

# Potential health impacts of the Lobito Corridor on local communities in Angola



## Introduction

The Lobito Corridor, a prominent cross-border infrastructure initiative connecting Angola, Zambia and the Democratic Republic of the Congo, is rapidly emerging as a key driver of trade, logistics and regional integration in Southern Africa. Supported by a variety of stakeholders, including the European Union and the United States, the Corridor is expected to generate significant economic opportunities through increased industrial activity, job creation and enhanced mobility. While these economic benefits are anticipated, the Lobito Corridor also carries important health implications for the local population. On the one hand, the upgraded infrastructure and improved socioeconomic conditions could foster a range of positive health outcomes, including reduced childhood mortality, enhanced public infrastructure, and increased

wealth indices. On the other hand, potential adverse impacts on the environment, society and public health must be carefully managed to ensure sustainable development.

This policy brief examines the forthcoming modernization of the Lobito Corridor and its potential health impacts on communities across the five Angolan provinces that it traverses, namely Benguela, Bié, Huambo, Moxico, and Moxico Leste. It reviews the current health status and needs of these provinces, explores the public health challenges and opportunities associated with the development of the Corridor, and offers recommendations to ensure that health remains a central focus in maximizing the benefits of the Corridor's development.

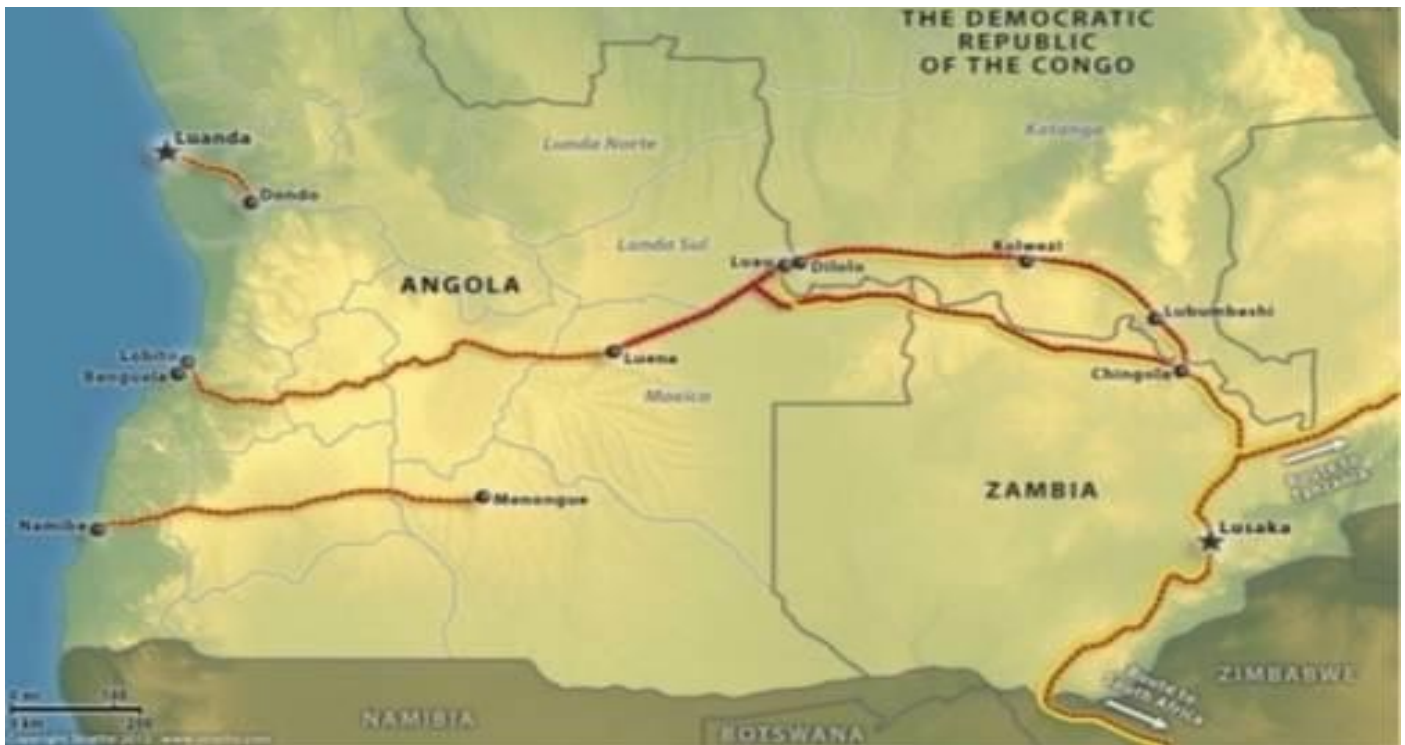


Fig. 1. Lobito Corridor layout

## Background

The Lobito Corridor revives the historic Benguela Railway, originally completed in 1928. This railway once connected the Angolan port city of Lobito (then the most significant port on Africa's west coast) to Luau on the border with the Democratic Republic of the Congo. However, the railway system suffered extensive damage during Angola's post-independence civil war, which began in 1975.

In Angola, the Corridor spans approximately 1300 kilometres, linking the provinces of Benguela, Huambo, Bié, Moxico and Moxico Leste. Once completed, the Lobito Corridor is expected to significantly enhance trade and mobility in a region still facing infrastructure deficits and logistical challenges that hinder economic growth. This

initiative is likely to have far-reaching impacts, including job creation, increased investment in agriculture, services and digital connectivity, and economic growth across multiple sectors.

Transportation networks, particularly road and rail systems, are key determinants of health<sup>1</sup>. Thus, while the Lobito Corridor presents promising economic opportunities, its public health implications warrant close attention. This policy brief addresses these health concerns and highlights the need for a health-focused approach in the Corridor's development and management to ensure that health outcomes improve alongside economic growth.

<sup>1</sup>WHO (1999). Charter on Transport, Environment and Health (<https://iris.who.int/bitstream/handle/10665/347408/WHO-EURO-1999-3850-43609-61274-eng.pdf?sequence=1>, accessed 1 April 2025).



## Health profile of the Lobito Corridor





Approximately 26% of Angola's population resides in the five provinces along the Lobito Corridor, with 46% living in rural areas<sup>2</sup>. The health profile of these provinces can be assessed using three key indices: the reproductive, maternal, newborn and child health (RMNCH) index; the infectious diseases index (IDI); and the service capacity and access index (SCAI)<sup>3</sup>. These indices measure the capacity of provinces to deliver and ensure access to essential health services, with scores ranging from 0 (no capacity) to 100 (full capacity for both service provision and accessibility).

Overall, the five provinces along the Lobito Corridor (Benguela, Bié, Huambo, Moxico and Moxico Leste) currently lack sufficient capacity to deliver essential services for infectious diseases as well as reproductive, maternal, newborn and child health. Access to health services remains limited,

largely due to a shortage of health care workers and inadequate infrastructure. Without proactive measures, any negative health impacts associated with the expansion of the Corridor could have serious consequences for populations in these provinces and nationally.

**RMNCH index:** Among the five provinces, only Benguela exceeds the national average for RMNCH service capacity, with a score of 53 out of 100. The remaining provinces score well below the national average of 44: Bié scores 31, Huambo 33, while both Moxico and Moxico Leste score 20. Antenatal care coverage is among the lowest in the country. The proportion of pregnant women receiving at least four prenatal visits ranges from 28% in Bié and Benguela to an average of only 39% across the five provinces—significantly below the national average of 51.2%. Immunization coverage is similarly inadequate. National coverage for the third dose of the pentavalent vaccine (Penta3) stands at 41.4%, while the average across the five

**Table 1. RMNCH index indicators**

Province	Antenatal care visits 4+ (%) 	Care seeking 5Yrs (%) 	Family Planning Needs Satisfied (%) 	PENTA3 Coverage (%) 
BENGUELA	59	60	43	51
BIE	29	66	18	28
HUAMBO	38	27	42	28
MOXICO	36	64	8	9
MOXICO LESTE	36	64	8	9
ANGOLA	51	64	27	41

Source: Angola IIMS 2023–2024

<sup>2</sup>PROJEÇÃO DA POPULAÇÃO 2014-2050 (INE, 2016 ed.)

<sup>3</sup><https://unstats.un.org/sdgs/metadata/files/Metadata-03-08-01.pdf>









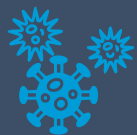
Corridor provinces is just 24.9%. Moxico province has the lowest rate at 9%. Table 1 provides a detailed breakdown of these composite indicators.

Limited access to skilled birth attendants and inadequate health infrastructure have contributed to high maternal mortality and low institutional delivery rates across the five Corridor provinces. In the last five years (IIMS 2023-2024), the average maternal mortality ratio across the five provinces was 170 per 100 000 live births. Institutional birth

rates remain below 40%, and only 50% of children are protected against maternal tetanus. Chronic malnutrition remains a significant concern, with prevalence rates ranging from 9% in Moxico and Moxico Leste to 23% in Bié.

**Infectious diseases index:** In the five provinces along the Lobito Corridor, the infectious diseases index (IDI) scores range from 20 to 33 out of 100, as detailed in Table 2. Despite the high incidence of malaria, particularly in Bié (36%), only 8% of

Table 2. Infectious disease index indicators

Province	Malaria (%) 	Coverage ART (%) 	TB-Treatment Success rate (%) 	Facilities with WASH (%) 	Infectious Disease Index 
BENGUELA	23	28	67	36	35
BIE	4	14	64	59	21
HUAMBO	8	34	67	71	33
MOXICO	3	33	44	59	22
MOXICO LESTE	3	33	44	59	22
ANGOLA	13	27	51	70	33

Source: IIMS 2023–2024, UNAIDS Spectrum 2023, WHO UHC service coverage index methodology

households surveyed across these provinces use insecticide-treated bed nets (ITNs), raising significant concerns about malaria prevention.

The health survey conducted in 2023/2024 shows persistently low levels of HIV/AIDS knowledge, testing and treatment coverage across all provinces along the Corridor, placing them among the lowest performers nationally. HIV/AIDS prevention knowledge among men (17.6%) and women (18.16%) is considerably lower than the national

averages of 24.6% and 33.7%, respectively. On average, only 23.9% of men and 27.2% of women in these provinces have ever been tested for HIV, compared to the national averages of 37% for men and 52% for women. Access to antiretroviral therapy (ART) remains markedly low. For example, in 2023, ART coverage among people living with HIV ranged from 14% in Bié to 34% in Huambo, reflecting the overall low national ART coverage of 27% (UNAIDS Spectrum, 2023). These disparities in

<sup>a</sup>WHO UHC service coverage index methodology







ART coverage highlight the critical need to expand health care access, particularly in rural areas, to improve the management of infectious diseases such as HIV and malaria.

**SCA index:** Despite a 46% increase in Angola’s health care workforce over the past four years, primarily through the recruitment of general medical practitioners and nurses, the overall service capacity and access index (SCAI) remains critically low, at approximately 11%. This is largely due to inadequate hospital infrastructure (scoring 1 out of 100) and limited human resources (scoring 23 out of 100). As shown in Table 3, hospital bed density in Benguela, Bié and Huambo is well

below the recommended standard of 18 beds per 10 000 population. With the exception of Moxico and Moxico Leste, which report approximately 9.0 hospital beds per 10 000 inhabitants, all other provinces along the Lobito Corridor report fewer than one bed per 10 000 inhabitants.

These disparities highlight critical gaps in health care access and service delivery that must be addressed alongside the development of the Lobito Corridor, ensuring that improvements in infrastructure also lead to better health outcomes for the affected populations.

**Table 3: Service Coverage and Access Indicators**

Province	Hospital bed density per 10,000 population 	IHR** core capacity 	Health Worker density per 10,000 population* 	SCA_Index 
BENGUELA	57	52	19	38
BIE	71	52	17	40
HUAMBO	43	52	18	34
MOXICO	55	52	13	34
MOXICO LESTE	55	52	13	34
ANGOLA	42	52	23	37

Source:\*\* IHR-SPAR 2023

\* Luanda Declaration Progress Report, December 2023



## Health opportunities arising from the development of the Lobito Corridor

The Lobito Corridor presents an opportunity for trade and commerce that can also enhance the health and well-being of communities across the five affected provinces in Angola.

### Economic growth and improved living conditions

The expected economic boost from the Corridor's development may lead to better socioeconomic conditions, including higher household incomes and improved living standards. Higher incomes and improved employment opportunities can reduce poverty-related health issues such as malnutrition and poor living conditions. Investments in the Lobito Corridor are expected to support ongoing efforts to ensure that these benefits reach vulnerable and mobile populations, especially those in underserved areas.

### Improved access to health care services

Enhanced transportation infrastructure will facilitate better access to health care facilities, particularly in remote and rural areas, thus improving the reach of health services. The development of the Corridor may also lead to the establishment of new health care centres and the expansion of existing ones, addressing gaps in service provision.

Improved infrastructure can have a transformative impact on access to health care. It may be valuable to also invest in building the capacity of health workers and ensure that services are inclusive, culturally sensitive and responsive to gender dynamics.

### Improved infrastructure for health commodities

The expansion of the Corridor is likely to upgrade transport and logistics systems, enhancing the supply chain for health commodities. This will enhance the capacity of health systems to effectively treat diseases and manage public health crises.

### Regional collaboration and knowledge sharing

The development of the Corridor may foster regional collaboration between Angola, Zambia and the Democratic Republic of the Congo in health and well-being initiatives, enabling the sharing of resources, expertise and health strategies. Joint efforts to tackle transnational health challenges such as infectious diseases, environmental health and disaster management could become more effective.

Overall, the Lobito Corridor presents multifaceted opportunities to improve health and well-being. However, it remains important to ensure that economic growth goes hand-in-hand with improvements in public health.

<sup>5</sup><https://extranet.who.int/e-spar/#capacity-score>



## Potential health challenges arising from the development of the Lobito Corridor

Despite the significant potential benefits of the Corridor, its development and operation may introduce health challenges, including overstretched health systems, increased gender-based violence, and a heightened risk of cross-border disease transmission.

### Overburdened health systems

Public health systems in the five Corridor provinces remain underdeveloped and overstretched, marked by poor infrastructure, limited access to primary health care, health workforce shortages, inadequate disease surveillance, and significant gaps in water, sanitation and hygiene (WASH). These systemic weaknesses are further compounded by high burdens of HIV, malaria, tuberculosis and neglected tropical diseases (NTDs).

The influx of people, goods and services along the Corridor could further strain existing health care facilities and personnel, potentially overwhelming local health systems. Without adequate support, increased demand for medical services (such as maternal and child health, emergency care, and infectious disease management) could exacerbate existing deficiencies.

Planning must include strategies to ensure that displaced or mobile populations maintain access to health care, sanitation and shelter.

### Risk of disease transmission

The spread of infectious illnesses (such as HIV, other sexually transmitted infections, malaria, tuberculosis, Ebola haemorrhagic fever and COVID-19) along major transportation corridors characterized by high population mobility and cross-border activity is well-documented<sup>6,7,8</sup>. The movement of large populations and goods along the Lobito Corridor could increase the spread of communicable diseases and sexually transmitted infections. Human mobility is a key predictor of disease spread, as mobile populations bring diverse health profiles that can introduce or exacerbate infections in host communities.

Additionally, cross-border interactions between Angola, Zambia and the Democratic Republic of the Congo could increase the risk of disease outbreaks unless robust surveillance and prevention measures are implemented. Enhanced cooperation between these countries will be crucial in mitigating the risk of cross-border disease transmission.

### Environmental and health hazards

Infrastructure development along the Lobito Corridor could trigger significant environmental changes that carry public health risks. Deforestation, water contamination and air pollution, particularly from unregulated mining and agricultural activities, could contribute to environmental degradation, exacerbating health issues such as respiratory, vector-borne and waterborne diseases.

<sup>6</sup>Singh YN, Malaviya AN. Long distance truck drivers in India: HIV infection and their possible role in disseminating HIV into rural areas. *Int J STD AIDS*. 1994 Mar-Apr;5(2):137-8. doi: 10.1177/095646249400500212. PMID: 8031917.

<sup>7</sup>Podhisita C, Wawer MJ, Pramualratana A, Kanungsukkasem U, McNamara R. Multiple sexual partners and condom use among long-distance truck drivers in Thailand. *AIDS Educ Prev*. 1996 Dec;8(6):490-8. PMID: 9010509.

<sup>8</sup>Francis Bajunirwe, Jonathan Izudi, Stephen Asimwe. Long-distance truck drivers and the increasing risk of COVID-19 spread in Uganda. *International Journal of Infectious Diseases*, Vol. 98, Pages 191-193, ISSN 1201-9712 (<https://doi.org/10.1016/j.ijid.2020.06.085>). (<https://www.sciencedirect.com/science/article/pii/S1201971220305221>)





## **Displacement and health vulnerabilities**

Displacement caused by infrastructure development could expose vulnerable populations to a range of health risks, including poor living conditions, inadequate sanitation, and limited access to health care services. Migrants moving along the Corridor may be particularly susceptible to diseases due to overcrowded and substandard living conditions, as well as limited access to preventive health care.

### **Risk of gender-based violence**

Women engaged in small-scale cross-border trade along the Lobito Corridor are likely to face significant safety risks, including increased instances of gender-based violence (GBV), discrimination and sexual exploitation as these women seek to benefit from trade and employment opportunities. The social instability associated with such developments further exacerbates vulnerability in host communities, with women and adolescent girls sometimes resorting to transactional sex or sex work, or even falling victim to human trafficking, including sex trafficking.

### **Increased risk of road/rail accident and traffic injuries**

Road and rail traffic accidents and the injuries they cause are among the most significant health risks linked to transport infrastructure projects like the Lobito Corridor. The expansion of highways typically results in higher traffic volumes, which can heighten the risk of injuries and fatalities among pedestrians, cyclists and other vulnerable road users, particularly if the network is not properly designed to accommodate increased traffic. An increase in accidents and trauma cases may also

overwhelm local health facilities, especially in areas with limited health care resources and where emergency services are ill-equipped to handle a surge in trauma patients.

## **Suggested recommendations**

Considering the health opportunities and challenges presented by the Lobito Corridor, it is crucial to ensure that challenges are adequately addressed in order to maximize the Corridor's potential as a driver of economic growth. This requires a coordinated, multisectoral approach focused on strengthening local health systems and community resilience.

### **Strengthen health care infrastructure**

Increase the number and capacity of health facilities along the Corridor, especially in remote and underserved areas, to accommodate the increased demand for health care services. Explore the use of digital health technology to reach more people.

### **Increase health workforce capacity and quality**

Invest in the training and retention of health care workers, including doctors, nurses, midwives and community health workers, to address the shortage of qualified personnel along the Corridor. Prioritize the needs of vulnerable groups such as adolescent girls, young women and migrant populations.

### **Improve access to health services**

Increase access to health services, particularly quality prenatal, delivery and postnatal care, including safe institutional deliveries. Expand





immunization coverage, especially in hard-to-reach areas and among mobile populations. Strengthen child nutrition programmes and integrate them with food security initiatives to address the high prevalence of malnutrition along the Corridor.

### **Enhance disease surveillance and control**

Establish a robust and integrated disease surveillance system to monitor health trends, track the spread of diseases, and respond rapidly to outbreaks. This should be a joint initiative between Angola, Zambia and the Democratic Republic of the Congo.

### **Strengthen cross-border access to prevention, treatment and care services**

Given the cross-border nature of the Corridor, it is essential to implement coordinated efforts to prevent, monitor and control the spread of infectious diseases, including tuberculosis, HIV and malaria. Efforts should also focus on raising awareness in border and host communities about the risks as well as prevention and mitigation measures associated with these diseases.

### **Address gender-based health challenges**

Develop and implement comprehensive programmes to prevent and respond to gender-based violence (GBV), particularly in areas experiencing high levels of economic migration and cross-border trade. These programmes should include preventive interventions, legal protection, safe spaces, and accessible health care and counselling services for GBV survivors.

### **Strengthen water, sanitation and hygiene (WASH) services**

Prioritize investments in clean water access and sewage and waste management systems to reduce waterborne diseases and improve overall public health. Step up community education and awareness efforts to encourage handwashing, safe water handling and other practices that help prevent disease transmission.

### **Promote environmental health and safety**

Regularly conduct environmental and health impact assessments of all large-scale infrastructure and industrial projects along the Corridor to minimize negative health outcomes from environmental changes, such as pollution and deforestation. Enforce environmental regulations to ensure that industrial activities do not negatively impact public health.

### **Community education on health**

Launch public health awareness campaigns to educate local communities and migrants about key health issues, such as HIV prevention, maternal health, vaccination, and hygiene practices.



## Conclusion

The development of the Lobito Corridor presents significant opportunities for economic growth, regional integration and improved infrastructure. However, it also brings with it substantial health challenges that must be proactively addressed to ensure equitable and sustainable development. The health and well-being of populations in the affected provinces of Benguela, Huambo, Bié, Moxico, and Moxico Leste will be directly impacted by both the positive and negative outcomes of this project. To maximize the benefits and mitigate the risks, a coordinated, multisectoral and data-informed approach is essential. This must be underpinned by robust gender analysis and include sustained investments in health systems strengthening, disease surveillance, prevention of

disease transmission and gender-based violence, and improvements in water, sanitation and human resources. Integrating health considerations into every stage of the Corridor's planning and implementation will help ensure that it becomes not only a catalyst for economic growth but also a vehicle for improved health and well-being for all affected communities. The potential health risks can be mitigated, and the benefits maximized. It is essential that health considerations are integrated into the planning and implementation of the Corridor's development to ensure that it becomes not only a driver of economic growth but also a catalyst for improved health and well-being for all those affected.

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