

# OACPS Research and Innovation Programme

**Harnessing Innovative technologies to support Resilient Settlements on the Coastal Zones of the Caribbean**



**Perry Polar**  
**The University of the West Indies**



Implemented by the OACPS Secretariat



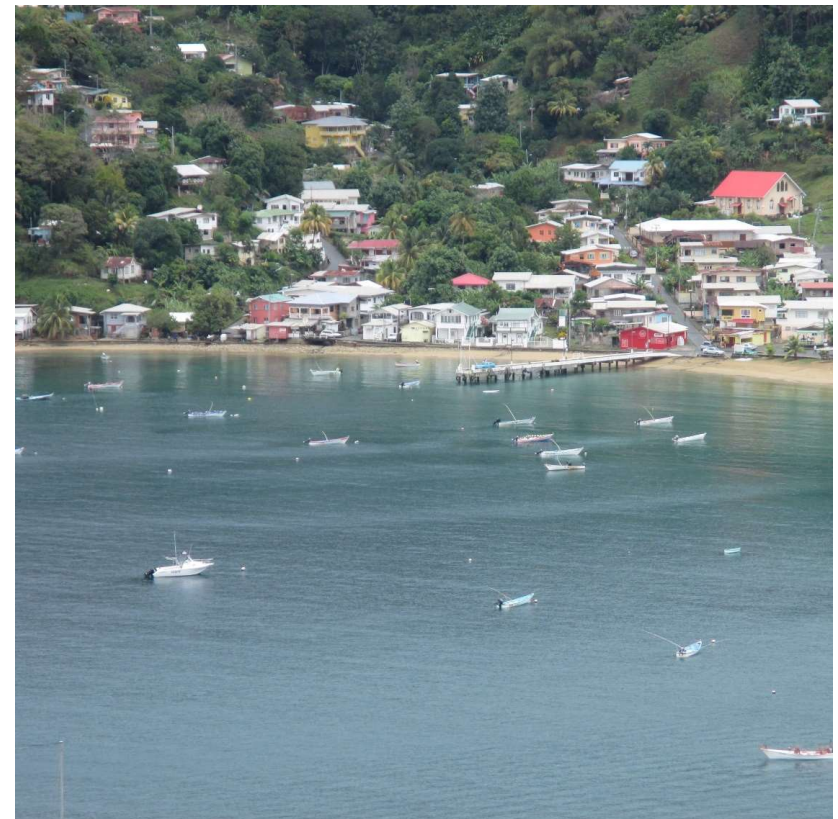
OACPS R&I



Financed by the European Union

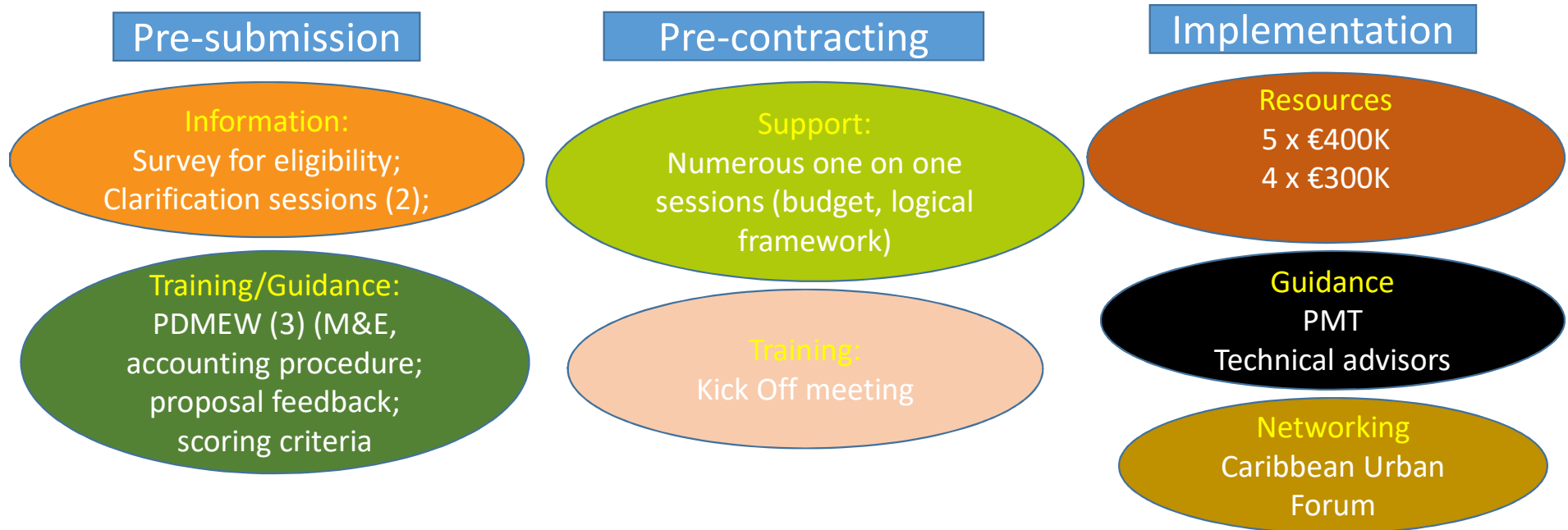
## What was the rationale for seeking support from the ACP Innovation Fund?

- Caribbean people are coastal
- Climate change and natural disasters
- Limited indigenous financing schemes
- Build a self sustaining R&I system (planning)



## How is the project implemented?

- Methodology (structure of financial and technical support to third-party projects)



- Info on Calls for Proposals (number, focus ...)
- Call for proposals (Pilot, Open, Third)
- New digitally based planning tool/ Healthy cities/Limiting factors
- Third party implementation



## What are the third-party projects doing?

Grantee	Location	Type	Duration	Products
UTT	Trinidad	App for collection of public transportation data and promotion of gender security Data to guide transportation planners and other key decision makers	2 years	Mobile phone app to verify 'safe' taxis and collect transportation data; Surveys on green public transport; data to support CNG refueling infrastructure
CANARI	Trinidad	Enhancing Vulnerability and Capacity Building Assessments (VCAs) with drone technology Development of community resilience plans Incorporation into coastal agencies practices, national laws and policies	2 years	Technical review of digital technologies and participatory tools; Vulnerability Assessment tool; Training on technologies and tools; Reports on pilot communities; Community resilience plans; road map with recommendations
PUCMM	Dominican Republic	Data collection on coastal parameters, land use changes and heat island effect in city Development of App to allow for real time decision making	2 years	Databases on location of infrastructure, construction materials and heat produced; visualization and prediction tool showing change in heat island effect with different parameters; papers
Spatial Innovation	Jamaica	Development and populating digital twin using GIS to improve planning Training in GIS Recommendation co-developed with coastal agencies	2 years	Data on natural hazards and vulnerability in Bluefields; Digital platform to allow prediction; Training in use of digital tool; recommendations for policy
Smith Warner Internatio	Dominica	Collection of data from existing GIS maps and field data collection Creation of model to predict coastal erosion	2 years	Risk Assessment Report for Dominica; Coastal erosion model; Hazzard vulnerability map for coastal communities; Training of community for



## What are the third-party projects doing?

Grantee	Location	Type	Duration	Products
CARDI	T&T, SVG, Saint Lucia	Socio-economic baseline of coastal communities Monitoring of South American weevil populations in relation to weather Training of farmers	1.5 years	Socio-economic assessment report; Integrated Pest Management Plots; National Committee; Farmer Field Schools; Workshops; Manuals; Videos
Atom Solutions	Barbados	Prediction of Sargassum (seaweed) influxes Coordination of community responses	1.5 years	Data on biomass and movement of Sargassum; Sargassum Biomass Prediction App; key stakeholder meetings for coordination of collection of Sargassum;
Habitat for Humanity	T&T	Development of Coastal Vulnerability Index based on sea level rise to select communities and ground truthing; community vulnerability assessments and action plan; training of communities in Disaster Risk Reduction	1.5 years	Dashboard and interactive map of communities; Training workshops; Documentary
UTECH	St. Lucia; Jamaica	Developing of methodology to map and monitor informal settlements using GIS datasets and drones; customized census along define informal settlement boundaries; training of stakeholders on use	1.5 years	Data availability and gaps report; geospatial file on informal settlement boundaries; Publications

## HIT RESET Caribbean products

Technical papers (3)

Caribbean Urban Forum  
(Policy dialogues;  
Proceedings)

Popular  
publications

Third party financial  
management system

## How are/will the products / services of the third-party projects / parent project be(ing) used?

**Findings:**  
Three projects initiated

### Lives and Livelihoods:

Lives saved and green transportation understood (UTT)

Vulnerabilities in communities understood and addressed (CANARI, HfH)

Livelihoods improved through pest control (CARDI)

Tourism improved through Sargassum management (Atom)

### Government Policy:

Heat island effect in urban centers understood (PUCMM)

Visualization for planning of communities enhanced (SI)

Coastal erosion monitored (SWI)

Informal communities better understood to allow informed interventions (UTECH)