

Caribbean

Aim

In the Caribbean the PARATUS project is working at different scales: we aim to support regional organizations in the development of a Multi-Hazard Risk Assessment Framework and local stakeholders in better preparing for future complex disaster events.

Why

The Caribbean is one of the most disaster-prone regions in the world, being vulnerable to an array of natural and anthropogenic hazards. These are expected to worsen due to climate change.

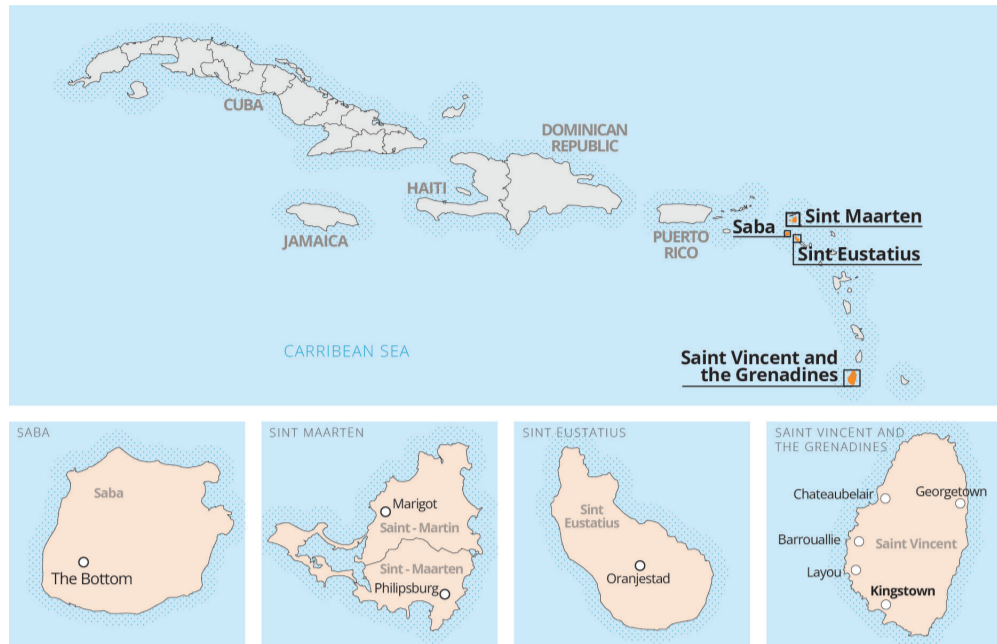
Why Caribbean

Small Island Developing States are one of the most vulnerable regions for climate-change induced multi-hazard events. In combination with other triggering events, such as volcanic eruptions, these multi-hazards pose a severe threat to the society and economy of these small countries.

Where do we want to go

At Regional Scale PARATUS is supporting regional organisations in the development of a Multi-Hazard Risk Assessment framework for the Caribbean. This framework advises stakeholders which multi-hazard risk approaches are appropriate for specific situations.

Geographical area



Eastern Caribbean Islands

Stakeholders involved



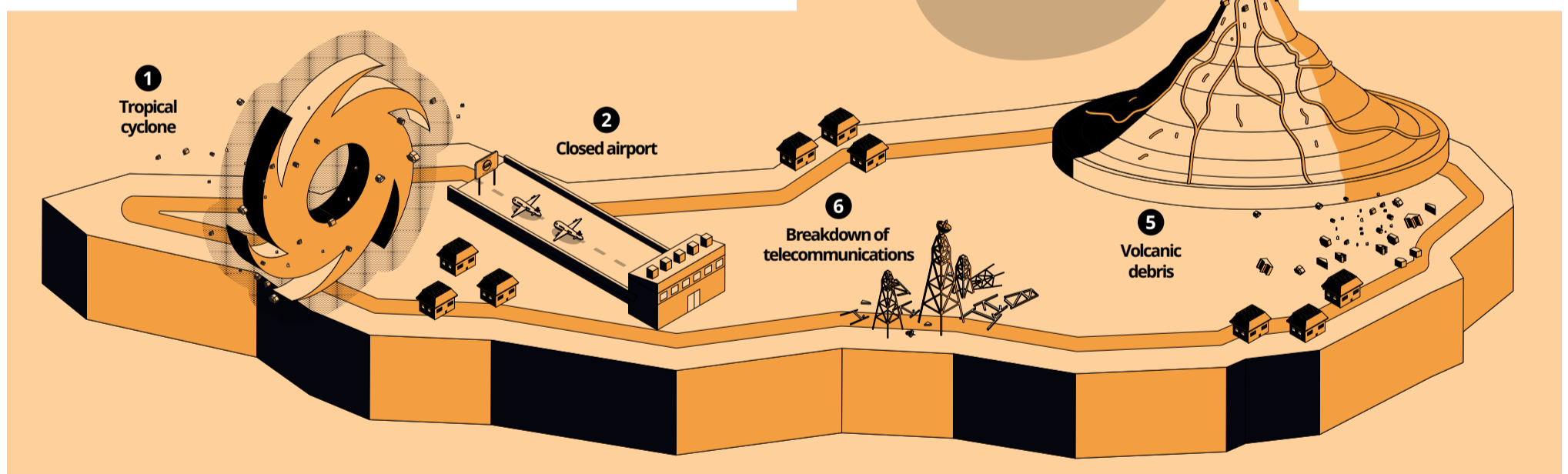
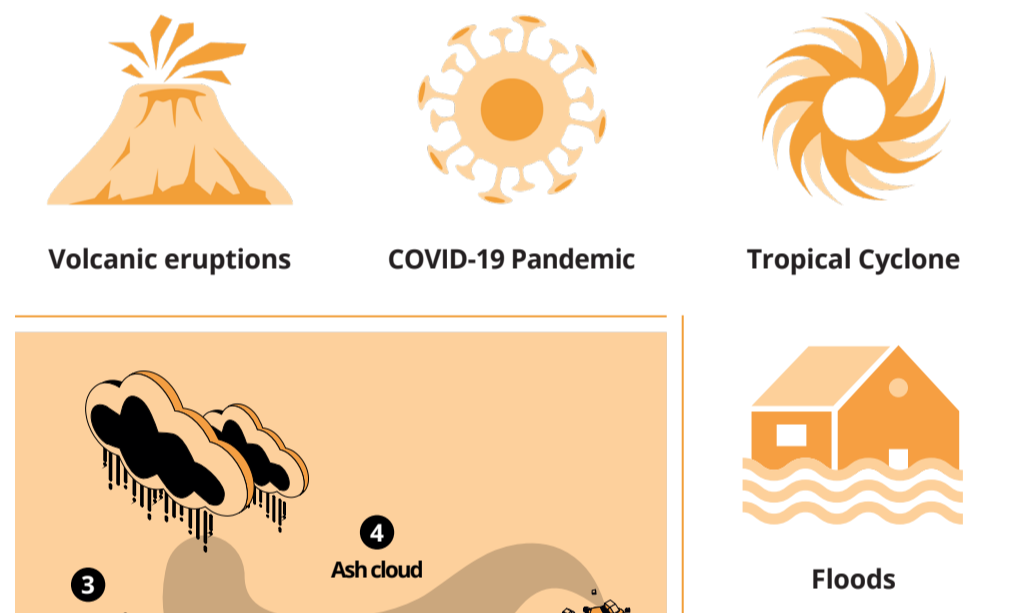
Timeline of impact chains



Sectors



Hazards



Research Methodology

<p>Climate change has already turned into crises in island states. This case study focuses on Caribbean islands that are part of Europe, especially the islands of Sint Eustatius, Sint Maarten, and Saba, but will also consider other islands (Sint Vincent and the Grenadines) and the Caribbean in a wider context, considering cross-border issues.</p>	<p>PARATUS aims to support regional and national stakeholders in the Caribbean with tools for Impact-based forecasting (IBF). IBF not only aims to predict what the weather will be, but what the weather will do in terms of impact, so that early actions can be taken to reduce the impact.</p>	<p>510, the data and digital initiative of the Netherlands Red Cross, is going to develop a tool for Impact-Based Forecasting for Sint Maarten in collaboration with other partners. This is done through a co-creation process with close interaction with stakeholders.</p>	<p>In Saint Vincent we study the impact of multiple hazards over time. The island has been affected by a number of volcanic eruptions. The latest eruption in 2021 had a large impact as it occurred during the COVID-19 pandemic and a Dengue epidemic. We also look at future multi-hazard scenarios, under climate change, and analysis the possible impact..</p>	<p>Future eruptions and or hurricane pose a major threat to the build environment, and economy, in combination with climate-induced coastal erosions. PARATUS supports national stakeholders in Multi-Hazard Risk Assessment.</p>	<p>Sint Maarten, Saba and Sint Eustatius are three small islands with Dutch links, that are highly vulnerable to tropical storms. In these islands we look at communication disruption to multi-hazard events.</p>
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Expected Results

- 01** Strengthen regional capacities for risk assessments and the development of risk profiles for priority hazards affecting CDEMA Participating States.
- 02** Impact Chain-based overview of the outcomes of historical and more recent compounding events that impacted sectors within individual countries.
- 03** Multi-hazard risk assessment at national scale based on the proposed multi-method framework.
- 04** Tools for rapid assessment of flood and landslide hazards, and loss estimation, and training of stakeholders in the use of these tools.
- 05** Co-developed tools for incorporating multi-hazard risk in planning and preparedness activities.
- 06** Impact-Based Forecasting tool implemented for at least one of the Caribbean islands, and possible regional upscaling.