

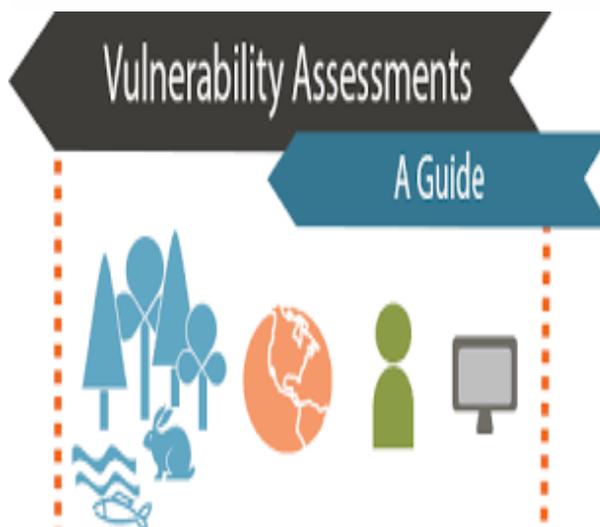
Modelling of Vulnerability and Adaptive Capacity of Caribbean SIDS

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Rethinking the Vulnerability of Small Island Developing States (SIDS) to Climate Change

- The ONLY reliable threshold based on accurate scientific conclusion upon which they would physically survive.
- Vulnerability is dynamic.



Rethinking the Vulnerability of Small Island Developing States (SIDS) to Climate Change

- Modeling the dynamism of climate change vulnerability for SIDS.
- A more comprehensive approach - Climate Change Vulnerability and Capacity Assessment Model for Caribbean Small Island Developing States (CC-VCAM-CaribSIDS).

CC-VCAM-CaribSIDS Development Process

DEFINE BASELINE NORMAL

- 1985-2015 – IPCC Fifth Assessment Report Baseline
- Generate high resolution spatial distribution through a form of gridded interpolation method
- Develop high resolution spatial distribution with some downscaling modelling using the CMIP6 datasets for the high/medium/low scenarios.



CC-VCAM-CaribSIDS Development Process

COMPOSITE SENSITIVITY INDEX

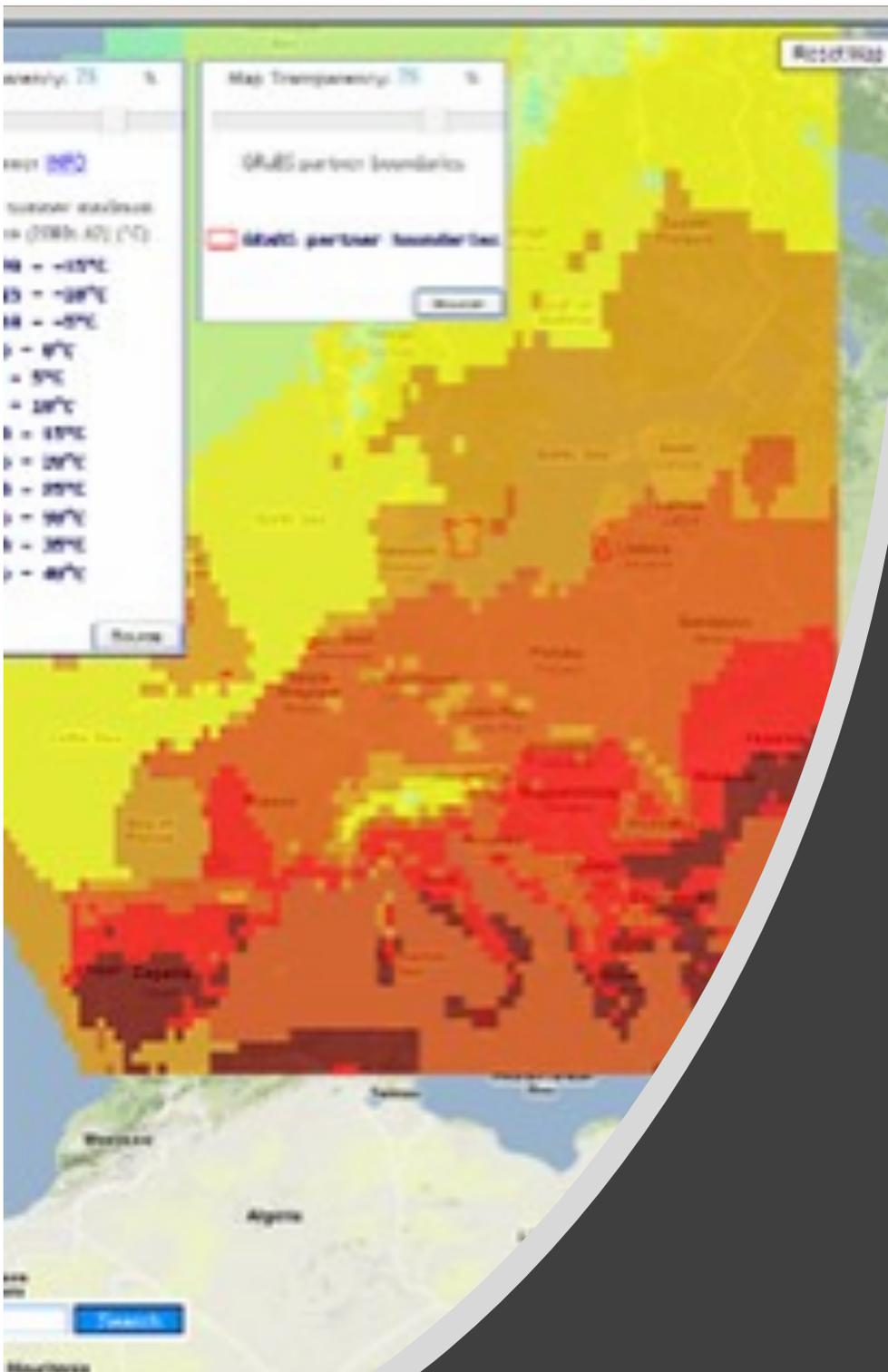
Physical/Natural:

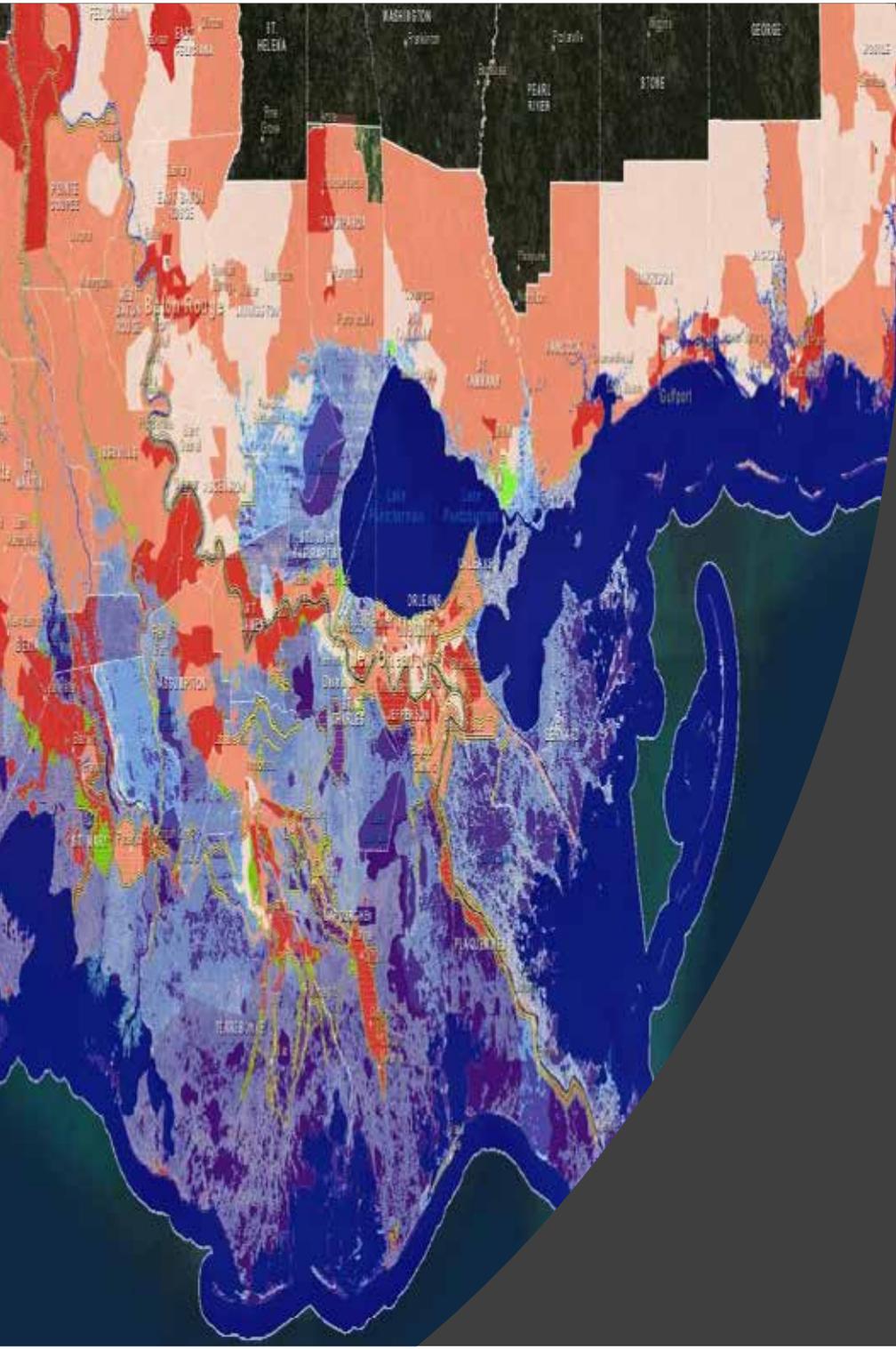
- Population density
- Critical Infrastructure

Social:

- Family Structure
- Structural sensitivity
- Rental dwelling
- Mobility
- Access to amenities
- Disable/inactive population
- Local Resource Base

Integrate - GIS





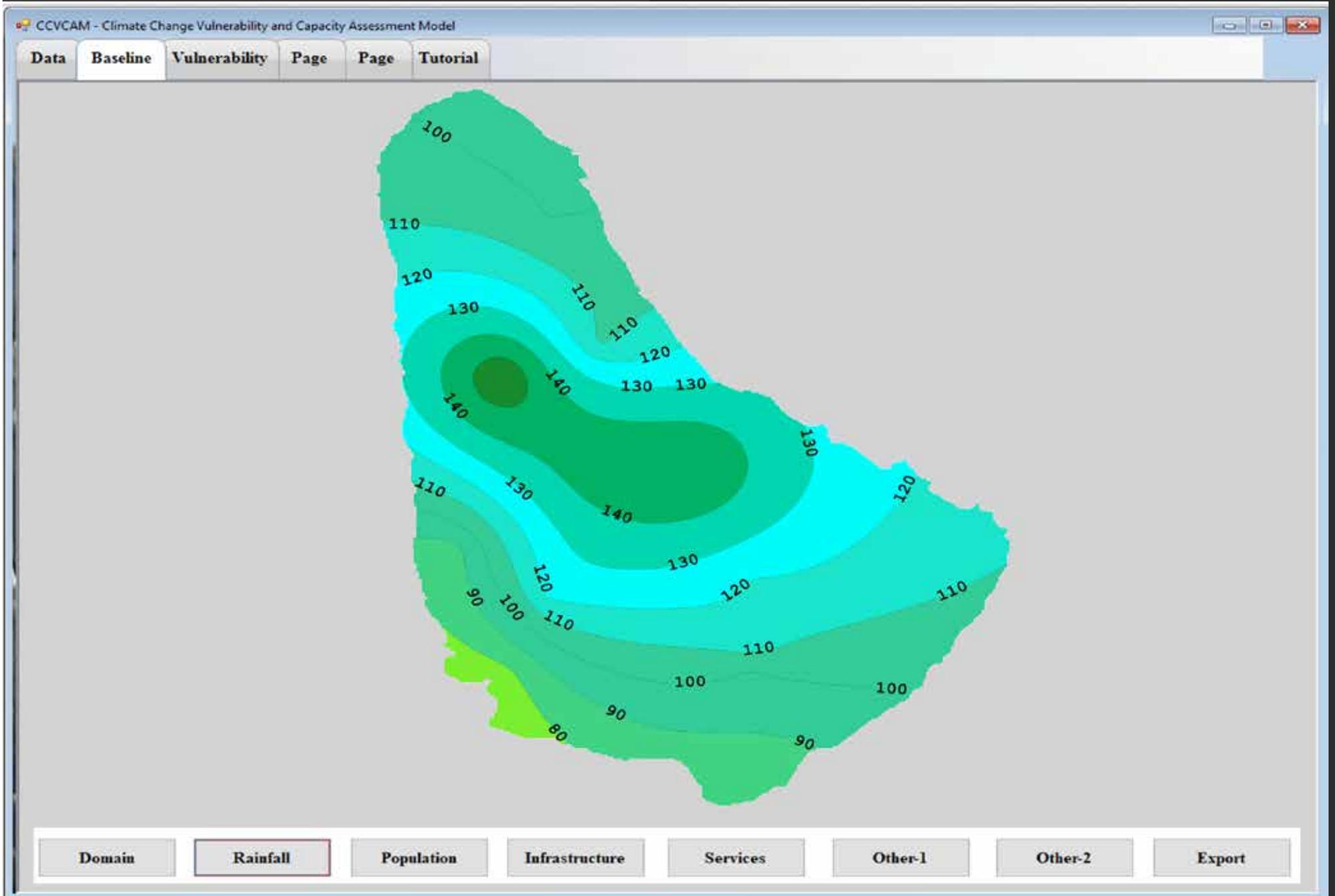
CC-VCAM-CaribSIDS Development Process

COMPOSITE ADAPTIVE CAPACITY INDEX

- Economically active;
- Education and awareness;
- Land-use planning;
- Infrastructural Integrity;
- Protective Structures

Integrate - GIS

CC-VCAM-CaribSIDS – Working Progress



CC-VCAM-CaribSIDS – Working Progress

CCVCAM - Climate Change Vulnerability and Capacity Assessment Model

Data Baseline Vulnerability Page Page Tutorial

Files Selection And Parameters Settings

Domain Information

Domain Boundary File	<input type="text"/>	Browse
Historical Climate File	<input type="text"/>	Browse
Infrastructure File	<input type="text"/>	Browse
Vulnerable Structures File	<input type="text"/>	Browse
Data File 1	<input type="text"/>	Browse
Data File 2	<input type="text"/>	Browse

GCM Information

Model Scenario

GCM Model

Simulation Information

Start Simulation Year Time Step

End Simulation Year

Output Information

Colour Scale File	<input type="text"/>	Browse
Images Caption	<input type="text"/>	
Output Folder	<input type="text"/>	Browse

Social Factors

Population

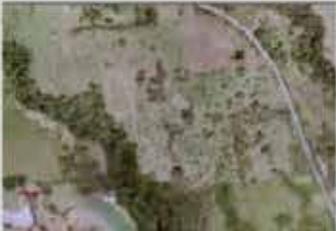
Mobility Ratio

Dependency Ratio

Vulnerability Factors

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Factor 2	<input type="text" value="0"/>
Factor 3	<input type="text" value="0"/>
Factor 4	<input type="text" value="0"/>
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START



QUIT

Processing Output Processing...

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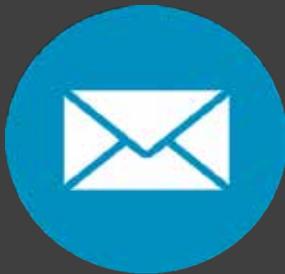
CC-VCAM-CaribSIDS

- The CC-VCAM-CaribSIDS will make a significant contribution to understanding the vulnerability of Caribbean SIDS, specifically to climate change scenarios.
- It is further expected that this will serve as a fundamental model to assist in guiding the process towards sustainability and viability, as it provides the foundation for the identification of the optimum restorative action to reduce impacts through effective implementation.





T H A N K Y O U



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