



Autoroute Dakar Saint-Louis Phase I

The Global Center on Adaptation (GCA), in partnership with the African Development Bank (AfDB) through the African Adaptation Acceleration Program (AAAP), is supporting the USD 214 million AfDB Autoroute Dakar Saint-Louis Phase I Project in Senegal to deliver climate smart transport asset management guidelines to optimize the resilience of the road over time. The project focuses on the Dakar-Saint Louis Highway project which will improve territorial connectivity along the 'Grande Côte,' between Kayar, Lompoul, and Saint-Louis, an area with strong potential for economic development, mining, tourism, and agricultural activities.

Adaptation Need

Climate change impacts cause damage to expensive transport assets and disrupt the services they provide. Damages to assets, loss of lives, and economic production loss associated with floods along the coast in 2017 were estimated to cost Senegal's economy a total of \$230 million or 1.4% of GDP. While engineering solutions are often prioritized, the resilience of infrastructure assets, and roads in particular, is driven in large part by downstream asset management.

GCA's Added Value

To address climate risks, GCA proposed adaptation options include engineering solutions for reinforcing the road pavement and drainage systems, and non-engineering solutions for O&M, which could include early warning systems, adaptive maintenance planning, and 'green' solutions, such as active maintenance of vegetation along roads. The solutions were co-developed and finalized with the project's stakeholders, including Agéroute and AfDB. The heavy maintenance investment options have financial returns ranging from USD 1.66 to 4.23 for each dollar spent. The solutions, which reduce key climate hazards and associated risks to the planned transport assets and surrounding natural environment, are estimated to reach USD 34.4 million and USD 37.3 million per year in 2050 for moderate (RCP4.5) and high-emissions (RCP8.5) global warming scenarios respectively.

Total Investment Value Influenced

\$213.98M

Beneficiaries

11,701

IFI Implementation period

2022 - 2026

Program

Infrastructure and NbS

Partners

African Development Bank

Status

Completed

Countries



SDG contribution



PROJECT GOALS

Mainstreaming Adaptation and Resilience

GCA developed specific outputs, upon Agéroute's request to inform Operations and Maintenance (O&M) national strategies, with a set of maintenance guidelines dedicated to tackle the issue of sand dune migration, pinpointed as a key risk for roads infrastructure in Senegal. In addition, GCA is strengthening local capacity to mainstream resilience for transport infrastructure planning, design, and operations through GCA Masterclass on Climate Resilient Infrastructure delivered with the Cheikh Anta Diop University in Dakar.

Expected Outcomes

208 km of resilient highway development

Decreased average vehicle operating costs: 22% for light vehicles and 27% for heavy goods vehicles.

21,408 direct permanent jobs during the concession period

GCA Support Status

Technical Assistance Preparation

GCA Support Implementation

November, 2022

GCA Support Completion

Monitoring

Project Investment Value

Total Investment Value

\$213.98M

IFI INVESTMENT VALUE

\$178.27M

OTHER INVESTMENT
VALUE

\$35.71M

IFI partners



African
Development Bank

CONTACTS

GENERAL MEDIA INQUIRIES

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REQUEST FOR INFORMATION

RELATED ARTICLES & RESOURCES

AfDB Project Portal

