



# Union of Comoros Maritime Corridor Development & Regional Trade Facilitation

GCA in partnership with AfDB through AAAP has supported efforts to strengthen the climate resilience of key seaports in Comoros. The project focuses on enhancing critical trade routes to sustain maritime transport, fisheries, and coastal tourism, expanding trade connectivity from 1 million to over 1.2 billion people.

## Adaptation Need

GCA's analysis revealed that the ports of Moroni, Boingoma, and Mutsamudu are highly vulnerable to climate hazards such as sea level rise, storm surges, cyclonic winds, and intense rainfall, which threaten operations and increase maintenance costs. Rising temperatures and ocean acidification further accelerate infrastructure degradation. For example, under the more extreme SSP5-8.5 scenario, projected increases are 0.8°C, 2.2°C, and 3.3°C, respectively. Given Comoros' reliance on imports and fishing, port disruptions pose serious risks to economic stability and trade efficiency. Without urgent adaptation measures, climate-induced damages could escalate dramatically by 2080, with estimated delayed cargo of approximately \$867,000 per extreme weather event per port at major ports.

## GCA's Added Value

To address these challenges, GCA's cost-benefit analysis prioritized economically viable adaptation measures. Grey infrastructure solutions, such as raising breakwaters, proved most effective for Moroni and Boingoma, with a high Benefit-Cost Ratio (BCR) of 6.59. For Moroni, a green solution—an artificial reef—was also proposed, showing a positive BCR of 2.45. In Mutsamudu, an ecological wastewater treatment system was recommended as a nature-based approach. GCA also identified options for improved climate monitoring, governance, port planning, and community engagement to ensure long-term maritime resilience. GCA is supporting the integration of the most cost-effective adaptation options within the AfDB Investment project by providing a financial rationale for the proposed adaptation options.

Total Investment Value Influenced

**\$247.58M**

Beneficiaries

**51,500**

IFI Implementation period

**2024 - 2029**

Program

**Infrastructure and NbS**

Partners

**African Development Bank**

Status

Completed

SDG contribution



## PROJECT GOALS

# Mainstreaming Adaptation and Resilience

GCA's support is informing the design of port extension investments in Moroni and Boingoma under the AfDB-financed project, while delivering the technical analysis for a third port on the remaining island to support a potential follow-on investment. In parallel, GCA is advancing global knowledge leadership through its collaboration with the Coral Research and Development Accelerator Platform (CORDAP), focusing on refining design and investment rationale for tandem artificial reefs and other NbS. This includes scoping a joint GCA-CORDAP workshop with coral reef scientists to assess feasibility of NbS for Small Island Developing States (SIDS). These mainstreaming efforts aim to accelerate implementation readiness while embedding climate resilience at the core of national infrastructure planning.

# Expected Outcomes

Two seaports upgraded with more resilient design and operations

Jobs secured through port resilient operation

Post 2080, the ports of Boingoma and Moroni will be able to avoid on average approximately US\$ 867 000 of delayed cargo, due to a 1-50-year weather event

TIMELINE

# GCA Support Status

Technical Assistance Preparation

GCA Support Implementation

July, 2024

GCA Support Completion

Monitoring

FINANCE

# Project Investment Value

Total Investment Value  
\$247.58M

IFI INVESTMENT VALUE

\$240.62M

OTHER INVESTMENT  
VALUE

\$6.96M

## IFI partners



African  
Development Bank

GENERAL MEDIA INQUIRIES

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