EVIDENCE BASED INFRASTRUCTURE IN CURACAO

THE CURACAO ASSESSMENT WAS LAUNCHED AT AN INTERNATIONAL RESILIENT INFRASTRUCTURE CONFERENCE

UNOPS and ITRC-MISTRAL presented the results of the EBI assessment at the Resilient Infrastructure Conference in Curacao, on the 8th and 9th of May, 2018. More than 100 participants attended from Curacao, the Caribbean region and international institutions. Key stakeholders in attendance from Curacao included the Prime Minister, 3 Ministers, ministry representatives, public utility companies, the University, private sector, donors and NGOs. Regional representation came from St Lucia, Grenada, Antigua, Dominica, Barbados and Belize.

Evidence Based Infrastructure

UNOPS advocates the need for a paradigm shift in infrastructure planning: moving away from traditional silo-based practices, towards a holistic approach that recognizes the interdependence of infrastructure systems across cities, countries and regions. In order to do so, UNOPS has developed the Evidence Based Infrastructure (EBI) framework, to support countries in making evidence-based decisions for a more resilient infrastructure with regards to future challenges such as climate change.

A global initiative, with a strong academic foundation

Since 2015, UNOPS has partnered with the Infrastructure Transitions Research Consortium (ITRC), a consortium of UK universities led by the University of Oxford, to benefit from its pioneering know-how and broad experience in this area.

Curacao leading the way in the Caribbean for infrastructure planning

The Government of Curacao has asked UNOPS to assist in its objective of adapting its management of infrastructure to become more resilient to future changes that the country might face, from the effects of climate change to an economy that is less reliant on fossil fuels.

Since 2016, the Ministry of Traffic, Transportation and Urban Planning and UNOPS have worked together with stakeholders in Curacao to develop the EBI approach for the country, notably through the National Infrastructure Systems Model (NISMOD), which is a unique tool that simulates the future of national infrastructure systems across multiple sectors. As a first for the Caribbean region, this initiative highlights Curacao’s ambition to promote international best practice and lead in resilient infrastructure planning.
Modelling the future to support long-term sustainable and resilient development

The first step of the study consisted of assessing the current infrastructure systems by mapping the location, interconnectivity and interdependence of assets from a range of sectors. Then, by applying a range of demographic and economic scenarios, the model has been used to:

- Support Strategic Planning by assessing long-term infrastructure needs and evaluating how those needs can be met using investments (both public and private), and policies. Key sectors such as wastewater, water, energy and waste have been analyzed, highlighting how evidence-based infrastructure development can be used to address Curacao's key long-term sustainability challenges.

- Support Resilience Planning by assessing the climate-change related risks (specifically, of sea-level rise and storm surge events) of infrastructure and social assets (hospitals, schools, public buildings...etc), to inform adaptation and preparedness for those risks.

The assessment was developed through the use of a long-term planning model and a geospatial database which will later be handed over to the authorities for their further development and use. Of primary importance is that the tools developed were open-source, which is a great advantage for partner governments and beneficiaries. This avoids the costs and technical constraints associated with patented tools, allowing for broader adoption by a range of entities.

EBI Curacao has provided the evidence and tools to support infrastructure decisions, establishing a journey towards sustainable and resilient development, and giving Curacao's senior decision-makers the confidence to act.