

A stylized Rod of Asclepius is the central graphic element. It consists of a vertical orange staff with a circular orange top. A green snake is coiled around the staff. Several other colorful lines (purple, yellow, blue, light green) are shown as dynamic, swirling paths around the staff, suggesting movement or a network. The background is a gradient from light blue on the left to orange on the right, with faint, larger-scale versions of the staff and snake motif.

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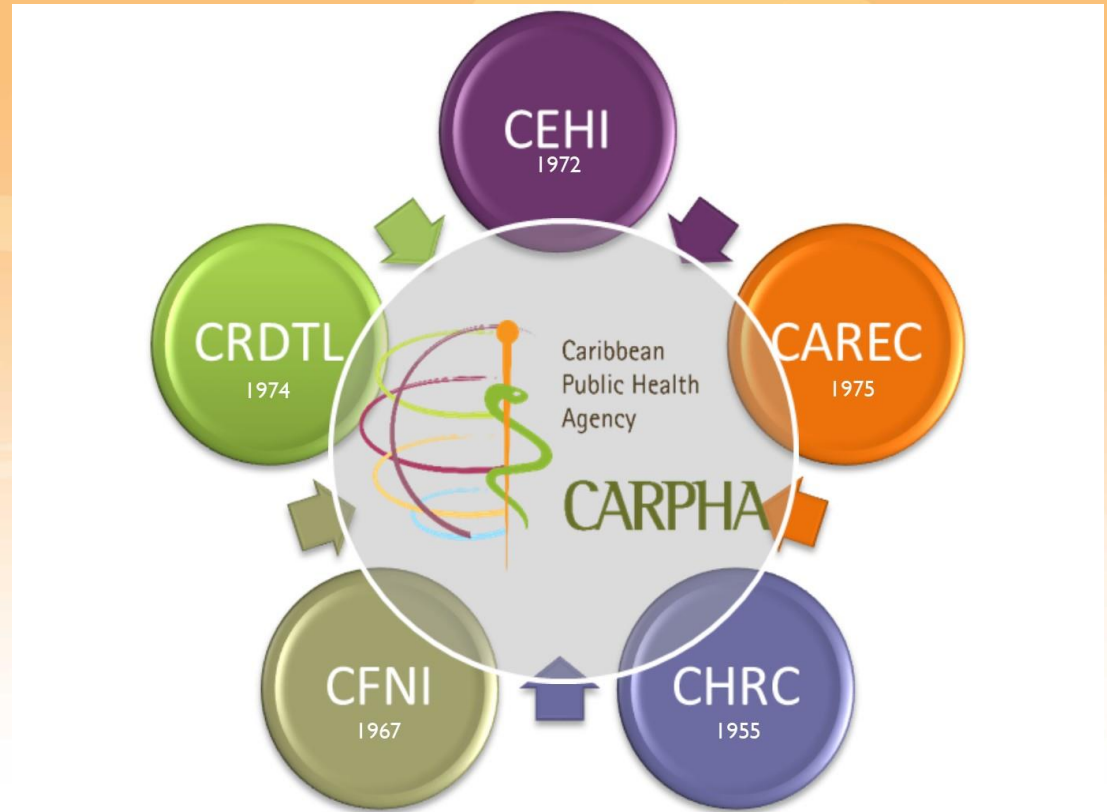
CARPHA

- A CARICOM Institution with responsibility for Public Health and management of the environmental determinants of health
- Merger of former 5 Regional Health Institutions
- Established by CARICOM Inter-Governmental Agreement 2nd July 2011
- Operational 1st January 2013; Headquartered in T&T with campuses in St. Lucia and Jamaica
- Officially launched 2nd July 2013



The Region's Response

**A CARICOM
Institution with
responsibility for
protecting human
health, the
environment and
promoting well-being**



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Who We Serve



Anguilla



Antigua and Barbuda



Aruba



Bahamas



Barbados



Belize



Bermuda



Bonaire



British Virgin Islands



Cayman Islands



Curacao



Dominica



Grenada



Guyana



Haiti



Jamaica



Montserrat



Saba



St. Eustatius



St. Kitts and Nevis



St. Lucia



Sint Maarten



Saint Vincent
and The Grenadines



Suriname



Trinidad and Tobago



Turks and Caicos Islands



CARPHA
Caribbean Public Health Agency

Environmental Health and Sustainable Development Department

Protecting the environment, preserving health and wellbeing

The Environmental Health and Sustainable Development Department is committed to becoming a centre of excellence for the Caribbean. Working with Member States and partners, we are dedicated to finding sustainable solutions to environmental problems, including the effects of climate change

We Provide Advisory Services & Technical Assistance in:

- Environmental surveillance and monitoring
- Risk assessment and management
- Integrated management of watersheds and coastal areas
- Chemicals management
- Solid, liquid, hazardous waste management
- Occupational health and safety
- Sustainable consumption and production
- Environmental assessments and audits
- Project development and management
- Indoor environmental quality

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Supported by the European Union



Environment and Health Nexus – manage the environmental determinants of health

Programmes

- **Sustainable Development/Natural Resource Management**

- Resilience in the water sector
- Coastal zone resilience
- Sustainable Land Management
- Livelihood contribution to well-being

- **Environmental Health**

- Water Quality Monitoring
- Water Sanitation and Health
- Health Disaster Management
- Occupational Health and Safety
- Climate change and health
- Waste management



Environmental Lab Facility



noting and protecting health



Partnership: Resource mobilization for climate change adaptation and natural resources management



CATS Programme Components

Adaption of Rural Economies and Natural Resources to Climate Change



Management of Coastal Resources and Conservation of Marine Biodiversity



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CATS: Regional Program

Caribbean Aqua-Terrestrial Solutions



Central America

Greater Antilles

Lesser Antilles

**F
O
C
U
S**

- Belize
- Dominica
- Grenada
- Guyana
- Jamaica
- St. Kitts & Nevis
- Saint Lucia
- St. Vincent and the Grenadines

Caribbean Aqua-Terrestrial Solutions

CARICOM regional

South America

CARPHA

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CATS: Ecosystem-based Approach



aims to achieve synergies along typical ecosystems in the landscape from the Ridge to the Reef !

Three focal island nations, namely

- a. Grenada
- b. Dominica
- c. Saint Lucia

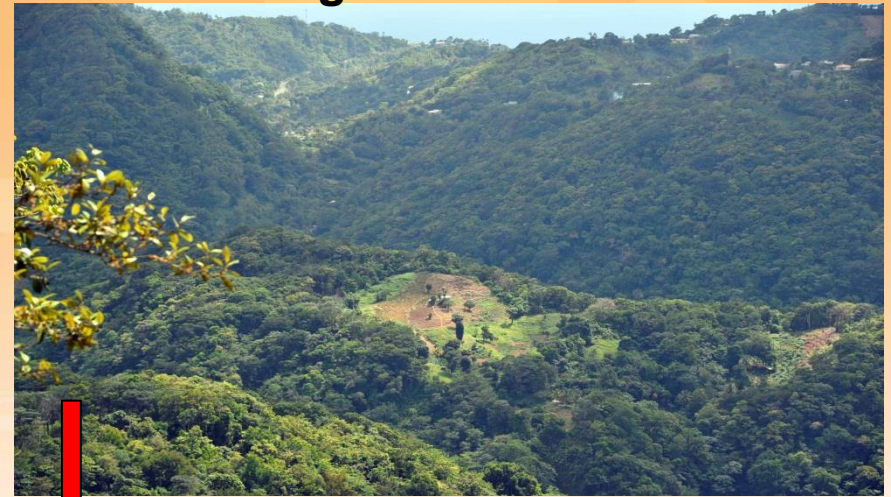
MMAs (Marine Managed Areas) and

... their adjacent watershed (Ridge-to-Reef)



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Ridge - Watershed



Reef – Marine Managed Area





GEF-Integrating Water, Land & Ecosystems Management in Caribbean SIDS (GEF-IWEco)



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Project Objective

To contribute to the preservation of Caribbean ecosystems that are of global significance and the **sustainability of livelihoods** through the application of existing proven technologies and approaches that are appropriate for small island developing states through **improved fresh and coastal water resources management, sustainable land management and sustainable forest management** that also seek to enhance resilience of socio-ecological systems to the impacts of climate change.



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Project Characteristics



GEF Multi-focal area project

- International Waters (IW)
- Land Degradation (LD)
- Biodiversity (BD)
- Sustainable Forest Management (SFM)
- GEF Small Grants Programme



Supports Cartagena Convention, LBS Protocol & other related MEAs



Project Duration: 2015-2019

Co-implementation: UN Environment & UNDP

Co-execution: Secretariat to the Cartagena Convention (UNEP CAR/RCU) & CARPHA



Total GEF Funds: **\$20,722,571**

Total Co-financing: **\$68,017,191**



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Participating countries



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Specific Areas of Focus for National Projects



Antigua & Barbuda
Land Degradation



Jamaica
Biodiversity



Barbados



Saint Kitts & Nevis
Land Degradation



Cuba
Biodiversity



Saint Lucia
Land Degradation



Dominican Republic
Biodiversity



Saint Vincent & the Grenadines
Land Degradation



Grenada



Trinidad & Tobago
Land Degradation



Bahamas has a complementary medium sized project

Country Initiatives **gef IWEco**
Integrating Water, Land and Ecosystems Management
In Caribbean Small Island Developing States

The GEF-IWEco Project will feature innovative environmental management solutions financed under the GEF focal areas:

- International Waters
- Biodiversity
- Land Degradation
- Sustainable Forest Management

Antigua and Barbuda
Reducing land degradation caused by improper sewage disposal

Cuba
Conservation of biodiversity through the integrated watershed and coastal zone management approach

Dominican Republic
Protection of biodiversity from the impacts of industrial waste discharges in the Higuamo River Basin.

Jamaica
Towards Restoration of the Great Negril Morass Ecosystem

St Kitts and Nevis
Addressing land degradation through sustainable land management practices in ghauts and other sensitive areas

Saint Lucia
Improving sustainable land management and pollution reduction in the Soufriere Watershed

St Vincent and the Grenadines
Improved watershed and biodiversity management practices in the Georgetown watersheds

Trinidad and Tobago
Promoting innovative solutions in reducing land degradation caused by quarrying

Barbados and Grenada
Participating countries at regional level (no national projects)

To learn more about this exciting initiative contact:
United Nations Environment Programme's Caribbean Regional Coordinating Unit
14-20 Port Royal Street, Kingston | JAMAICA | Tel: (876) 922-9267-9 | Email: rcu@cep.unep.org



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Project Components – National Component

Component 1: National Innovative Solutions

Water Security & Improved Sanitation

Wastewater Management

Land & Watershed Restoration & Ecosystem Resilience



National Component Outcomes

Component

Integrated,
targeted
innovative climate
change resilient
solutions

Actions

Management of
untreated effluent
that are impacting
freshwater & marine
ecosystems

Erosion control,
agricultural non-
point source
pollution mitigation,
land stabilization &
runoff/flood control

Climate change-
adaptive water
supply, water use
efficiency, water
safety & improved
sanitation.

Outcomes

Verifiable evidence-based stress
reduction at project sites
through appropriate sustainable
water, land and ecosystems
management interventions that
account for climate change

Enhanced livelihood
opportunities and socio-
economic co-benefits for
targeted communities from
improved ecosystem services
functioning

Regional Components and Outcomes

Will support national actions

Component 2: Strengthening Water, Land and Ecosystems Monitoring & Indicators Frameworks

- **Outcome 2.1:** Improved decision making based on strengthened national and regional information systems for monitoring of environmental status with respect to key international agreements
- **Will support the development of State of Convention Area Report for Wider Caribbean Region**

Component 3: Strengthening Policy, Legislative & Institutional Reforms; Capacity Building for Land, Water & Ecosystem Services Management

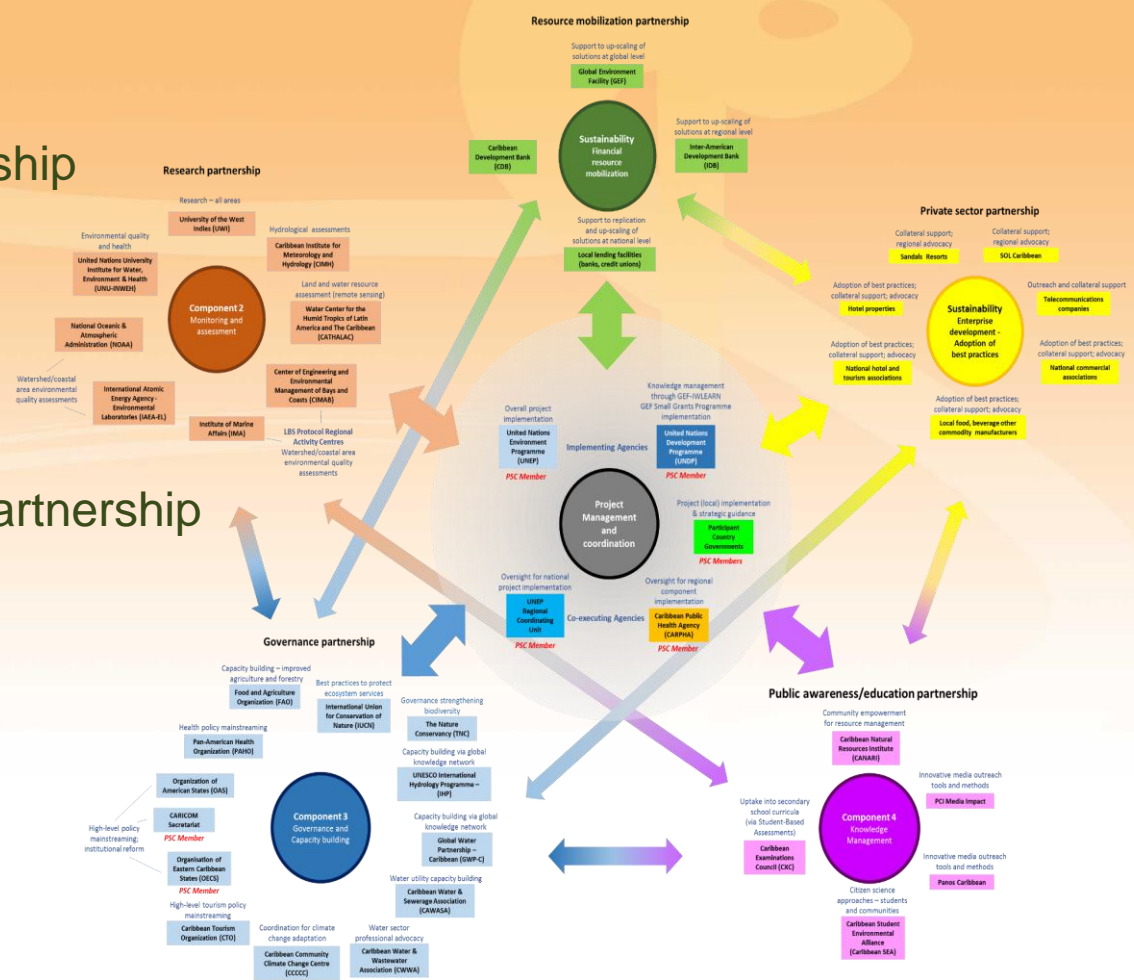
- **Outcome 3.1:** Improved and effective management of water, land and ecosystems resources that account for climate change through strengthened policy and legislation
- **Outcome 3.2:** Strengthened capacity of national and regional institutions and other stakeholders for improved water, land, and ecosystems management that take climate change into account

Component 4: Enhancing Knowledge Exchange, Best-Practices, Replication and Stakeholder Involvement

- **Outcome 4.1:** Enhanced engagement of practitioners and other stakeholders through effective and targeted knowledge management and knowledge sharing networks.

IWEco Partnerships

- Resource mobilization partnership
- Governance partnership
- Public awareness/education partnership
- Private sector partnership
- Research partnership



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IWEco Partnerships



- **Research Partnership**
 - provide **technical advice and scientific research** contributions particularly in establishment of monitoring and assessment protocols to **track implementation progress based on relevant indicators associated with the GEF tracking tools.**
- **Governance Partnership**
 - provide technical back-stopping to **assist strengthen and mainstream policies and strategies** drawing on the knowledge-base of these agencies
- **Public Awareness / Public Education Partnership**
 - provide close support through **application of innovative tools and methods for expanding buy-in and driving behavioural change** around the implementation of the national sub-projects.
- **IWEco Partnership Forum**
 - **bring in project implementation teams and partner agencies and wider collaborators** at the regional level in environment, decision makers to include ministers of government and where relevant Heads of State; **promote advocacy, collaboration, knowledge exchange, common regional policy**

IWEco Support Partnerships

- **Private sector partnership**
 - approach private sector to make concrete **commitments based on identified support needs at both regional and national levels.**
 - Companies already involved in programmes to implement improved **environmental standards are potentially good collaborators**
- **Sustainable financing**
 - to be supported by a **small technical advisory group.** To include the Caribbean Development Bank (CDB) and the Inter-American Development Bank (IDB) and other relevant agencies, along with GEF Small Grants. Support micro-small business opportunities associated with investments





Regional Component 2: Strengthening of the SLM, IWRM and ecosystems Monitoring, and Indicators framework



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Regional Sub-Component

C2.1 Outcome: Strengthened national and regional systems for monitoring of environmental status with respect to key international agreements

Regional Component 2: Strengthening of the SLM, IWRM and ecosystems Monitoring, and Indicators framework

Regional Sub-Component C2.1 Outcome: Strengthened national and regional systems for monitoring of environmental status with respect to key international agreements

Sub-component 2.1.1 Regional environmental indicators compendium

Activity 2.1.1.1 Conduct needs assessment at country level

Activity 2.1.1.2 Convene regional workshop on indicators frameworks

Activity 2.1.1.3 Develop indicators compendium, publish and disseminate



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Sub-component 2.1.2 Scientific research to support monitoring at national projects (CARPHA & UWI, NOAA, UNU, IAEA)

Regional Component 2: Strengthening of the SLM, IWRM and ecosystems Monitoring, and Indicators framework

Sub-component 2.1.2 Scientific research to support monitoring at national projects (CARPHA & UWI, NOAA, UNU, IAEA)

Activity 2.1.2.1 Develop research protocols

Activity 2.1.2.2 Conduct applied research in-country (augment national research)

Activity 2.1.2.3. Publish technical and scientific papers (From Y2 – Y5)



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Sub-component 2.1.3. Strengthened field monitoring and assessment capabilities (CARHA lead) SGP linking. CANARI & Caribbean Sea

Regional Component 2: Strengthening of the SLM, IWRM and ecosystems Monitoring, and Indicators framework

Sub-component 2.1.3. Strengthened field monitoring and assessment capabilities (CARHA led) SGP linking. Time Stays same. CANARI & Caribbean Sea

Activity 2.1.3.1 Conduct country diagnostic needs assessments

Activity 2.1.3.2 Procure laboratory diagnostic equipment, tools and supplies (on demand basis)

Activity 2.1.3.3 Procure tools and supplies for schools, communities (on demand basis)

Activity 2.1.3.4 Develop training modules and conduct associated training



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Sub-component 2.1.4 Develop decision support tools and systems (CARPHA lead but technical support from CATHALAC).

Regional Component 2: Strengthening of the SLM, IWRM and ecosystems Monitoring, and Indicators framework

Sub-component 2.1.4 Develop decision support tools and systems (CARPHA led but technical support from CATHALAC). May have link to community decision-making)

Activity 2.1.4.1 Conduct country needs assessment for decision support tools and systems

Activity 2.1.4.2 Procure hardware and software decision support tools and systems (on demand basis)

Activity 2.1.4.3 Develop training modules and conduct associated training



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Proposed Research Topics

- Ocean Acidification
- Micro plastics
- Antifouling paint residues
- Heavy metals in the environment
- POPs in the environment
- Compounding impacts of climate change on pollution



All contributing to the LBS protocol

Component 3 Outcome:

Improved and effective management of water, land and ecosystems resources that account for climate change through **strengthened policy and legislation *and* Strengthened capacity** of national and regional institutions and other stakeholders for improved water, land, and ecosystems management that take **climate change into account;**



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Component 3 Activities

- **Output 3.1.1 New and/or updated national and regional-level plans and strategies for improved water, land and ecosystems management**
 - **Activity 3.1.1.1. Conduct a regional level review of status of policy & legislative implementation in countries and support the review and upgrade of regional and national strategic and action plans**

Output 3.1.2 New and/or revised regional and national-level policies, regulations and frameworks for improved water, land and ecosystems management

Activity 3.1.2.1: Support the upgrade/ strengthening/ implementation of new and existing legislative instruments and/or frameworks and/or development of new legislative instruments

3.1.2.2: Develop a regional action framework for Integrated Water Resources Management (IWRM) for the CARICOM Region

THANK YOU



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