



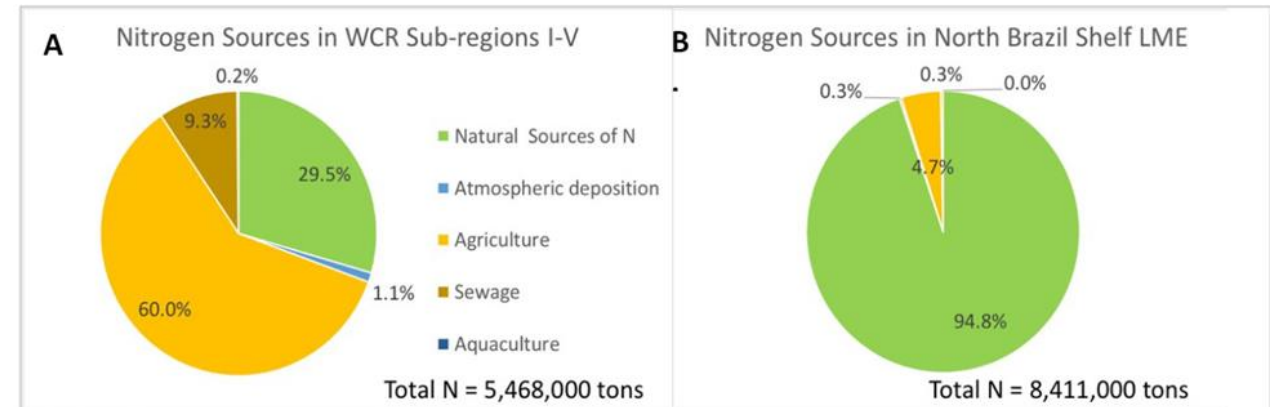
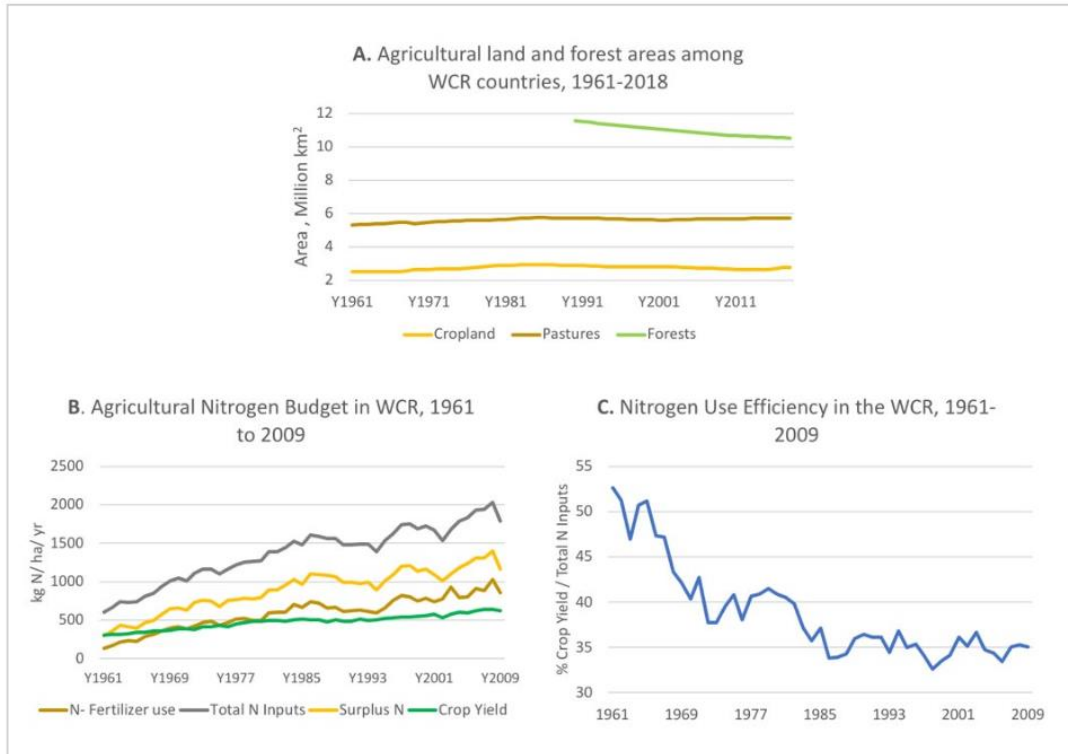
# Regional Nutrient Pollution Reduction Strategy and Action Plan for the Wider Caribbean Region

UNEP Working Group on Nitrogen  
Sixth Meeting  
26 -27 June 2024

Presented by: Laverne Walker, AMEP  
Programme Officer, Cartagena  
Convention Secretariat



# Nitrogen in the Wider Caribbean Region



A. Land use, 1961 to 2018. B. Agricultural Nitrogen Budget, 1961 to 2009. C. Nitrogen Use Efficiency in the WCR, 1961 to 2009 (simple unweighted average among 22 WCR countries with NUE data).

Estimates of nutrient sources using the Integrated Model to Assess the Global Environment – Global Nutrient Model (IMAGE-GNM). A. WCR generate more than half of nutrient flow from agricultural runoff, both surface and groundwater. B. For watersheds draining to the North Brazil Shelf Large Marine Ecosystem, 90-95% of nutrients come from natural sources such as floodplain vegetation and natural runoff

# REGIONAL NUTRIENT POLLUTION REDUCTION STRATEGY AND ACTION PLAN (2021- 2030)

Adopted by Contracting  
Parties at the 5 COP of the  
LBS Protocol

Goal: To establish a collaborative framework for the progressive reduction of impacts from excess nutrient loads on priority coastal and marine ecosystems in the WCR

## Overall Objectives:

- Assist in defining regional standards and criteria for nutrient discharges including regional indicators for monitoring discharges;
- Support institutional, policy and legal reforms relating to nutrients and sediments management including supporting integrated interventions to reduce nutrient discharge and promote recovery of nutrients from wastewater;
- Contribute to relevant regional and global commitments including the Cartagena Convention and its LBS Protocol, UNEA Resolution on Sustainable Nitrogen Management, and SDGs 6 and 14;
- Contribute to the operationalization of the Caribbean Platform for Nutrient Management under the GPNM;
- Contribute to the UN Global Campaign on Sustainable Nitrogen Management.



# Approach

- Considers the watershed as the geographical management unit and incorporates major marine sources of nutrient pollution.
- An integrated, watershed approach that acknowledges linkages between terrestrial, freshwater (surface and groundwater), and coastal marine waters.
- Considers all the major sources of nutrients and the processes promoting their loss to the natural environment and transport across the entire continuum from land to freshwater systems and coastal waters.



Cartagena Convention limits

GULF OF MEXICO LME

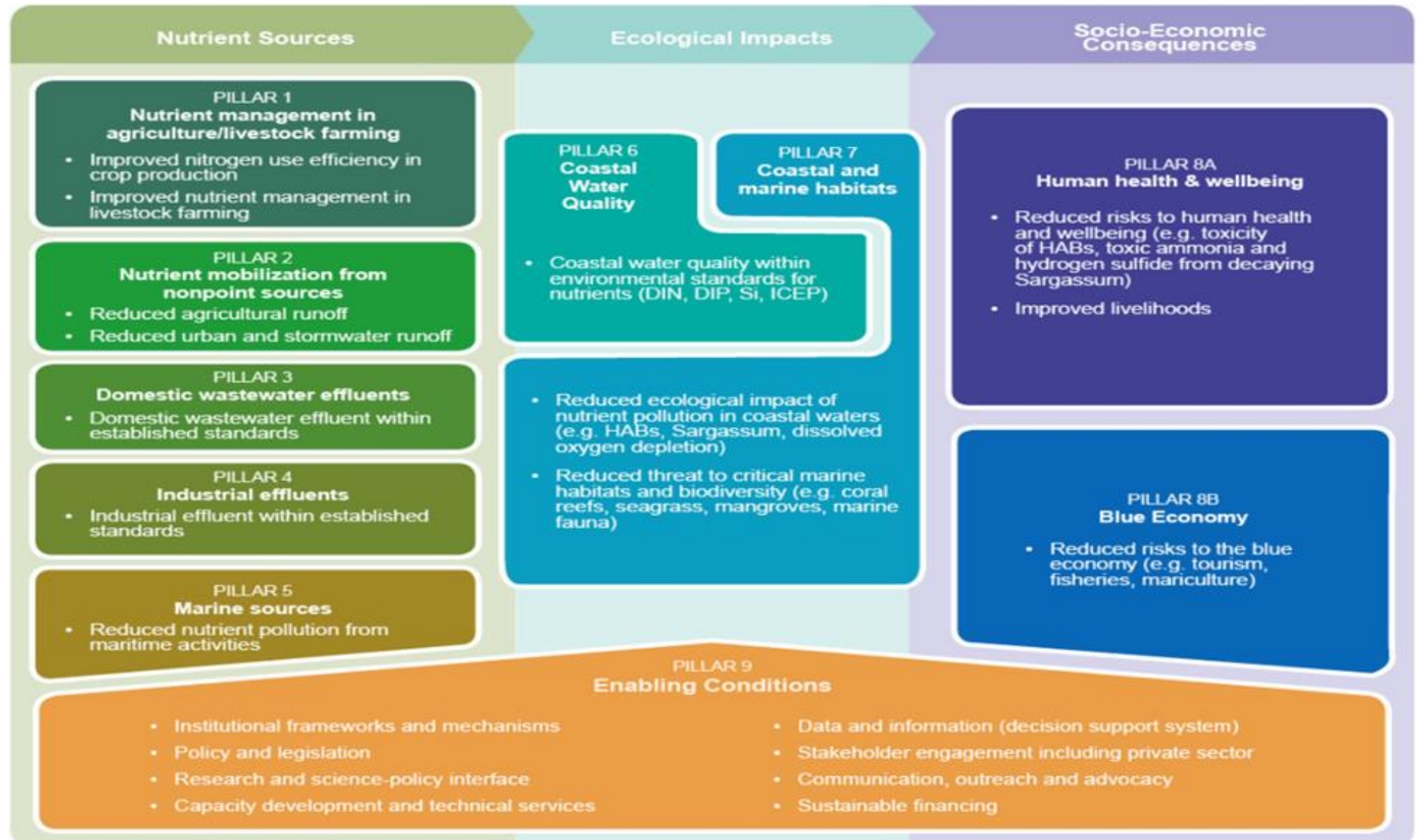
CARIBBEAN SEA LME

NORTH BRAZIL SHELF LME

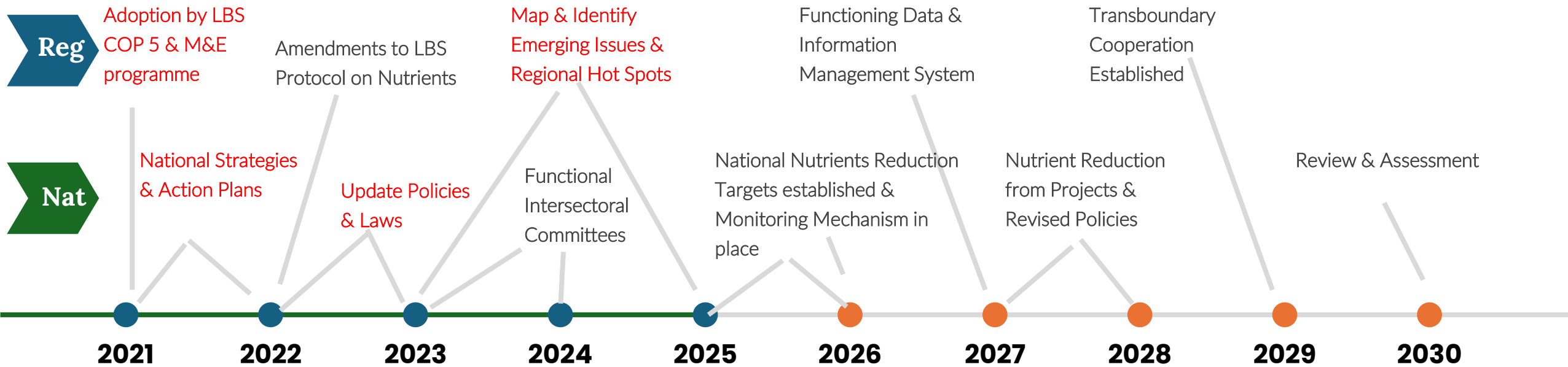
# Geographic Scope

- Gulf of Mexico LME
- Caribbean LME
- Part of the North Brazil Shelf LME

# Structure



# Regional Nutrients Pollution Reduction Strategy: Indicative Timeline (subject to financial resources)



**PHASE ONE**

**PHASE TWO**





# Towards the Implementation of the Strategy and Action Plan

- Open Ended Working Group on Monitoring and Assessment
  - Nutrient & Wastewater Standards Sub-Group: This sub-group is expected to focus on standards and criteria to include discussions on comparable data, standards on nutrients, wastewater effluent standards and definition of Class I and II waters.
- Support countries in putting in place the necessary institutional, legislative and policy frameworks
  - Support provided under the ACP MEA Project and the GEF UNEP CReW+ Project
- Support countries in defining national nutrients reduction strategies and action plans
  - Jamaica and Barbados case studies on Nutrient Management Valuation



# Towards the Implementation of the Strategy and Action Plan

- Regional standards for Nitrogen (N) and Phosphorus (P) loads in domestic discharges
  - Draft Report on regional criteria and standards for Nitrogen (N) and Phosphorus (P) loads in domestic discharges
  - Jamaica and Barbados case studies on Nutrient Management Valuation
- Improve capacity to support national water quality monitoring within WCR
  - US EPA water quality project (2024 -2027)
- Upload data and information to central repository databases and inform State of Convention Area Reports
  - Cartagena Convention regional environment monitoring platform
  - Regional Environmental Monitoring Data Portal (REMDAP)



# Towards the Implementation of the Strategy and Action Plan

- Regional Workshop on Index of Coastal Eutrophication & Harmful Algal Blooms (ICEP HABs) in July 2022
- Promotion of better use efficiency and reduced runoff from fertilizers
  - GEF IWeco national projects in Cuba, Dominican Republic and Saint Lucia
- Moving towards demonstrating benefits of nature-based solutions for treated waste and wastewater reuse
- Seeking to change behaviors and raise awareness of the impact that nutrients have on marine ecosystems and coastal livelihoods





# Protecting Our Caribbean Sea, Sustaining Our Future

## THANK YOU/GRACIAS/MERCI

United Nations Environment Programme Caribbean Environment Programme  
and Cartagena Convention Secretariat

14-20 Port Royal Street  
Kingston, Jamaica, W.I.

<https://www.unenvironment.org/cep/>

[unep-cartagenaconvention@un.org](mailto:unep-cartagenaconvention@un.org)



UNEPCartagenaConvention



UNEP\_CEP



Youtube: CEPUNEP



LinkedIn: UNEP-Caribbean Environment Programme