

Caribbean Community Climate Change Centre



Empowering People to Act on Climate Change



CDEMA

5Cs

CDB

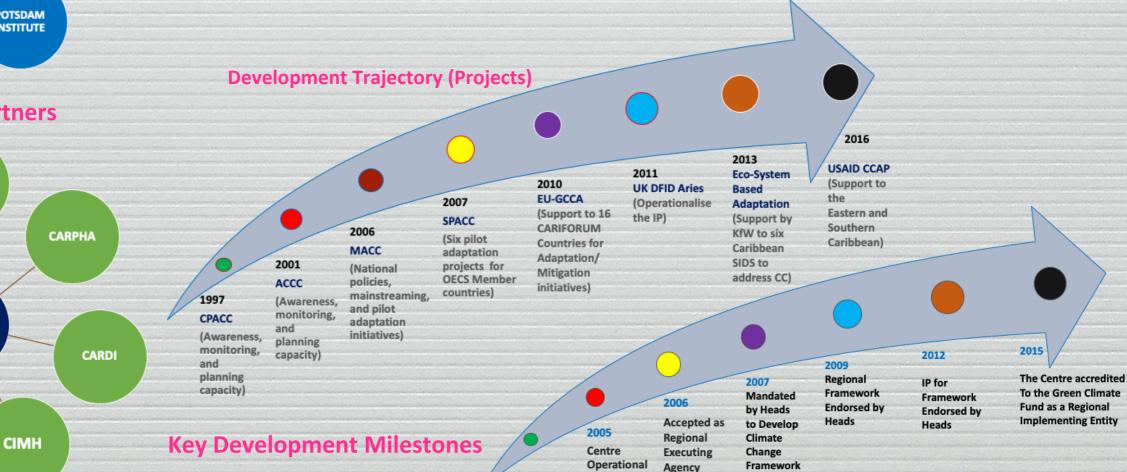
NATIONAL

CRFM

The Centre's two primary mandates

- -To coordinate the regional response to climate change and the region's efforts to manage and adapt to the impacts of Climate Change.
- -To develop a financial mechanism to support its operations.

The Centre became operational in July 2005 through supporting grants from the host country, Belize and the Governments of Barbados and Italy.



Challenges



Solutions

<u>Targets</u>

- Decentralized water capture, storage and distribution.
- Increase storage capacity for essential services and shelters.
- Desalination or Brackish Water Reverse Osmosis technologies.
- Physical Barriers to increase soil water retention and reduce storm water runoff.
- Use of soil materials with increased water retention capacities.
- Reduce Non-Revenue Water: Implement NRW program.
- Grid independence, use renewable sources for generation and batteries to store energy.
- Limit use of potable water for non-potable purposes.
- · Public awareness campaign
- Development of Public-Private Partnership policies
- Install infrastructure to withstand category 3/4 winds and storm waters.

Health, Agriculture, Water, Energy, Climate....

- Reduction in potable water availability, reduced water access for sanitation & hygiene.
- Limited storage capacity for essential services.
- Reduced food security: reduction and loss of crops.
- Salt intrusion to aquifers and at 61-64% of agricultural wells.
- Decreased water penetration in soils to the underground aquifers: (crops) Decreased soil moisture.
- Aquifer recharge is about 15-20% of the average annual rainfall.
- Increased prolonged power outages: Limited access to pumping power during severe weather events.
- Increased drought periods have suppressed IRWR.
- Increased storm weather intensity and frequency.

WSRN S-BARBADOS BENEFITS



- RE systems and MT installed and integrated:
 - Decrease Fossil Fuel usage
- Revolving Adaptation Fund Facility Established
- Gender Equality and sensitivity program launched
- Climate Change Adaptation and Master Plan
- 16km of water mains replaced
- Decentralized water storage and RWH installed
- Increased water accessibility for the most vulnerable
- Personnel trained and certified
- Public awareness campaign launched
- Development of Policies
- Formal training for water-energy professionals





















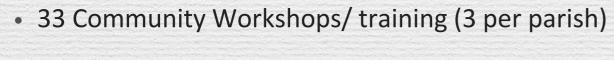
Lessons Learnt

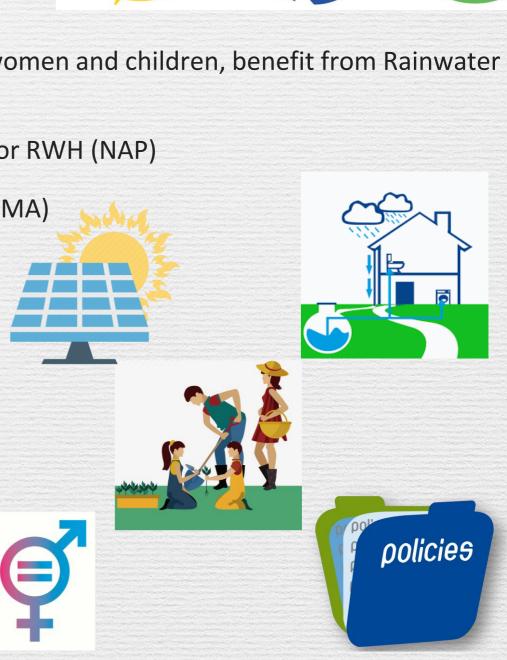
- Be inclusive
- Review National Determined Contributions
- Rank Needs of Country and match to Resources to Need
- Do your homework: Research available funding sources and review of the information necessary to complete application
- Rank Projects and assign dedicated resources
- Involve major stakeholders and drivers in the initial conceptualization process for maximum input
- Involve grassroots communities
- Gender equality and develop gender commitments
- Develop Environmental and Social Safeguards
- Integrating Climate Change and Variability concerns into operating machinery of Governments and Private Sector
- Transforming national budgets into climate risk opportunities for change
- Addressing the impacts of external mitigation policies on national economies (e.g. UK APD)
- Management interventions must be based on inter-sectoral linkages



Ways Forward

- Avoided emission 73,394 tCO₂eq by 2030 (NDC)
- 1,500 Vulnerable households with storage tanks (NAP)
- 5500 (50% male and 50% females) individuals, including women and children, benefit from Rainwater Harvesting Systems and Personal Tank Programme.
- 1 hospital and 9 polyclinics retrofitted with storage tanks or RWH (NAP)
- 40 Farmers utilizing harvested rainwater for irrigation (NAMA)
- By 2023, reduce NRW by 0.48MGD (NDC)
- Minimum of 25 persons benefited from the RAFF.
- Training:
 - 500 BWA staff trained with ISO 45001
 - 25 BWA and partners ENVISION certified
 - 500 BWA staff trained on gender





Energy

 Ministry of Energy and Water Resources and Caribbean Community Climate Change Center to develop: Full Funding Proposal for: "Reduce, Reuse and Recycle for Climate Resilient Wastewater Systems in Barbados- (3R CReWS)"