



Global Solutions Summit  
United Nations HQ  
May 5, 2023

# **SUSTAINABLE DEVELOPMENT: THE CHALLENGE OF CLIMATE AND ROADS**

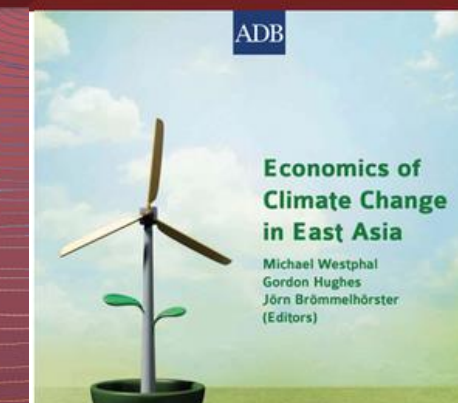
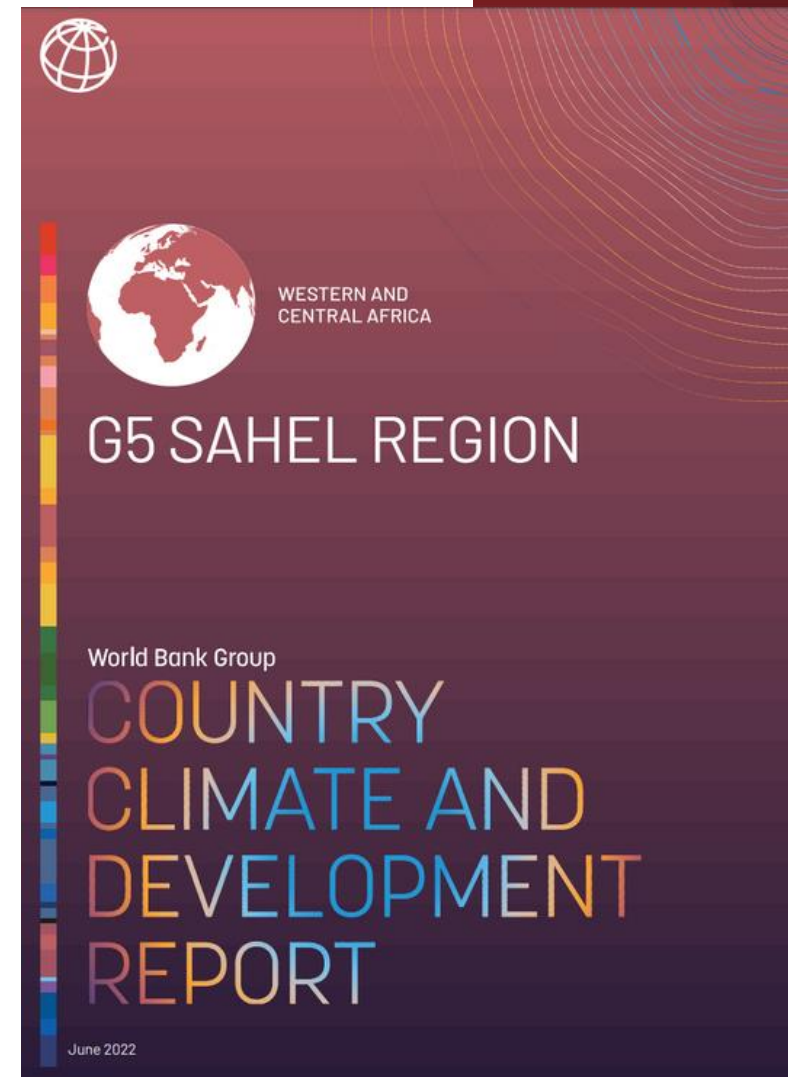
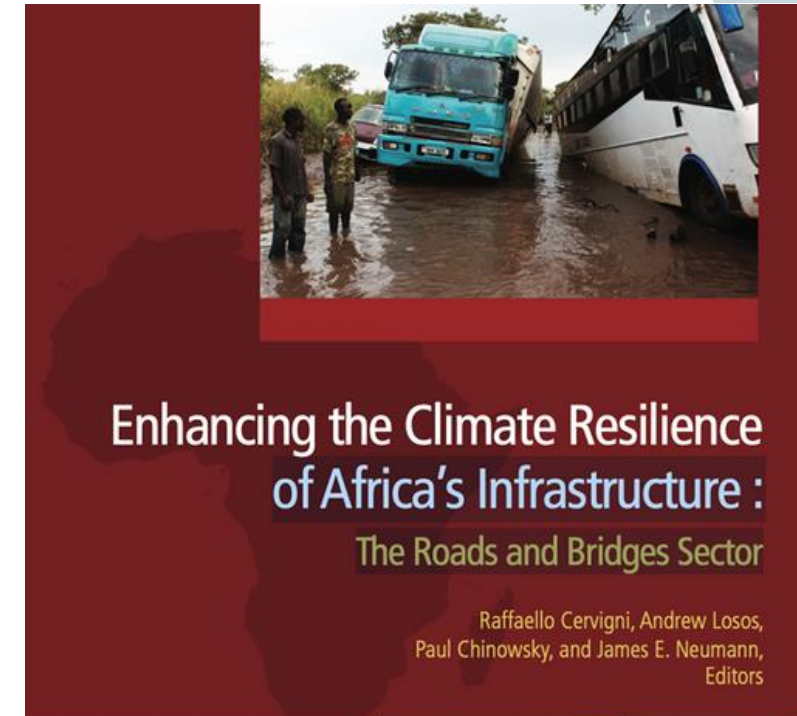
Paul S. Chinowsky, PhD  
Director



# Transport Sector

Focus Since 2006

The True Cost of Climate Change



AFRI-RES-TP2 TRANSPORT

Enrolment options

AFRI-RES-TP2-TRANSP-EN-2022 AFRI-RES-TP2 TRANSPORT

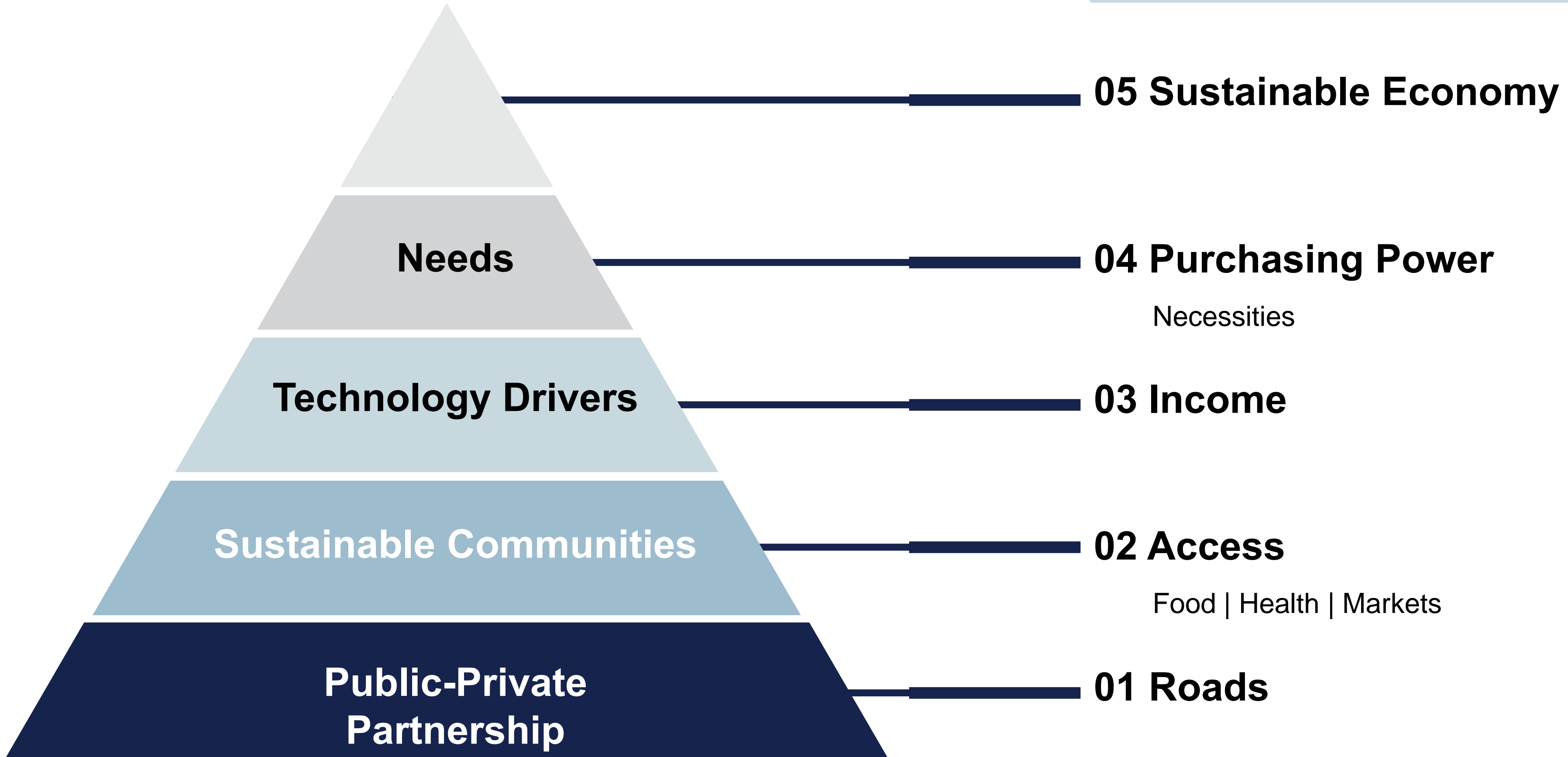
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The screenshot shows a navigation menu on the left with 'Home', 'Site pages', and 'Courses'. The footer contains logos for UN, AFRICAN UNION, ATPC, ALPC, and the European Union.

# Roadmap



# Road Deficit

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**73% UNPAVED**

**Only 27% of Africa's 2 million kilometres of roads are paved**

**(19% in sub-Saharan Africa, versus 27% in Latin America and 43% in South Asia)**

# Climate Impact

Conditions are rapidly getting worse

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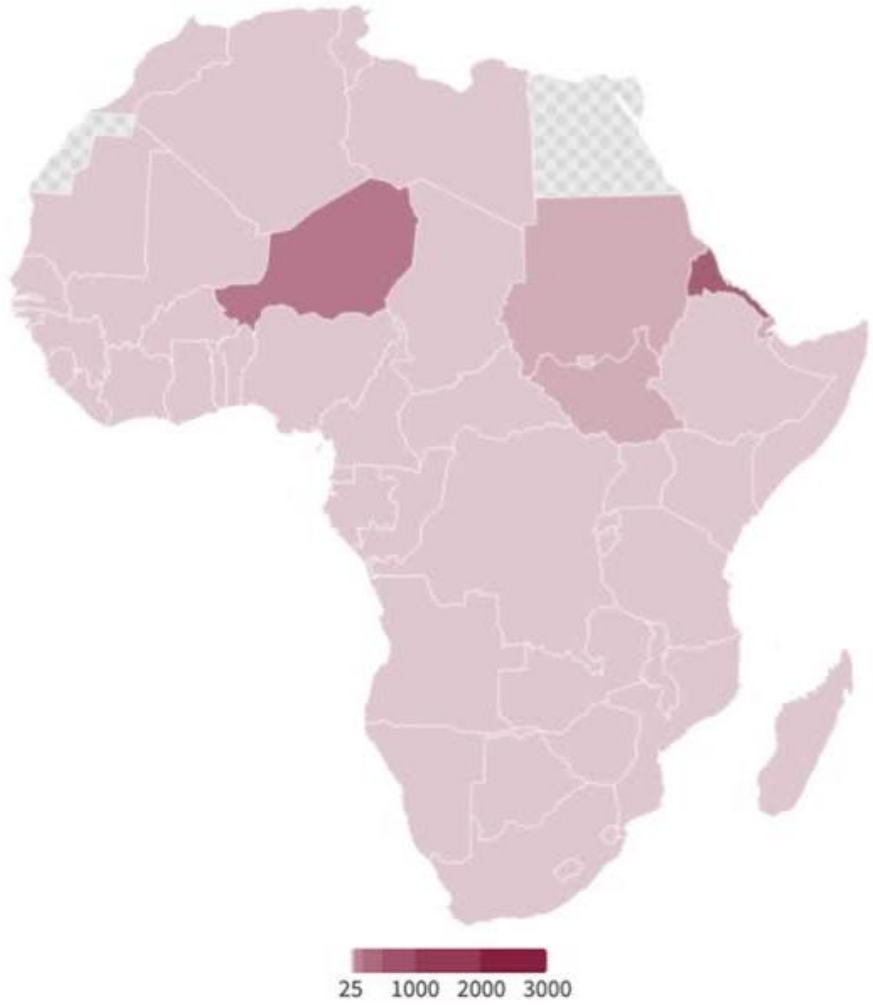


# Total Cost of Climate Change

Adaptation (\$USD Million) **2020**

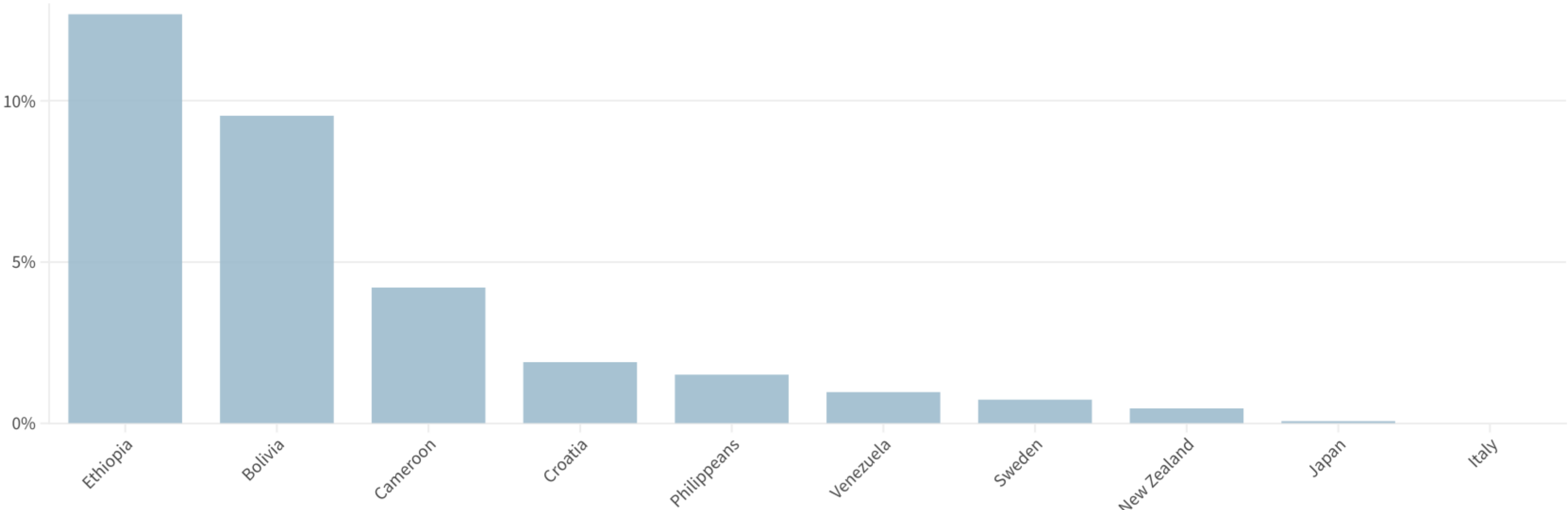


No Adaptation (\$USD Million)



# Average Decade Expenditures

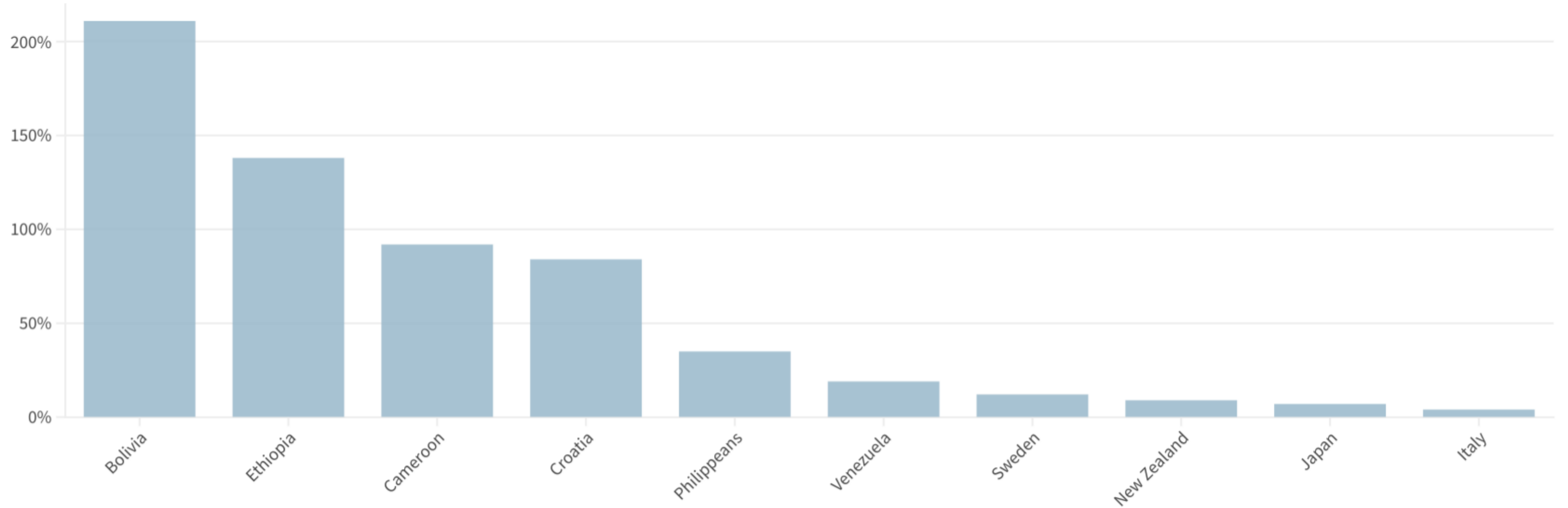
Cost comparisons BLIND us to the TRUE IMPACT of climate change and the OPPORTUNITY to improve road networks



% of roads expenditure that will be focused on repairing damage from climate events

# Total Opportunity Cost

The lost ability to expand current paved road inventory due to the need to reallocate funds to offset potential impacts from climate change





# CHANGE THE STORY

Collaboration on Modeling - Stop Analyzing, Start Acting

New Materials - Stop Repeating, Start Replacing

New Policies - Stop Slipping, Start Sustaining

The Cost of Climate Change CANNOT be Borne by Any  
Developing Country

Let's Start Addressing the True Cost of Climate Change

Technology Collaboration is Essential as a First Step

# Thank You

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