

Zambia Transport Corridors for Economic Resilience

The Global Center on Adaptation (GCA) is working under the African Adaptation Acceleration Program (AAAP) with the World Bank Group (WBG), the Road Development Agency (RDA) and the Ministry of Transportations and Logistics on the Zambia Transport Corridors for Economic Resilience (TRACER) project. The project aims to rehabilitate 200km of road between Serenje and Mpika along the Dar es Salaam corridor, construct a One Stop Border Post at Nakonde, and develop a SMART corridor between Lusaka and Nakonde. These upgrades will enhance transport and trade connectivity between Zambia and Tanzania, support economic activities along the corridor, and improve the climate resilience of key regional transport infrastructure.

Adaptation Need

Zambia's transport corridors are increasingly exposed to climate hazards such as extreme temperatures, prolonged droughts, intense rainfall, and flooding. Without targeted adaptation efforts, these hazards are expected to significantly disrupt road functionality, increase economic losses, and undermine access to essential services, particularly for vulnerable populations. GCA's climate stress test found that by 2050, and under a high-emission scenario (RCP8.5), annual climate-related losses are expected to rise substantially: up to USD 10.1 million in annual losses for the Livingstone-Sesheke corridor, USD 9.0 million for Lusaka-Chongwe-Luangwa, and USD 0.4 million for Serenje-Mpika. While the Serenje-Mpika section currently exhibits limited flood exposure due to its higher elevation, all sections face mounting risks from heat-related degradation and weather extremes. These risks also have a social dimension, with women in rural areas facing reduced access to health services, schools, and markets during periods of road disruption

GCA's Added Value

GCA's technical support aims to reduce climate risk for transport assets by conducting a comprehensive climate risk assessment, focusing on the Dar es Salaam, Nacala, and Trans-Caprivi corridors. The assessment pinpointed vulnerabilities and critical links within the transport network. Technical results highlight the need of the identification and evaluation of adaptation and resilience options, including Nature-Based Solutions. Additionally, GCA will provide capacity building activities, enhancing local authorities' abilities to integrate climate resilience into project planning and execution. Building on its technical support to the World Bank Group under the TRACER project, GCA also supported the Government of Zambia in updating the transport sector component of its Nationally Determined Contribution (NDC).

Total Investment Value Influenced

\$270.00M

Beneficiaries

800,000

IFI Implementation period

2024 - 2030

Program

Infrastructure and NbS

Partners

World Bank

Status

Completed

Countries



SDG contribution





PROJECT GOALS

Mainstreaming Adaptation and Resilience

For the Serenje-Mpika section, GCA proposed three adaptation packages addressing heat and flood risks. Although economic returns were limited due to low modeled climate risk, these measures help manage residual risks and strengthen social outcomes. For higher-risk corridors, such as Lusaka-Chongwe-Luangwa, priority measures include drainage upgrades, raised road elevations, and improved vegetation management—expected to deliver stronger returns in future project phases.

Expected Outcomes

Resulting adaptation and resilience options implemented, which GCA influenced, will deliver the following outcomes:

200 km of resilient road rehabilitation

500,000 people benefiting from the rehabilitated road and 800,000 people with enhanced access to transportation services

TIMELINE

GCA Support Status

Technical Assistance Preparation

GCA Support Implementation

February, 2024

GCA Support Completion

Monitoring

Project Investment Value

Total Investment Value \$270.00M

IFI INVESTMENT VALUE

\$270.00M

OTHER INVESTMENT VALUE

N/A

IFI partners



World Bank

CONTACTS

GENERAL MEDIA INQUIRIES

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