Tuberculosis (TB) is a significant problem within the Southern African mining industry. In South Africa alone, TB rates within the mining workforce are estimated at 2,500-3,000 cases per 100,000 individuals. This incidence is 10 times the WHO threshold for a health emergency, and is also 2.5 to 3 times the incidence rate in the general population. Of the estimated 500,000 mineworkers in South Africa’s mines, approximately 40 percent originate from Mozambique, Swaziland, and Lesotho. Factors that contribute to the high incidence of TB among mineworkers include prolonged exposure to silica dust, poor living conditions, high HIV prevalence in mining communities, poverty, and a poor cross border health referral system. Furthermore, circular movement of mineworkers across provincial and national borders fuels infection rates, adversely affects adherence to TB treatment, and contributes to the incidence of drug resistant strains including multi-drug resistant (MDR) and extensively drug-resistant (XDR) TB in the sub-region.

Recent efforts to build and sustain an effective response through innovative and dynamic partnerships have marked a fundamental shift in the management of TB in the region, particularly in the mining sector which is a key driver of economic growth. Through the South Africa Knowledge Hub, the World Bank Group (World Bank) has played a catalytic role in convening key stakeholders among the public, private, and civil society sectors in South Africa, Lesotho, Swaziland and Mozambique to ensure that a framework is in place to drive the TB agenda forward. This case study summarizes how high-level political commitment—along with multi-sectoral and cross-country coordination—has helped to bring the issue of TB in the Mining Sector to the forefront, and in so doing, has created a paradigm shift in how this challenge has been addressed.

1 World Bank: Economic Analysis of TB in Mines in Southern Africa (World Bank), 2014
3 The Employment Bureau of Southern Africa (TEBA), 2010
4 The South Africa Knowledge Hub was created in April 2013, by the South African government in partnership with the World Bank, in a new form of co-operation to support the implementation of development goals in the country. The Hub focuses on systemic, multi-sector challenges that can best be resolved through joint learning and co-operation, and partners with stakeholders to facilitate dialogue; enhance co-ordination; and to encourage pooling, sharing and centralization of critical knowledge. The Hub has three pillars of work: Health, Education and Cities Support Program. One of the focus areas of the Health pillar is the work on the TB in the mining sector initiative.
Case Study on Advancing Cross-Sector Partnerships to Combat TB in the Mining Sector in Southern Africa

**CONTEXT AND STRATEGIES**

The Southern Africa TB in the Mining Sector Initiative started in 2010, with a study supported by the World Bank that examined the scope of TB prevalence in South Africa. This study—initially developed to gain more insight into the key health challenges in country—revealed the disproportionate impact of TB in the mining sector, where mineworkers, ex-mineworkers, and peri-mining communities appeared to be the most heavily affected. At the request of the South African government, the World Bank initiated a process to better understand the drivers of TB in the mining sector and explore the ways in which it could leverage its comparative advantages to give new impetus to a long-standing issue—one that had persisted for over a century. Key strategies included:

**Building the evidence base:** A 2010 study commissioned by the South African Department of Mineral Resources (DMR) and conducted by South Africa’s National Institute of Occupational Health (NIOH), with support from the World Bank, highlighted the burden of TB and TB/HIV in the mining sector in Lesotho, Botswana, Namibia, and Swaziland. The study revealed TB ‘hot spots’ in mining communities across the four countries and identified huge disparities in industry health service provision. Within this context, the World Bank, working with the Stop TB Partnership and other partners, initiated a comprehensive effort to develop an effective regional solution, with the ultimate goal of reversing the rise of TB rates.

**Gaining expert consensus:** In September 2010, the World Bank and the South African Departments of Health and Mineral Resources held an International Expert Consensus Meeting on TB in the Mining Sector to share findings from the NIOH study, synthesize existing evidence about the extent of the problem, and define a list of evidence-based interventions and best practice examples from around the world. The conclusions were presented to the Stop TB Partnership Coordinating Board in Johannesburg in October that year—resulting in a joint call for action on TB in the mining sector by the Health Ministers of South Africa, Swaziland, and Lesotho.

**Facilitating high-level political dialogue:** The World Bank leveraged its convening power and relationships to facilitate negotiations and deliberations at the highest levels of government. The priority given to TB in the mining sector by the Health Ministers of South Africa, Swaziland, and Lesotho led to discussions at the SADC Health Ministers’ Meeting in November 2011. At that meeting, the decision was taken by the SADC Secretariat to hold an Extraordinary Meeting of Health and Labor Ministers in 2012 to develop a draft Declaration on TB in the Mining Sector. The draft document was developed with technical support from the World Bank, Stop TB Partnership, the International Organization for Migration (IOM) and representatives from Lesotho, South Africa, and Swaziland. The mobilization of these political and policy processes culminated in the historic signing of the SADC Declaration on Tuberculosis in the Mining Sector by all SADC Heads of States in August 2012. The Declaration recognized the special vulnerability of mineworkers and their communities to TB and identified key steps needed to reduce risks and improve services.

**Establishing a framework for stakeholder engagement and implementing a regional action plan:** The World Bank supported the establishment of a regional mechanism to operationalize the TB in the mining sector agenda in the four countries and to ensure effective networking and sharing of information and knowledge. A Program Implementation Committee (PIC) was established in 2013 consisting of technical representatives from each country’s Ministry of Health, representatives from the Department of Mineral Resources and Department of Labor in all four countries, development partners (World Bank, UK Department for International Development, International Organization for Migration, and Stop TB Partnership), and civil society (international NGOs, research institutions, labor unions, and ex-mineworkers associations). In addition, a TB Service Delivery Model was developed in 2013 that provides a platform for coordinating multiple actors in addressing TB in the mining sector across the four countries.
To date, several significant achievements have been made in the collective effort to tackle TB in the mining sector in the region:

**Increased funding opportunities:**

**Preparation of $100 million World Bank Group regional project to scale up TB prevention and treatment in the mining sector in four SADC countries: South Africa, Lesotho, Mozambique and Swaziland.**

A **$30 million Global Fund two-year pilot grant**, with increased funding over time, to scale up the TB response in ten countries: Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe

**A £2 million grant from the UK Department for International Development to support the regional response to TB in the mining sector.**

**Enhanced political, policy, and technical-level partnerships and collaborations:**

A multi-country and multi-sector political consensus was achieved for the first time in August 2012 in a groundbreaking declaration by the Heads of States of Government of the Southern African Development Community. The declaration emphasized the urgent need to eradicate TB in the mining sector. The declaration also set the stage for policy changes at national level and greater collaboration among countries and sectors, all of which are essential to take the fight against TB to the next level.

Consultations with technical experts led to the development of the **Harmonized Framework for the Management of Tuberculosis in the Mining Sector** which was signed in March 2014. The framework harmonizes treatment, prevention, diagnosis, and referral across countries.

**Private sector engagement has been enhanced** through a collaborative initiative launched by five mining companies aimed at finding a comprehensive, fair, and sustainable solution to the problem of occupational lung disease in the gold mining industry in South Africa.

**Increased knowledge generation:**

An economic analysis of TB in the mining sector was funded by the World Bank in 2013, which has provided data on the economic benefits of TB control, estimated the return on investment, and recommended high-impact interventions that maximize investment in TB control in the mining sector for Lesotho, Mozambique, South Africa, and Swaziland. This study was one of the key data sources that informed the development of the TB service delivery model.

Geospatial mapping of mineworkers, ex-mineworkers, and their families in Lesotho, South Africa and Swaziland was conducted in 2014 and has provided data on the size of the key populations as well as the availability of health facilities in these areas.
Within a relatively short time frame, this initiative has made a significant contribution towards addressing the persistent challenge of TB in the mining sector and has paved the way for innovative approaches to regional health interventions. With a focus on action by consensus, the initiative has showcased the successes and challenges of building and sustaining multi-sectoral, multi-country, public-private partnerships and developing a truly regional approach to cross-border disease management. Continuity of effort and sustained investment in the regional partnership are required to improve upon the gains that have been made over the past five years and to meet the needs of mineworkers and their families over the long term.

The Southern Africa TB in the Mining Sector Initiative is one of the key initiatives led by the South Africa Knowledge Hub. It is an innovative multistakeholder effort involving government, civil society, development, and private sector partners aimed at combating TB in the mining sector in the Southern Africa region. With coordination led by the World Bank, the multi-sectoral initiative includes representatives from the Departments of Health, Mineral Resources, and Labor of South Africa, Swaziland, Lesotho and Mozambique; development agencies (UK Department for International Development, International Organization for Migration, and Stop TB Partnership); research institutes; mining companies; ex-mineworkers’ associations; and labor unions.

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