs funds for awareness raising in: combating TB, Silicosis, Health and Safety Occupational training and instruction; Gender Based Violence awareness; screenings for occupation diseases; and environmentally sustainable mining.

Namibia

The Value Minerals & Mining Velin Association was established in 2022 to strengthen the socio-economic status of the indigenous communities, women and young people in Namibia and to offer scholarships to the young people to go and further their education and come back to invest in the mining sector. Its target population is women in the mining sector and women having business in mining sector in Namibia.

Namibia is a high TB burden country which ranks 11th in incidence rate and misses 25% of TB patients annually. The mining activities are generally known as high-risk settings for TB disease and transmission and there is neither background prevalence/incidence of TB in the mining sector, nor documented prevalence of silicosis and there are inconsistent screening practices.

The challenges in the sector include the gap knowledge of true TB burden in the mining sector (prevalence/incidence), lack of standardized screening methodologies and tools used in the mining sector, lack of formal Occupational Safety and Health Institute in the country, lack of systematic surveillance & data sharing, gaps in post-employment follow-up, lack of formal program for post-TB lung disease and the fact that the ASMs remain underserved.

This calls for the need to strengthen screening for TB in the mining sector, including Artisanal and Small-Scale Miners; develop an updated TB Research Agenda that includes TB in the Mining Sector; continue the Multi-Stakeholder Committee for TIMS; strengthen surveillance for TB, Silicosis, and other occupational lung diseases; develop an OSH policy and develop an OSH Institute in the long term.

In implementing its workplan, the association is coordinating with the Chamber members' medical surveillance providers. It jointly developed standardized tools for TB screening which are ready for implementation. The association plans to work on quarterly reports and reviews like safety statistics, then do the data collection, integration, sharing and reporting for TB screening in the Mines. The association is planning to conduct a two phased baseline survey to determine inherent risk of TB in the mining sector in Namibia, and has planned for finalization and sign-off of the Mine Health and Safety Standard Operating Procedures by the Line Ministry Executive Directors.

At the country, regional and international levels, the association has been engaged in activities that include:

- To give scholarships to young men and women to promote their participation in mining sector;
- To support ex-miners' wives and children and people working in the mines; collaborate with the Namibian Government-specifically Ministry of Health and Social Services to implement the adopted generic Mine Health and safety Standard Operating Procedures
- To advocate increase the participation of women and youth in the mining sectors since women constitute 21% participation in this sector. Its target groups are mine workers, artisanal and small-scale miners, ex-miners, selected residential areas and fish factories.
- Focused community TB systematic screening activities and community-based campaigns which were aiming at increasing awareness on TB issues
- Incorporated TB/OLDs in the mines as a permanent agenda of the Chamber Health and Safety Committee's quarterly review meetings;
- Chamber Health and Safety Committee agreed to adopt the Ministry of Health and Social Services National Tuberculosis and Leprosy Program (NTLP) TB screening protocols to standardize across sectors;

Mine Health and Safety Standard Operating Procedures drafted in 2023 ready for sign off by line ministers and Occupational Safety and Health Bill in progress to be approved.

United Republic of Tanzania

Tanzania Women in Mining Association (TAWOMA) was established in 1997 with 22 members and in a course of 26 years TAWOMA has managed to register more than 7000 women miners across the country. These are active members that are mining various types of minerals and gemstones, and women working in mineral value additional.

In Tanzania, many mines are in rural areas and a major challenge for majority of members is access to reliable information on vital matters such as health and safety issues in mine sites. The government has been putting efforts in providing education but due to limited resources and considering the increasing population, these efforts are hardly producing significant results.

The presence of the SADC Women in Mining Association (SADC WIMA) is a liberation for TAWOMA as its members have benefited from the training provided because TB, Silicosis and other diseases caused by dust have been a constant problem to members. Through the training provided by ECSA-HC through TIMS III implementation, TAWOMA has managed to:

- Convey the knowledge to members throughout the country;
- Develop a booklet on mining and health which will be distributed to women mines and provide education on those vital issues;

• Train and enforce the use of personal protective measures (PPE) when working in mining sites and crushing pebbles;

TAWOMA still faces challenges of accessing the right PPE especially face masks, therefore recommended to members to use sewed cloth masks and emphasized cleanliness including washing and drying of the cloth masks immediately after using them. ECSA-HC through SADC WIMA has made all these possible by equipping the association with skills and knowledge on the importance of protecting members against diseases.

To ensure the education obtained is sustainable and that the members' lives are protected, the association plans to increase the number of stakeholders to work with, such as the Ministry of Health, as this cooperation will capacitate TAWOMA to serve its members efficiently.

As an institution, the request made to the SADC WIMA is to continue strengthening the capacity of the members through trainings, technical and financial support so that they became one of the strongest institutions.

TAWOMA appreciated SADC Women in Mining Association (SADC WIMA) for the opportunity and promised an effective cooperation and invited the regional body to Tanzania to see the contribution and impact it has brought to TAWOMA members through health and safety education.

Zambia

The Association of Zambian Women in Mining (AZWIM) shared a review and progress of women in mining with the support of TIMS III. Due to the structure of the mining sector, it has been difficult for many activities in Zambia to be implemented. Nevertheless, AZWIM is currently actively involved in ensuring that Occupational, Health, and Safety regulations are strictly adhered to.

The association in Zambia has been engaged at different levels and the following are the activities which have been implemented:

- Visits to individual and cooperatives, whereby statistics in Zambia show that there are more women in Artisanal Mining Sector than men. The women require education on proper mining methods and handling of the different types of minerals they are extracting i.e. Tin, Beryl, Silica etc;
- Worked closely with the Ministry of Health and Ministry of Labor to ensure that the TIMS program is used in the sensitization and carrying out of awareness programs of Tuberculosis (TB) in the mining sector as well as economic empowerment and social support;
- Supported establishment of 53 co-operatives and assisting in the acquisition of Artisanal Mining Licenses;

- Supported Identification of an investor who has partnered with 39 co-operatives;
- Engaged with the University of Zambia School of mines in order for them to assist to train the association members in basic geology and mineral identification, mine development, environmental degradation, afforestation, land reclamation;
- Engaged with CITAMPLUS, one of the CSOs that supported the TIMS III implementation of CLM, and have started working together.

AZWIM intends to fully engage with key stakeholders at the national level to implement activities which include;

- increase the visibility of TIMS using the outreach programs that AZWIM is undertaking in all the regions at the country level;
- enhance Occupational Health and Safety procedures nationally;
- promote establishment of mobile Silicosis clinics for screening of Silicosis, TB and other related occupational lung diseases;
- carry out more capacity building programs such as: Entrepreneurship, Mine development, Mineral Identification, Basic geological knowledge, First Aid training, and Importance of Protective Clothing in Mining.
- Strengthen collaborative efforts and linkages with key stakeholders such as United Nations International Labor Organization (ILO), United Nations Development Program (UNDP), Government ministries etc.

Zimbabwe

Zimbabwe Association of Women in Mining Associations (ZAWIMA) is an association that brings together women mining associations drawn from 8 mining provinces of Zimbabwe. The registered membership currently stands at twenty thousand (20,000) women ranging from unregistered artisanal miners to formally registered small-scale miners in this male dominated industry.

In reviewing its progress, the association has been engaged at country, regional and international level in multifaced ways. It has managed to:

- Cultivate a national network of companies, organizations and individuals who share a vision for the future of the mining sector in Zimbabwe;
- Stand united in solidarity to raise awareness about Tuberculosis and prioritize women's health and well-being and pledged to support women in mining in accessing healthcare services,
- Promote safe working conditions and advocating for better resources to combat TB to make a difference and create a healthier future for all;
- Created a strategic document whose aim is to promote safety and health for women in mining;

- with the support of ECSA consultant, reviewed and updated Mine Health and Safety Standard Operating Procedures and conducted a sensitization workshop at the regional level to adopt them to suit the realities of the country and this included other stakeholders in the mining sector.
- Conducted mine site visits (Matabeleland North and Southern provinces) and provided occupational health technical support

Furthermore, ZAWIMA has received a grant under the program of Health and Safety of Women and Girls in Mine Sites which will further enhance awareness programs. The association is also participating in TB processes such as the UNHLM 2023 Country consultative preparations, CRG processes, and ongoing Stigma and Key and Vulnerable Populations Assessment processes through the Stop TB Partnership Zimbabwe.

The association's main challenge is funding. The multidisciplinary approach in support and supervision of the effects of TB in the country requires funding and this activity could not be implemented at national level.

Regional Level Analysis

The respective SADC WIMA associations have been engaged in different aspects from technical to policy formulation. In addition, the associations have been very active in advocating for different issues which are related to women in the mining sector and their overall welfare.

Engagement in TB programmatic issues

Most of the associations have been engaged in raising awareness on health issues related to mining sector which among others, essentially screening for Tuberculosis, Silicosis and other occupational lung diseases. For instance, in Malawi and Zambia the associations worked closely with the Ministry of Health TB section and mobilized ASM and sensitized them on TB and Silicosis in the mines and surrounding communities using their own resources; and sensitize women associations on health and safety issues in several mines and communities surrounding mines. In other countries, the associations have been engaged in conducting TB screening exercises, supporting referrals for the people presumed to have TB disease, assessment of the working conditions at the mine sites etc.

In Madagascar plans are there for the association to partner with the small-scale mining federations and conduct sensitization workshops on TB and silicosis in small scale mining workplaces; Influence and integrate TB and silicosis issues as occupational disease in associations' member workplaces in partnership with the mining chambers and reinforce the participation of the association as a consultative member for all initiatives on TB and silicosis.

In Namibia, the association worked closely with the Chamber of Mines members' medical surveillance providers to develop standardized tools for TB screening. The association plans to conduct baseline survey to determine the prevalence and risk of TB in the mining sector in Namibia. Furthermore, the association has achieved to make issues of Tuberculosis and other occupational lung diseases in the mines to be a permanent agenda of the Chamber Health and Safety Committee's quarterly review meetings.

Policy and technical issues engagement

In order for policies to have good outcomes and impact, they need to be inclusive and gender-sensitive. This can be appreciated by ensuring women are included in key policymaking and regulatory bodies within the mining sector. This could involve appointing women to national and regional mining committees and regulatory boards. In addition, more advocacy is needed for the creation of policies that recognize and address the unique challenges faced by women in the mining sector, such as safety concerns, harassment, access to finance, and childcare.

In some countries such as Zimbabwe and Namibia, the associations participated in either developing, reviewing and/or updating Mine Health and Safety standard operating procedures and issues related to women's health and safety in mining sector were addressed. The association also facilitated adoption and approval by the relevant Ministries.

Furthermore, In Madagascar the association has worked closely with respective ministries in development of the draft on Patients' Rights chatter and aimed at not only defining and protecting the rights of TB patients but also addressing women's and gender related issues.

Capacity building engagement

There are numerous ways to build capacities essentially in the mining sector depending on the context. Skill development which entails specialized training programs in mining technologies, data analysis, environmental management, and safety protocols can be utilized to enhance women's technical skills and equip them for leadership roles. Moreover, the mentorship opportunities between experienced mining professionals and young women can offer hands-on experience in mining operations, providing women with the tools to excel in technical roles.

In this review, it has been shown that building capacities has been a cornerstone of most of the associations' activities. One aspect has been the associations being trained in/oriented on different issues including awareness on tuberculosis and other occupational lung diseases. The other aspect has been in cascading the information and learning to reach all the women in the associations by conducting meeting and orientation sessions which included key population organizations as experienced in Zimbabwe whereby organizations such as Women in Mining representatives, Artisanal and Small-Scale Mining representatives, representatives from various mining associations, Zimbabwe Mining Federation, and others participated in developing the standard operating procedures (SOP) on safety.

For sustainability, the associations have been oriented on the utilization of the CLM tool. This tool is designed to equip communities to better understand the TB screening and diagnostic services they receive; to identify gaps in the availability of tools, services, and care delivered; and to translate findings into evidence-based advocacy.

In collaboration and working closely with other entities, In Zambia the association has engaged the University of Zambia School of mines in order for them to assist to train the association members in basic geology and mineral identification, mine development, environmental degradation, afforestation, land reclamation.

Engagement in advocating different issues related to women in mining

The review indicates most of the associations have been involved in advocacy matters pertaining women in the mining sector especially those issues related to accessing healthcare services, prevention of TB, silicosis and other occupational lung diseases, promoting safe working conditions and advocating for more resources to combat TB and other occupational lung diseases.

- I. Sensitization of the communities on TB and silicosis prevention
 - Most of the associations have been engaged in sensitizing the community on TB and silicosis prevention including safe working areas at the workplace, correct use of personal protective equipment etc. This has been made possible through different approaches including mass media, mine site visits, presentations at different platforms etc.
- II. Resource mobilization for TB response

The associations have been engaged in mapping and collaborating with key stakeholder who can support financially the TB response in respective countries. As the TB response is a multifaced approach, different key partners and stakeholders have been engaged to support some aspect of the TB response through women in the mining sector initiatives,

III. Economic empowerment of women in the mining sector

Some associations have managed to advocate different approaches in strengthening economic status of the women involved in the mining sector through promotion of the cooperative societies. In Lesotho, the association has been at the forefront in advocating for the economic empowerment through supporting women miners, safer working conditions and access to financial resources as well as linking them with relevant Ministries and other stakeholders.

IV. Collaborative efforts and integration

In order to appreciate the efforts towards inclusion of women in all mining activities to have positive impact, the associations have demonstrated collaboration with key stakeholders to be an important aspect in bringing the change in the community. In Angola, the association has been involved in advocating for the integration of women in the field of geoscience, as well as promoting safe and healthy working conditions during their activities. Through engagement of public sector, the association in Eswatini has managed to get a ministerial support to host the associations' first workshop for developing a 5-year strategic plan and put in place other organizational policy documents that will encourage the government and policy makers to realize and positively shift attention to support and adopt policies that promote the inclusion of women in spaces that are male dominated. This approach has increased the visibility of the associations making them possible to be acknowledged and appreciated.

Generally, the associations have been engaged in capacity building initiatives. Furthermore, the associations have been involved in different meetings and workshops where they were oriented on issues such as framework for community led monitoring for TB issues, sensitization on screening of TB, silicosis and other occupational lung diseases to artisanal and small-scale miners.

At the regional level, much has been done in the way of establishment of a constitution to guide the associations and ensure they speak with one united voice, establishment of an executive committee, development of a various committees on issues that require regional prioritization, regional capacity building initiatives such as trainings on human rights evidence-based advocacy, policy dialogue and programming, Efforts to secure more collaborations at regional level are underway. SADC WIMA has an opportunity to create a more inclusive and sustainable mining sector that benefits from the full participation of women at technical, policy formulation and advocacy levels. This not only contributes to economic growth but also fosters gender equality and empowerment across the SADC region.

Strengths, Weakness, Opportunities and Threats of the SADC Women in Mining Association (SADC WIMA)

Strengths:

- SADC WIMA is a legal entity with a guiding constitution
- Coverage: As a regional platform for women in mining, SADC WIMA has managed to reach 16 Countries with 13 Women in Mining Associations (affiliated) from Angola, the Republic of Botswana, the DRC (online), the Kingdom of Eswatini, Lesotho, Madagascar, Malawi, Namibia, Mozambique, South Africa, United Republic of Tanzania, Zambia, and Zimbabwe. During the implementation of the TIMS-III project, total of 4 new associations from South Africa, Eswatini, Mozambique and Lesotho were established.
- Members of this regional platform have managed to participate fully in the TB response including programming in their countries. This creates an opportunity for the national TB programs to engage the associations in the overall TB response and involvement in the control of other occupational lung diseases such as silicosis
- Capacity Building: SADC WIMA has provided trainings and orientation sessions to members of each association on different areas such as advocacy skills from TIMS, encouraged transparency and collaboration for all members.
- Diversity and Inclusion: Engaging women in the mining sector enhances diversity, which is critical for fostering innovation and creativity. Diverse teams have been shown to perform better, as they bring varied perspectives and experiences that can lead to more effective problem-solving and decision-making.
- Mapping of stakeholders: Both the national associations and SADC WIMA have managed to map different stakeholders who can support different planned interventions.
- Supportive policies: Many SADC member states are adopting genderresponsive policies that encourage women's participation in various sectors including mining.
- Economic empowerment: members of these associations are owning mines and employing other women hence participating in boosting household incomes and contribute to local economies. In some of the associations, they are promoting cooperative society groups which essentially are aiming at improving the economic empowerment to women in the mining sector.

Weaknesses:

- Misrepresentation of women in mining in countries, most of them are not well represented and there is a lack of feedback mechanism to allow continuity. Traditional gender roles and societal norms may discourage women from pursuing careers in mining.
- Inadequate funding due to lack of inclusion in national strategic documents. This would have facilitated the associations to apply for funding through strategic interventions
- Inadequate promotion and empowerment to women in mining due to lack of resources. It is challenging to run the administration of the association and manage diseases such as TB and Silicosis etc. In addition, insufficient access to training, funding, and resources can hinder women's entry and advancement in the industry.
- Insufficient visibility and advocacy of SADC WIMA due to lack of recognition from SADC secretariat
- Very limited research works done (in some aspect, lack of data) which would inform SADC WIMA programming
- lack of information sharing locally (reporting);
- lack of equal distribution of resources in the region and weak collaboration amongst the associations at times.

Opportunities:

- There is a great chance of networking and exchange of experience between SADC countries so as to enhance their works and increase chances for funding the planned interventions. It can collaborate with international women's networks, other sectors where women are involved (e.g. engineering, construction) and strengthen male associations as allies and capacitate leadership of national and regional women in mining associations.
- There is a perceived strong collaboration with partners and other stakeholders who can eventually support priority interventions for SADC WIMA
- Being a regional platform, sharing of information and expertise as well as shared resources can be appreciated as the associations are working under one umbrella. Additionally, it can be used to share expertise and knowledge on women and mining to other associations outside the region;
- Existence of good cooperation and collaboration from the SADC Secretariat creates an excellent buy-in which can allow associations to influence policies in their respective countries
- Global Trends and Support: There is a growing global recognition of the importance of gender equality in all sectors, including mining. International organizations and initiatives focused on women's empowerment can provide funding, resources, and a supportive framework for engaging women in the industry.
- Leadership Roles: the review has showed that encouraging women to take on leadership positions can inspire others and create role models in the mining sector.

• Availability and utilization of different social media and digital platforms (posting, sharing, commenting) to showcase the work hence attracting funders and investors

Threats:

- Inadequate data collection (for instance those of artisanal and small-scale miners) which might pose a risk of important interventions not to be supported due to lack of accurate data and information
- Resistance to Change: The review noted that existing male-dominated structures within the mining industry may resist the inclusion of women, leading to workplace challenges such as discrimination, harassment, and a lack of support for women employees. This resistance can perpetuate gender inequality and discourage women from pursuing careers in mining.
- Market competition and economic instability which creates difficulties for women to have access to the mines as they often lack access to finance and face economic barriers and thus cannot compete fairly in the market, for instance, if there is no local leadership engagement, disproportionately affecting women.

The SWOT analysis of SADC WIMA has highlighted the multifaceted aspects of engaging women in the mining sector within the SADC region, emphasizing the importance of addressing barriers while leveraging strengths and opportunities for a more inclusive industry. By leveraging strengths and opportunities while addressing weaknesses and threats, stakeholders can develop targeted strategies to promote gender diversity and inclusivity in this traditionally male-dominated field.

Stakeholders that should be linked with SADC WIMA

The response to the women's issues related to the mining sectors requires the engagement of different stakeholders at all levels. There are several key stakeholders and partners that can be linked with SADC WIMA to enhance their participation, capacity, and influence at both national and regional levels. These stakeholders can provide resources, support, and collaboration to foster gender equality and economic empowerment.

National level

Government Agencies and Ministries

The review has indicated that most of the government ministries are engaged in developing policies, regulations, guidelines, standard operating procedures etc. Other are involved in supporting implementation of these policies. Examples of ministries which can be linked to SADC WIMA association include:

- Ministries of Mines and Energy: Responsible for developing policies and regulations in the mining sector. Their involvement is crucial for ensuring that gender-sensitive policies and programs are integrated into national mining frameworks.
- Ministry of Health: Responsible for developing policies and guidelines in the health sector, providing the guidance to the overall health service provision.
- Ministries of Gender, Equality, and Social Development: These ministries can support the implementation of gender-responsive policies, provide financial resources for gender-specific initiatives, and work to integrate women into economic development strategies.
- Ministry of Labor and Employment: responsible for developing and implementation of labor laws and regulations

National Regulatory Bodies and agencies

In countries where these exist, they can be linked and work closely with SADC WIMA to regulate mining activities and safety standards and ensure that laws and regulations are gender-sensitive, promoting a safe and inclusive working environment for women. These can range from mining commissions to state mining agencies.

Mining Companies and Associations

- Private Mining Sector: Large and small mining companies can offer women opportunities for employment, training, mentorship, and leadership roles. They can also implement gender-inclusive corporate policies and provide equitable access to resources, training, and career advancement.
- Mining Associations: Mining companies can partner with industry associations that focus on gender equality. These associations can provide platforms for advocacy, networking, and skill development for women in mining.
- Labor Unions: These unions can advocate for workers' rights, including gender equality in labor practices. They can ensure that women's rights are protected, working conditions are improved, and women are represented in negotiations for better terms and policies in the mining industry.

Local NGOs/CSO, Gender and Mining Networks:

- Non-governmental organizations (NGOs)/Civil Society Organizations working in women's empowerment, economic development, and gender equality can collaborate with women in mining to promote access to resources, education, and advocacy.
- Networks such as Migrant Workers Association, and Ex- Miners Association in Lesotho can connect women in the SADC region with global and regional opportunities, share best practices, and facilitate collaboration.

Educational and Training Institutions

- Universities and Technical Colleges: Educational institutions that offer programs in mining, engineering, environmental management, and business can play a pivotal role in providing women with the technical and leadership training necessary for success in the mining sector.
- Vocational Training Centers: These institutions can offer specialized programs tailored to developing practical skills for women in technical mining fields, such as geology, mining safety, and equipment management.
- Research Institutions: Universities, research think tanks, and innovation hubs can engage in research and development (R&D) efforts to create gender-responsive technologies and solutions that better support women working in mining.

Local legal aid and National Lawmakers

• National Parliaments: Legislative bodies can pass laws that promote gender equality and protect the rights of women in the mining sector.

• Legal Aid and Human Rights Organizations: These organizations can help women navigate legal issues related to land rights, employment discrimination, and mining concessions.

Media outlets

- Media organizations can play a key role in raising awareness about the contributions and challenges of women in the mining sector, providing visibility and promoting gender equality initiatives.
- Country-specific key stakeholders that each association can collaborate with are listed in annex 2. These stakeholders have been supported through Challenge Facility for Civil Society (CFCS Rounds 10-12) to implement community, rights and gender related work. This essentially mean these stakeholders can partner with the women in mining associations to realize some of their works.

Regional level

International Development Agencies

Organizations such as the International Labor Organization (ILO), United Nations Development Program (UNDP), United States Agency for International Development (USAID), World Bank, The Global Fund, and the African Development Bank (AfDB) can offer technical assistance, funding, and policy support for gender integration in the mining sector.

Bilateral Donors

Countries and international development partners, such as the UK Department for International Development (DFID), Irish Aid, the Swedish International Development Cooperation Agency (SIDA) etc, can support gender-inclusive initiatives in mining through grants, training, and technical assistance.

Linkage to Regional Organizations

Institutions like the Southern African Development Community (SADC), East African Community (EAC), The East Central and Southern Africa Health Community (ECSA-HC) and the Stop TB Partnership can play a critical role in promoting harmonized regional strategies and policies to increase women's involvement in mining, provide technical assistance including data collection, research, and advocacy efforts.

Similarly, below are regional stakeholders that currently have received the CFCS round 10 - 12 to implement and would be great to partner with in realizing some of the targeted activities for women in mining:

- **1.** Anglophone Africa:
 - East Africa National Networks of AIDS Service Organizations (EANNASO),
 - Lawyers Alert Association Makurdi (LAAM), Africa Coalition on TB (ACT)
- **2.** Francophone Africa:
 - Dynamique de la réponse d'Afrique Francophone sur la Tuberculose (DRAF TB)

Inclusion of indicators in the SADC TB dashboard that respond to women

To monitor the extent to which Member States adhere to regional and global TB commitments and targets, the SADC Secretariat together with Member States developed TB indicators which would guide the regional approach to TB prevention, treatment, care and reporting. This dashboard includes several key indicators that are important for monitoring and addressing the TB burden in the region, ideally it should also include how TB affects women. This report reviewed and examined weather the SADC TB dashboard contains indicators that responds to women or not.

The SADC TB dashboard (annex 1) has been designed in such a way that it displays the performance of key selected indicators based on major TB intervention areas which include TB Baseline, DS TB, DR TB, TB in Mines, TB treatment, TPT, TB/HIV and TB Financing and Research. In each of these areas a set of indicators has been selected to monitor the progress and implementation status of the SADC TB interventions in the Member States.

Most of the indicators included in the dashboard are responding to women, and these indicators include the TB case notifications which is the measure of the rate at which TB cases are reported in the health system. It highlights differences in access to care or in the rates of diagnosis between men and women.

Another indicator which captures data on women is the TB mortality rate which shows the number of TB-related deaths per 100,000 population and is disaggregated into male and female. This is crucial for understanding the gendered disparities in TB-related outcomes.

Other indicators which respond to women include TB/HIV related indicators (also disaggregated) except for the TB Prophylactic Treatment (TPT) which does not capture gender data. This indicator measures the effectiveness of TB preventive treatment (TPT) programs and help to track progress towards reducing TB incidence in the community. There is therefore an opportunity to consider disaggregating this data to better understand if there are any gendered dynamics in taking TPT and ensure that focused interventions are made.

While the SADC TB dashboard captures data on TB in the mines which includes referrals and treatment outcome, the indicators under this section in the dashboard are not disaggregated and therefore does not inform on any gender dynamics that may or may not exist. As the indicator looks into the continuum of care, it is very important to disaggregate the data by gender so as to measure the effectiveness of the program towards gender equality.

Recommendations

Collaboration between SADC WIMA, its affiliates and other stakeholders can create powerful support networks that strengthen the position of women in sectors like mining. Below are recommendations which basing on the current opportunities and how they can support strengthening the networks and improve future interventions. There are general recommendations which can be considered by all SADC WIMA members. The other part has recommendations which are association/country-specific; associations are highly advised to implement these recommendations so as to improve the current issues and challenges faced.

General recommendations

Contribution to the national and regional TB response:

Strengthen community engagement in the TB programming

SADC WIMA should continue to participate in different avenues which are reviewing the implementation of the TB in the mining activities through site visits and assessing the progress of implementation of activities aimed at improving the situation of TB in the mining sector and mining communities. The association should work closely and collaborate with Ministries of Health and relevant and key stakeholders in implementing TB activities such as TB screening, referral of TB presumptive, etc.

Furthermore, the associations should strengthen the utilization of the CLM tool which eventually is aiming at improving the TB service provision.

Strengthening community sensitization on TB, Silicosis and other occupational lung diseases

The association has a good opportunity to be close to the affected communities and already most of the associations are involved in sensitization of the community on TB and other occupational lung diseases. SADC WIMA is urged to continue building capacities of its affiliates so that they strengthen raising community awareness on the TB prevention and importance of regular screening for TB and silicosis.

Joint Policy Advocacy and Lobbying

Advocacy for Gender-Sensitive Legislation

Governments, NGOs, SADC WIMA and its affiliates should collaborate to advocate for gender-sensitive policies and regulations that support women's participation in the mining sector at regional and national levels. They can work together to lobby for laws

around equal pay, anti-discrimination, and sexual harassment in the workplace. Moreover, establishing coalitions between governments, NGOs, and women in mining associations can amplify their collective voice in pushing for reforms and ensuring women's rights are represented in mining policies. This can be achieved by working closely with local legal aid organizations, national parliaments, local advocacy CSOs, government ministries, departments and agencies.

Improvement of the working conditions

SADC WIMA and its affiliates should work closely with the relevant government ministries and agencies involved in the mining sector to improve the working conditions particularly of artisanal, small-scale miners and developmental mining. This includes advocating for the implementation of mine safety guidelines, standard operation procedures and other relevant policies and making sure they are implemented.

Advocate for the disaggregation of the SADC TB Dashboard indicators

SADC WIMA should engage the SADC Secretariat further and advocate for the disaggregation of some of the SADC TB Dashboard indicators such as thos capturing data on TPT so as to better understand any gendered dynamics and provide the adequate interventions.

Capacity Building and Training Programs

Skills Development Initiatives

NGOs, SADC WIMA and its affiliates should collaborate with governments, educational and training institutions to design and provide training and capacity-building programs that equip women with technical, managerial, and entrepreneurial skills in the mining industry. Women's associations can help ensure that these programs are accessible, relevant, and tailored to women's needs. Furthermore, by jointly running leadership training initiatives, these stakeholders can ensure that more women take on leadership and decision-making roles within mining companies and mining communities.

Strengthen public awareness initiative:

Governments and NGOs/CSOs and other advocacy groups should continue to collaborate with SADC WIMA and its affiliates to launch public awareness campaigns about the benefits of women's participation in mining, combating stereotypes, and promoting gender equality. Together, they can design programs in mining communities that educate both men and women about the importance of women's roles in mining, as well as legal rights, gender equality, and the need for fair treatment in the industry. Mass media can be utilized in raising awareness in the community.

Health and Safety Initiatives

Gender-Specific Health and Safety Standards

SADC WIMA and its affiliates should work closely with the Government ministries, department, agencies and regulatory bodies to create and enforce health and safety guidelines and protocols tailored to the needs of women miners. This could include appropriate personal protective equipment (PPE) and addressing gender-specific health concerns, sexual harassment and gender-based violence in the workplace.

Monitoring and Accountability

Monitoring Mechanisms

SADC WIMA, its affiliates, government and regulatory bodies should establish joint monitoring mechanisms that track the implementation of gender-sensitive policies and programs in the mining sector. SADC WIMA and its affiliates should play a crucial role in holding both governments and companies accountable for meeting gender equity goals. The associations, governments and mining companies can work together to monitor and evaluate the implementation of gender policies in the mining sector.

Collaboration and Partnerships

Cross-Border Cooperation and collaboration

SADC WIMA should foster collaboration of its members and affiliates within and across borders and work closely with other regional initiatives with the main focus on women's empowerment in mining. Regional bodies such as SADC, EAC, IGAD, ECSA-HC should foster initiatives that bring together governments, civil society organizations, and the private sector to promote gender equality in mining. SADC WIMA should explore ways in which it can play a role in the established regional Cross Border Referral System (CBRS) developed by ECSA-HC under TIMS III. This platform captures TB patients, especially miners, as they migrate from one country to another, to ensure that their TB treatment is not disrupted.

Resource Mobilization

At the country level, the association should forge partnership and collaboration with key stakeholders including relevant government ministries in mobilizing resources which will support implementation of different health and safety activities including TB, Silicosis screening and other occupational lung diseases. In order to increase their visibilities, the associations need to seek more avenues and platforms to advocate their works, seek more collaborations and partnership and promote resource mobilization.

Research, Data Collection, and Knowledge Sharing

Gender Disaggregation in Mining Data

SADC WIMA and its affiliates should advocate for data collection that specifically disaggregates into men and women in the mining sector, providing insights into their specific challenges and contributions. This will aid in formulating better policies and interventions addressing the challenges faced. There should be deliberate efforts to strengthen the utilization of the community led monitoring (CLM) tool, **OneImpact**, which is currently being implemented in almost all the SADC countries and use data collected from this platform to promote accountability and inform development of a Human Rights violations reporting system.

Knowledge sharing platforms

Moreover, SADC WIMA and its affiliates should forge partnership with training and research institutions to conduct studies on the impact of gender-inclusive practices, identification of key opportunities and share best practices from other countries or regions that have been successful in improving women's participation in mining.

Country-specific recommendations

Angola

- The association needs to speed up its formalization to the key stakeholders and partners. This will enhance and strengthen the collaboration and cooperation and working together and seek more potential partnerships in various aspects including eradicating TB and other occupational lung diseases.
- 2. AAMG has engaged a lot in different avenues which has increased its visibility. It is recommended to strengthen this approach and incorporate resource mobilization of the association
- 3. The association should seek and forge more support from the government essentially the Ministries of Health and Mineral resources. This will enhance the advocacy part of the association and mobilize more resources for their planned interventions.

Botswana

- 1. The association should strengthen the collaboration with partners and stakeholders already existing and seek more opportunities to engage with other stakeholders. This will enhance the visibility of the association's activities, experience sharing and learning; and improve resource mobilization.
- 2. The association should also prioritize partnering with other CSOs that are in the TB space to be able to share resources as needed.

Democratic Republic of Congo

1. The association should continue to utilize different forums for instance meetings to advocate for its mission and interventions. This will enhance more visibility of its works and widen its reach and network.

- 2. The association should strengthen the partnership with SADC WIMA, government and key stakeholders envisioning more on the support to implement activities in the mining provinces.
- 3. The association can explore more ways of supporting the establishment of smaller groups/associations in the mining communities in those most affected mining provinces (east part of the country) and work closely with them.

Eswatini

 With the good support and buy in from the government, the association should work closely with the government and other key stakeholders to mobilize resources which will support various envisioned activities such as the development of 5-year strategic plan and its implementation, assessments on access to health care, magnitude of the TB in the mining sector etc.

Lesotho

- 1. The association should continue to participate in different avenues of TB programming including reviewing the implementation of the TB in the mining activities through site visits and assessing the progress of implementation of activities aiming at improving the situation of TB in the mining sector.
- 2. The association should work closely with relevant government ministries and agencies involved in mining sector to improve the working conditions essentially of artisanal, small-scale and developmental miners. This includes advocating for the implementation of mine health and safety standard operating procedures and guidelines and other relevant policies.
- 3. In improving the economic empowerment of women in the mining sector, the association should advocate and support the establishment of savings and credits cooperative societies which will improve the income of women
- 4. The association should also work closely with the government ministries and affected communities to establish a monitoring mechanism which will improve documentation of the deceased which are needed in timely compensating the beneficiaries.

Malawi

- 1. In order to overcome certain barriers such as cultural, literacy and language, the association should work closely with relevant government ministries and key stakeholders (including grass-root societies) to address the barriers and if possible, to translate some of the interventions in local languages (for instance use of IEC materials in advocacy).
- 2. The association should collaborate and cooperate with existing CSO's such as Facilitators of Community Transformation Malawi (FACT Malawi) and establish engagement with other local communities in implementing the planned activities.

Namibia

1. The association should work closely and collaborate with the Ministry of Health to support programmatic interventions such as establishing a true burden of TB in the mining sector, particularly within the ASM, and support focused TB screening approaches and surveillance of TB and other occupational lung diseases.

2. In collaboration with the Namibian government, advocate for more scholarship to young women to study issues related to mining sector, which will then promote their participation in the mining sector

South Africa

- 1. The association should put more efforts into uniting the various women in mining associations on the ground and having a platform that represents all women in mining to better collaborate with government stakeholders and share the available resources.
- 2. Increased awareness programs on TB and silicosis among women in the mining sector as well as better understanding of the compensation systems in the country

Tanzania

1. While the association has managed to support the implementation of minimum standards for protective gears essentially cloth masks in artisanal and small-scale miners, it should collaborate with relevant government ministry to reinforce the implementation of other mine health and safety procedures in the mining sector including artisanal miners.

Zambia

- 1. The association should continue to support establishment of small groups of most vulnerable women into registered cooperatives and support them on acquisition of artisanal mining licenses.
- 2. The association should consider establishing mentorship programs with other SADC WIMA associations to share their experiences and knowledge.

Conclusion

This review was conducted to take stock of the impact that the TIMS III project has had on the situation of women in mining in the SADC region. This was done through analyzing the baseline assessments done in 2022 and the current status of SADC WIMA and its affiliates through review of available data, information and various reports. It was found that there has been a commendable progress in the level of engagement and participation of women in interventions aiming to improve their situation in the mining sector and in the TB response.

One of the project achievements has been establishment of the regional SADC WIMA platform which is registered and members are guided by a constitution. This platform is an important organ in improving the situation of women in the mining sector in the SADC region by providing a regional platform for engagement and collaboration. SADC WIMA and its affiliates have been instrumental in highlighting issues and challenges related to women in the mining sectors in SADC Member States. It is therefore anticipated that the SADC WIMA will strengthen the associations, improve networking, sharing of experience,

further seek opportunities to partner and collaborate with stakeholders such as government entities, private sectors, regional bodies and donors and other international partners. In order to appreciate the improvement, SADC WIMA and its affiliates should not work in silos, they need to forge collaborations and cooperations with each other and other relevant stakeholders. Establishing a comprehensive, multi-stakeholder approach to addressing the challenges faced by women in the mining sector is key to ensuring successful interventions and impact in reducing the TB burden. These collaborations can lead to sustained changes and development that improve women's access to opportunities, enhance their safety, and empower them to take on leadership roles.

Most of these associations are varying in their current status, some are at an infancy stage, others have been in existence for some time. All in all, they need to be supported and learn from each other. Supporting the growth and development of these important associations need a multidisciplinary approach which can address the issues related to resource mobilization and funding and strengthening collaboration with key stakeholders for sustainability of the gains already appreciated.

The review has shown significant achievement in engaging women in the overall TB response from raising community awareness, supporting focused TB screening interventions, various preventive assessment of the workplaces etc. The associations have been involved in raising awareness on silicosis and other occupational lung health diseases to artisanal and small-scale miners. This indicates an excellent opportunity which the TB programs can work closely and collaborate with the associations to have a comprehensive TB response in all Member States.

Among other approaches which has shown to improve the economic empowerment to women in the mining sector has been linkage to cooperative societies hence access to financial resources. This has been acknowledged to be one of the excellent approaches in improving household income hence improving social well-being. If well embraced, it will prove to be one of the best options in making sure women are driven out of the economic hardship.

In conclusion, the review has indicated that there has been a significant improvement in the situation and engagement of women in the mining sector which can be attribute to efforts from the implementation of TIMS-III project. More support and efforts are needed to sustain these interventions and continue to enable environment where women can participate equally and equitably in the mining sector, improving their livelihoods, fostering inclusive economic growth, and reducing gender inequality in the industry.

Annexes

SADC TB Indicators dashboard

	Baseline Indicators' dash	board			
S/no	Favorite name	Indicator name/Data element name	Туре	Numerator	Denominator
		1. Incident TB cases in the same year	Number	N/A	N/A
1	TB Cases Notified Vs Estimated TB Incidence in the SADC Region	2. Number of TB cases notification_	Number	N/A	N/A
		1. Incident TB cases in the same year	Number		
	Total TB Cases Notified by estimated TB	2. Number of TB		(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_	
2	incidence (2021)	cases notification	Number	DR TB , >=15 Yrs)	N/A
		1. Estimated number of deaths		(Estimated number of deaths due to TB in a given time per 100,000 population All TB cases, Male + Estimated number of deaths due to TB in a given time per 100,000 population All TB cases, Female + Estimated number of deaths due to TB in a given time per 100,000 population TB/HIV, Male + Estimated number of deaths due to TB in a given time per	
3	Annual TB Death in the SADC Region	due to TB in a given time	Number	100,000 population TB/HIV , Female)	N/A

				DS TR Ind	icators Dashboa
		Indicator name/Data			
S/no	Favorite name	element name	Туре	Numerator	Denominator
	Number of TB cases	1. Number of TB		(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_	
1	notification_Angola	cases notification	Number	DR TB , >=15 Yrs)	N/A
2	Number of TB cases notification_Botswana	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A

3	Number of TB cases notification_Comoros	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
4	Number of TB cases notification_DRC	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
5	Number of TB cases notification_Eswatin	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
6	Number of TB cases notification_Lesotho	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A

7	Number of TB cases notification_Madagascar	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
8	Number of TB cases notification_Malawi	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
9	Number of TB cases notification_Mauritius	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
10	Number of TB cases notification_Mozambique	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A

11	Number of TB cases notification_Namibia	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
12	Number of TB cases notification_Seychelles	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
13	Number of TB cases notification_South Africa	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A
14	Number of TB cases notification_Tanzania	1. Number of TB cases notification	Number	(Number of TB cases notification_ DS TB, < 15 Yrs + Number of TB cases notification_ DS TB, >=15 Yrs + Number of TB cases notification_ DR TB , < 15 Yrs + Number of TB cases notification_ DR TB , >=15 Yrs)	N/A

				(Number of TB cases notification_		
				DS TB, < 15 Yrs +		
				Number of TB		
				cases notification_ DS TP > -15 Vrg		
				DS TB, >=15 Yrs + Number of TB		
				cases notification_		
				DR TB , < 15 Yrs		
				+ Number of TB		
15	Number of TB cases	1. Number of TB cases notification	Number	cases notification_ DB TB > -15 Vro	N/A	
15	notification_Zambia		Number	DR TB, >=15 Yrs)	IN/A	
				(Number of TB		
				cases notification_		
				DS TB, < 15 Yrs + Number of TB		
				cases notification		
				DS TB, $>=15$ Yrs +		
				Number of TB		
				cases notification_		
				DR TB, <15 Yrs		
	Number of TB cases	1. Number of TB		+ Number of TB cases notification_		
16	notification_Zimbabwe	cases notification	Number	DR TB , $>=15$ Yrs)	N/A	
	-					
				DR TB Ind	licators Dashbo	ard
		Indicator		DR TB Ind	licators Dashbo	ard
S/no	Favorite name	Indicator name/Data element name	Туре	DR TB Ind	licators Dashbo	ard
S/no	Favorite name	name/Data	Туре	Numerator	Denominator Number of	ard
S/no	Favorite name	name/Data element name 1. Drug Susceptibility	Туре	Numerator Number of TB	Denominator Number of notified new	ard
S/no		name/Data element name 1. Drug Susceptibility Testing (DST)	Туре	Numerator Number of TB patients with DST	Denominator Number of notified new and	ard
<u>S/no</u>	Drug Susceptibility	name/Data element name 1. Drug Susceptibility		Numerator Number of TB patients with DST results for at least	Denominator Number of notified new and retreatment	ard
S/no 1		name/Data element name 1. Drug Susceptibility Testing (DST)	Type Percentage	Numerator Number of TB patients with DST	Denominator Number of notified new and	ard
<u>S/no</u>	Drug Susceptibility	name/Data element name 1. Drug Susceptibility Testing (DST)		Numerator Number of TB patients with DST results for at least	Denominator Number of notified new and retreatment TB cases Number of	ard
S/no 1	Drug Susceptibility	name/Data element name 1. Drug Susceptibility Testing (DST)		Numerator Number of TB patients with DST results for at least	Denominator Number of notified new and retreatment TB cases Number of notified DR	ard
<u>S/no</u>	Drug Susceptibility	name/Data element name 1. Drug Susceptibility Testing (DST)		Numerator Number of TB patients with DST results for at least	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients	ard
S/no 1	Drug Susceptibility	name/Data element name 1. Drug Susceptibility Testing (DST)		Numerator Number of TB patients with DST results for at least	Denominator Number of notified new and retreatment TB cases Number of notified DR	ard
<u>S/no</u>	Drug Susceptibility	name/Data element name 1. Drug Susceptibility Testing (DST)		Numerator Number of TB patients with DST results for at least rifampicin Number of notified DR TB patients	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients who were	ard
<u>S/no</u>	Drug Susceptibility	name/Data element name 1. Drug Susceptibility Testing (DST) Coverage 1. DR TB		Numerator Number of TB patients with DST results for at least rifampicin Number of notified DR TB patients who were cured	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients who were initiated on anti-TB treatment in	ard
1	Drug Susceptibility Testing (DST) Coverage	name/Data element name 1. Drug Susceptibility Testing (DST) Coverage 1. DR TB Treatment	Percentage	Numerator Number of TB patients with DST results for at least rifampicin Number of notified DR TB patients who were cured and or completed	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients who were initiated on anti-TB treatment in the same	ard
<u>S/no</u>	Drug Susceptibility	name/Data element name 1. Drug Susceptibility Testing (DST) Coverage 1. DR TB		Numerator Number of TB patients with DST results for at least rifampicin Number of notified DR TB patients who were cured	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients who were initiated on anti-TB treatment in	ard
1	Drug Susceptibility Testing (DST) Coverage	name/Data element name 1. Drug Susceptibility Testing (DST) Coverage 1. DR TB Treatment	Percentage	Numerator Number of TB patients with DST results for at least rifampicin Number of notified DR TB patients who were cured and or completed treatement	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients who were initiated on anti-TB treatment in the same	
1	Drug Susceptibility Testing (DST) Coverage	name/Data element name 1. Drug Susceptibility Testing (DST) Coverage 1. DR TB Treatment Success rate	Percentage	Numerator Number of TB patients with DST results for at least rifampicin Number of notified DR TB patients who were cured and or completed treatement	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients who were initiated on anti-TB treatment in the same period	
1	Drug Susceptibility Testing (DST) Coverage	name/Data element name 1. Drug Susceptibility Testing (DST) Coverage 1. DR TB Treatment Success rate	Percentage	Numerator Number of TB patients with DST results for at least rifampicin Number of notified DR TB patients who were cured and or completed treatement	Denominator Number of notified new and retreatment TB cases Number of notified DR TB patients who were initiated on anti-TB treatment in the same period	

		1. Proportion of cases from mining population fully referred across borders for continuum of care	Percentage	Number of cases from mining population referred across borders and receiving anti-TB treatment Miners + Number of cases from mining population referred across borders and receiving anti-TB treatment Ex- Miners + Number of cases from mining population referred across borders and receiving anti-TB treatment Family Member of Miner or ex-miner	Number of cases from mining population referred across borders for TB care Miners + Number of cases from mining population referred across borders for TB care Ex- Miners + Number of cases from mining population referred across borders for TB care Ex- Miners + Number of cases from mining population referred across borders for TB care Family Member of Miner or ex- miner Number of notified DS TB patients in mining who were initiated on anti-TB
		2. DS TB in Mining Treatment		cured and or completed	treatment in the same
1	TB in Mines	Success rate	Percentage	treatement	period
		1. Proportion of cases from mining population fully referred across borders for continuum of care, miners	Percentage	Number of cases from mining population referred across borders and receiving anti-TB treatment Miners	Number of cases from mining population referred across borders for TB care Miners
2	Proportion of cases from mining population fully referred across borders for continuum of care	2. Proportion of cases from mining population fully	Percentage	Number of cases from mining population referred across borders and	Number of cases from mining population

continuum care, ex min		Miners	borders for TB care Ex- Miners
3. Proportion cases from mining population = referred acr borders for continuum care, Family Member of or ex-miner	fully oss of Miner	Number of cases from mining population referred across borders and receiving anti-TB treatment Family Member of Miner or ex-miner	Number of cases from mining population referred across borders for TB care Family Member of Miner or ex- miner

				TB-HIV In	dicators Dashbo	bard
		Indicator				
		name/Data				
S/no	Favorite name	element name	Туре	Numerator	Denominator	
				Number of TB	Number of]
				patients with	TB cases	
				known positive	notification_	
				HIV status < 15	DS TB, < 15	
				Yrs, Male +	Yrs +	
				Number of TB	Number of	
				patients with	TB cases	
				known positive	notification_	
				HIV status < 15	DS TB, >=15	
				Yrs, Female +	Yrs +	
				Number of TB	Number of	
				patients with	TB cases	
				known positive	notification_	
				HIV status >=15	DR TB , < 15	
				Yrs, Male +	Yrs +	
				Number of TB	Number of	
		1. Percentage of		patients with	TB cases	
		TB patients with		known positive	notification_	
		known positive		HIV status >=15	DR TB ,	
		HIV status	Percentage	Yrs, Female	>=15 Yrs	
				Number of TB	Number of	
				patients with	TB patients	
				known positive	with known	
				HIV status who are	positive HIV	
				on ART < 15 Yrs,	status < 15	
				Male + Number of	Yrs, Male +	
				TB patients with	Number of	
		2. Percentage of		known positive	TB patients	
		TB patients with		HIV status who are	with known	
		known positive		on ART < 15 Yrs,	positive HIV	
		HIV status who		Female + Number	status < 15	
1	TB HIV	are on ART	Percentage	of TB patients with	Yrs, Female	

TB-HIV Indicators Dashboard

	Percentage of TB patients			known positive HIV status who are on ART >=15 Yrs, Male + Number of TB patients with known positive HIV status who are on ART >=15 Yrs, Female	+ Number of TB patients with known positive HIV status >=15 Yrs, Male + Number of TB patients with known positive HIV status >=15 Yrs, Female
2	with known positive HIV status _with Targets				
3	Percentage of TB patients with known positive HIV status who are on ART_with Targets				
		Indicator		TB Preventive The	rapy Indicators
		name/Data			
S/no	Favorite name	element name	Туре	Numerator	Denominator
		1. TPT treatment coverage, < 15	Percentage	People enrolled on TPT who are household contacts of people with bacteriologically confirmed pulmonary TB < 15 Yrs	Number eligible for TPT < 15 Yrs
1	TB Preventive Therapy	2. TPT treatment coverage on PLHIV		Number of PLHIV	Number of PLHIV eligible for TPT
	TD Fleventive Therapy			enrolled on TPT	111
2	TB Preventive Therapy Trends of <15 Years	1. TPT treatment coverage, < 15	Percentage	People enrolled on TPT who are household contacts of people with bacteriologically confirmed pulmonary TB < 15 Yrs	Number eligible for TPT < 15 Yrs

TREATMENT OUTCOME Indicator					
		Indicator			
		name/Data			
S/no	Favorite name	element name	Туре	Numerator	Denominator
		1. DS TB Treatment Success rate	Percentage	Number of notified DS TB patients who were cured and or completed treatment	Number of notified DS TB patients who were initiated on anti-TB treatment in the same period
		2. DR TB Treatment Success rate	Percentage	Number of notified DR TB patients who were cured and or completed treatment	Number of notified DR TB patients who were initiated on anti-TB treatment in the same period
1	Treatment Outcomes	3. DS TB in Mining Treatment Success rate	Percentage	Number of notified DS TB patients in mining who were cured and or completed treatment	Number of notified DS TB patients in mining who were initiated on anti-TB treatment in the same period
2	DS TB Treatment Outcomes	1. DS TB Treatment Success rate	Percentage	Number of notified DS TB patients who were cured and or completed treatment	Number of notified DS TB patients who were initiated on anti-TB treatment in the same period
3	DR TB Treatment Outcomes	1. DR TB Treatment Success rate	Percentage	Number of notified DR TB patients who were cured and or completed treatment	Number of notified DR TB patients who were initiated on anti-TB treatment in the same period

4	TB in Mining Treatment Outcomes	1. DS TB in Mining Treatment Success rate	Percentage	Number of notified DS TB patients in mining who were cured and or completed treatment	Number of notified DS TB patients in mining who were initiated on anti-TB treatment in the same period
		This indicator is			
5	Treatment Success Rate of TB Patients with HIV+	crucial but it needs changes on the data entry to be captured,			
TB Financing Dashboard					
		Indicator name/Data			
S/no	Favorite name	element name	Туре	Numerator	Denominator
		1. Annual TB National Strategic Plan Budget	Number	N/A	N/A
		2. International	N 1	Total released	
		contributions	Number	funds	1
				(Annual TB National Strategic	
1	TB Funding gap in	2 Unfrandad	Number	Plan Budget - Total	1
	SADC MS	3. Unfunded	Number	released funds)	1

List of country- specific key stakeholders that each association should collaborate with to realize some of their work

Democratic Republic of Congo:

- Club des Amis Damien (CAD),
- FOCUS DROITS ET ACCES (FDA),
- SYNERGIE DES ORGANIZATIONS DE LA SOCIETE CIVILE POUR LA PROMOTION DES DROITS HUMAINS ET DE L'ENVIRONEMENT SYDHE Asbl,
- Health for Prisoners

Malawi:

- The Southern African Human Rights Litigation Centre Trust (SALC),
- Facilitators of Community Transformation (FACT)

Mozambique:

- Associação Moçambicana para a Ajuda de Desenvolvimento de Povo para Povo (ADPP),
- Association of Mozambican Mineworkers (AMIMO)

Republic of South Africa:

- TB Proof,
- Best Health Solutions NPC,
- Ubunye Foundation Trust (UFT),
- WACI Health (also regional),
- TB HIV Care

United Republic of Tanzania:

- Family Welfare Foundation (FWF),
- Chimaba Sanaa Group,
- Tanzania TB Community Network,
- Pastoral Activities and Services for People with AIDS Dar es Salaam Archdiocese (PASADA),
- Mwitikio wa Kudhibiti Kifua Kikuu na Ukimwi Tanzania (MKUTA),
- Mapambano ya Kifua Kikuu na Ukimwi Temeke (MUKIKUTE), Service, Health and Development for People Living Positively with HIV/AIDS,

• Women Injecting Drug Users Initiative Tanzania (WIDUIT).

Zambia:

- National Ex-miners and Allied Workers Association of Zambia,
- Community Initiative for TB, HIV and Malaria plus (CITAMplus),
- DEVELOPMENT AID FROM PEOPLE TO PEOPLE IN ZAMBIA (DAPP Zambia),
- Zambia Tuberculosis and Leprosy Trust (ZATULET)

Zimbabwe:

- Jointed Hands Welfare Organization (JHWO),
- Stop TB Partnership Zimbabwe (STP Zim),
- Disaster and Environmental Management Trust (DEMT),
- Students And Youth Working on Reproductive Health Action Team (SAYWHAT)

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