

# Latin America and the Caribbean

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Vegetable sellers  
at the market, Peru



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Connie Espinosa  
Latin America and  
Caribbean Director

In Latin America and the Caribbean, we are applying our experience, and the original research CDKN has commissioned, to strengthen institutions to respond to climate change. We are promoting better understanding of the links between climate change agendas and development plans – and building the economic case for climate action now.



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Claudia Martinez  
Senior Strategic Advisor,  
CDKN Colombia

The Paris Agreement was a big incentive to change the conversation about climate change in Colombia.

## Increasing El Salvador's resilience to natural hazards

El Salvador is a small, densely populated country that is highly vulnerable to natural hazards. The devastating impacts of Hurricane Mitch in 1998 and two earthquakes in 2001 catapulted disaster risk management on to the national policy agenda. At the Government of El Salvador's request, CDKN funded a study to review the exposure of the country's strategic infrastructure to multiple hazards.

The study modelled almost 100 different hazard scenarios, including landslides, flooding, tsunamis, earthquakes and volcanic hazards, and assessed the physical vulnerability of major roads, bridges, transmission towers, electricity, water and health infrastructure. The study concluded that natural hazards are causing US\$35.5 m per year of losses to El Salvador's infrastructure.

CDKN is helping bridge the gap between science and policy, providing decision-makers with a robust evidence base so they can make informed and coordinated decisions. In June 2015, the Government of El Salvador built on this study, and on stakeholder dialogues sponsored by CDKN, to develop and launch its first National Climate Change Plan, with the aim of building a low-carbon and climate resilient society.

Now CDKN is helping the Government to implement the National Climate Change Plan by developing tools to address climate change issues that are raised following Environmental Impact Assessments (EIAs) on infrastructure projects. This project has also trained Ministry of Environment staff and carried out awareness-raising activities for other professionals involved in EIAs.



San Salvador,  
El Salvador

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An eroded hillside,  
Quito, Ecuador



Improving ecosystems around Quito, Ecuador

## Reducing Quito's risk from floods and fires

Poor people in the hills surrounding Quito live under constant threat from landslides and wildfires, which climate change has made worse with alternating heavy rains and droughts. A CDKN study and pilot project helped make the case for restoring local ecosystems and sustainable farming to safeguard these vulnerable communities.

Not everyone has benefitted from Ecuador's recent economic growth; around 38% of the capital's 2.2 million inhabitants still live below the poverty line, many in shanty towns dotted along steep slopes and ravines on the outskirts of the city. Erratic rainfall caused by climate change can transform the ravines into rivers of mud with the power to wipe out homes and lives in an instant.

CDKN and the Ecopar Corporation conducted a vulnerability study to help Quito's municipal government to design initiatives that protect the sensitive ecosystems within city boundaries, combat soil erosion, and safeguard vulnerable lives and livelihoods.

The CDKN and Ecopar teams then partnered with Quito's Department for Environment to assess five rural communities to the north of the city using a participatory, gender-based approach to gauge

local need. The study fed into an adaptation pilot project focused on the area's main industry – agriculture – covering sustainable production, water management and irrigation, supply chains, and community engagement.

An agro-forestry nursery was set up to help maintain the delicate balance between agricultural production and forestry systems. The nursery aims to restore native species and vegetation cover to prevent further soil erosion and landslides. In the wake of the project, the city government has funded numerous climate projects following the study, including resettling families living in flood-risk areas; creating urban green spaces and roofs; and setting up urban farms to provide nutritious and affordable locally grown food to poor communities. Over 1,000 urban farms have sprung up around the city, from small family plots to large-scale neighbourhood farms.

The city's Director of Climate Change, Diego Enriquez, announced that the study would also inform new measures to tackle wildfires, which affect many poor communities. Following the project, participants and their families said they now have the necessary tools and knowledge to develop new responses to emerging climate challenges.

## Building resilient and adapted roads in Colombia

The road infrastructure sector is one of the main pillars of the Colombian economy, contributing 4.23% of GDP (2013) and underpinning other sectors such as trade, transport, tourism and agriculture, among others. However, the national road system is very vulnerable to climate change and climate events, as recorded in 2010–2011, when the ‘La Niña’ phenomenon affected almost 10% of the primary road system, cost about 2.2% of GDP, and hampered the growth of other sectors which depend heavily on road infrastructure.

At the same time, the Government of Colombia is investing US\$18 bn in its 4th Generation Road Concessions Program (4G), to modernise its primary road system and improve the connectivity among the country’s main development clusters. This creates an opportunity to build more climate resilient roads and include adaptation criteria in road planning and investment, thus maximising investments, reducing operating costs in the long run and improving economic competitiveness.

Against this background, CDKN and Ecology, Economics and Ethics (E3) supported the Ministry of Transport and other governmental agencies to create Plan VIAS-CC, the first ever cross-sectoral adaptation plan in Colombia. This plan aims to mainstream climate adaptation into transport sector

planning. It sets out a pathway with specific actions for early adaptation measures, based on innovative methods of road-building, improved knowledge, robust information systems and greater institutional capacity. Plan VIAS-CC is now being carried out.

CDKN has also supported the development of the Climate Risk Model and Assessment, which provides the first climate risk map for the nation’s primary road system and shows that nearly 40% of that network will be at high risk from climate impacts by 2040. The Ministry of Transport is now undertaking a climate risk analysis on two vulnerable stretches to determine adequate adaptation measures and to document the experience and apply it elsewhere. The Ministry has also created a Climate Change Working Group to lead its climate compatible development agenda and has organised a regional workshop to improve capacity amongst professionals in the sector.

***“Thanks to CDKN for all the support in the transport sector.”***

**Magda Buitrago, Advisor to the Environment and Sustainability group of the Ministry of Transport**



Colombia's roads are vulnerable to the impacts of climate change

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Rural bus service,  
Tierradentro,  
Colombia