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Fifth Meeting of the Scientific and Technical
Advisory Committee (STAC) to the Protocol
Concerning Pollution from Land-Based
Sources and Activities in the Wider Caribbean.

Virtual

15 to 17 March 2021

Draft Strategy and Work Plan of RAC IMA

Institute of Marine Affairs Regional Activity Centre under the
Land Based Sources of Pollution Protocol, Cartagena
Convention

2nd DRAFT

Strategic Plan 2021 - 2026

Institute of Marine Affairs

31st May 2021

EXECUTIVE SUMMARY

A decision was taken at the Fifteenth Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region Roatan, Honduras, 5-6 June 2019 to support an expanded role for the Regional Activity Centres (RACs) and the Regional Activity Network (RAN) for implementing the LBS Protocol. A request was made to the RACs to develop a 6-year strategic plan, to assist the Secretariat by mobilising funds and to develop new projects and activities as part of a workplan to be approved by the COP. The informational paper presented by the Secretariat of the Cartagena Convention on the expanded role for the RACs and the RAN requested the RACs to prepare detailed biannual work plan and budget for approval/endorsement at the next meeting of Contracting Parties to be announced in 2021.

The primary objective of the RACs is to provide scientific and technical support to UNEP-CAR/RCU for the coordination of the implementation of the Convention and its Protocols. The establishment and operation of RACs and related RANs have the potential of becoming one of the most effective ways for governments and Caribbean Environment Programme (CEP) partner organizations to implement cooperative measures and programmes called for by the Cartagena Convention and its Protocols. Overall, RACs and RANs represent an institutional framework of technical cooperation consisting of regional and national institutions selected for the purpose of coordinating the implementation of CEP activities in a systematic manner.

RAC-IMA's approach is based on a short (1-2yrs), medium (4yrs) and long-term (6) implementation of the strategy. The production of this strategy is ongoing and requires alignment with IMA's current Strategic Plan 2019- 2024.

In the short term RAC-IMA will implement a phased approach to involve key staff based on a 10-20% time spent on project at national and regional basis for RAC Activities. A biennial work plan will be developed and project to be done will be based on the strategic research areas of the CEP Strategy. RAC IMA will continue to make in-kind contributions to projects under Small Scale Funding Agreement (SSFA) m, with UNEP CAR/UNEP and will seek grant funding from other sources.

Due to the impact on the COVID-19 pandemic in 2020, and the inherent delays on work and activities, a draft long term strategy is produced. It is expected that the development, progress and inputs to this strategic plan would occur during the Scientific and Technical meeting of the Convention.

1. Introduction

Background

The IMA is a statutory body established by Act of Parliament (Chap. 37:01 of the Revised Laws of the Republic of Trinidad and Tobago, as amended by Act No. of 1990). Established following negotiations for an agreement signed in 1974 between the Government of Trinidad and Tobago and the United Nations, through its Executing Agency, the United Nations Development Programme (UNDP), the IMA has been in operation since 1978. In 1990, legislation was amended by Act No. 13 to emphasize and underscore the Institute's regional role and to expand its scope to include marine and other related areas of the environments. It is the oldest multi-disciplinary marine research organisation in the Caribbean Community (CARICOM) states established to conduct inter-disciplinary studies and is recognized as one of the two Regional Activity Centres (RACs) for the LBS protocol.

Vision statement

"To be the Centre of Expertise for Marine Scientific Research in the Caribbean Region."

Mission statement

"To conduct and foster research and provide advice to support the sustainable management of the coastal and marine areas and resources of Trinidad and Tobago."

Mandate

The Institute's mandate is to collect, analyse and disseminate information relating to the economic, technological, environmental, social and legal developments in marine affairs and to formulate and implement specific programmes/projects.

Functions

The functions of the IMA, which are discharged with the assistance of research and administrative staff in furtherance to its mandate, are to:

- a) Conduct research and development on the marine and related resources of Trinidad and Tobago, the Caribbean and adjacent regions;
- b) Conduct research and development on the marine environment and other areas that impact upon the environment of Trinidad and Tobago, and adjacent regions;
- c) Study multiple uses of the sea and coastal zones, resources and use potential in Trinidad and Tobago, and adjacent regions and to evaluate and promote such studies to minimise conflicts which may result from such uses;

- d) Establish at the IMA an Information Centre for collection and dissemination of information on economic, social, technological, environmental and legal developments in marine and coastal zones of the Caribbean and adjacent regions;
- e) Provide information and advice to the government in its formulation of policies relating to the marine and other related aspects of the environment;
- f) Respond to technical enquiries and questions by policy-making organs of the Government, private sector organisations and individuals;
- g) Organise training courses and projects that foster and encourage regional and international collaboration in exploitation of the marine and related environment;
- h) Advise development and optimum utilisation of the marine and coastal resource potential of Trinidad and Tobago; and to
- i) Take action necessary or expedient for proper performance of its functions.

In its approved Strategic Plan for the period (2019-2024), the IMA has four strategic priorities:

- Improved long term stakeholder value through Trinidad and Tobago Vision 2030 alignment and the fostering of interdisciplinary research and linkages to industry;
- Growth and diversity of research funding through grant funding and corporate sponsorship;
- Operational cost reduction and optimisation of resources to achieve value;
- Strengthening of external engagement.

The organisational chart of IMA in the approved Strategic Plan for the period (2019-2024) is shown in Figure 1. IMA intends to fulfil its Mission and Mandate to the Government of the Republic of Trinidad and Tobago, the Ministry of Planning and Development and the people of Trinidad and Tobago by undertaking applied research on the marine and coastal environment that is policy-driven and policy-relevant using the best available technology. IMA's 2019-2024 Strategic Plan will be augmented by the RAC- six-year strategic plan and regional mandate while contributing to the achievement of Vision 2030 of Trinidad and Tobago by collecting and analysing data that leads to National and Regional development. This is useful for evidence-based decision making on the marine environment and coastal sphere, identifying appropriate interventions that address development pertaining to human interaction with the marine environment and formulation of projects and programmes in partnership with national and international stakeholders to bridge the development gaps identified at global, regional, national and local levels. Based on the current economic situation in 2021 and the reduced allocation from government funding of approximately 17% annually, projects are streamlined and aligned with projects of a regional mandate. Some of the core research projects funded from government subventions were streamlined by a reduction in sampling costs.

Overview Of Research Programmes at the IMA

Research Goal:

To strengthen the science-policy nexus by conducting applied research on the coastal and marine environment to assist with effective decision-making towards achieving sustainable development and produce knowledge products for public education and awareness.

Objectives:

- To monitor the coastline and coastal ecosystems and produce biennial State of the Marine Environment Reports;
- To conduct applied and innovative research related to Climate Change impacts and adaptation, land and marine pollution, biodiversity conservation, food security, creating sustainable livelihood opportunities for coastal communities and publishing findings;
- To produce knowledge products for public education and outreach;

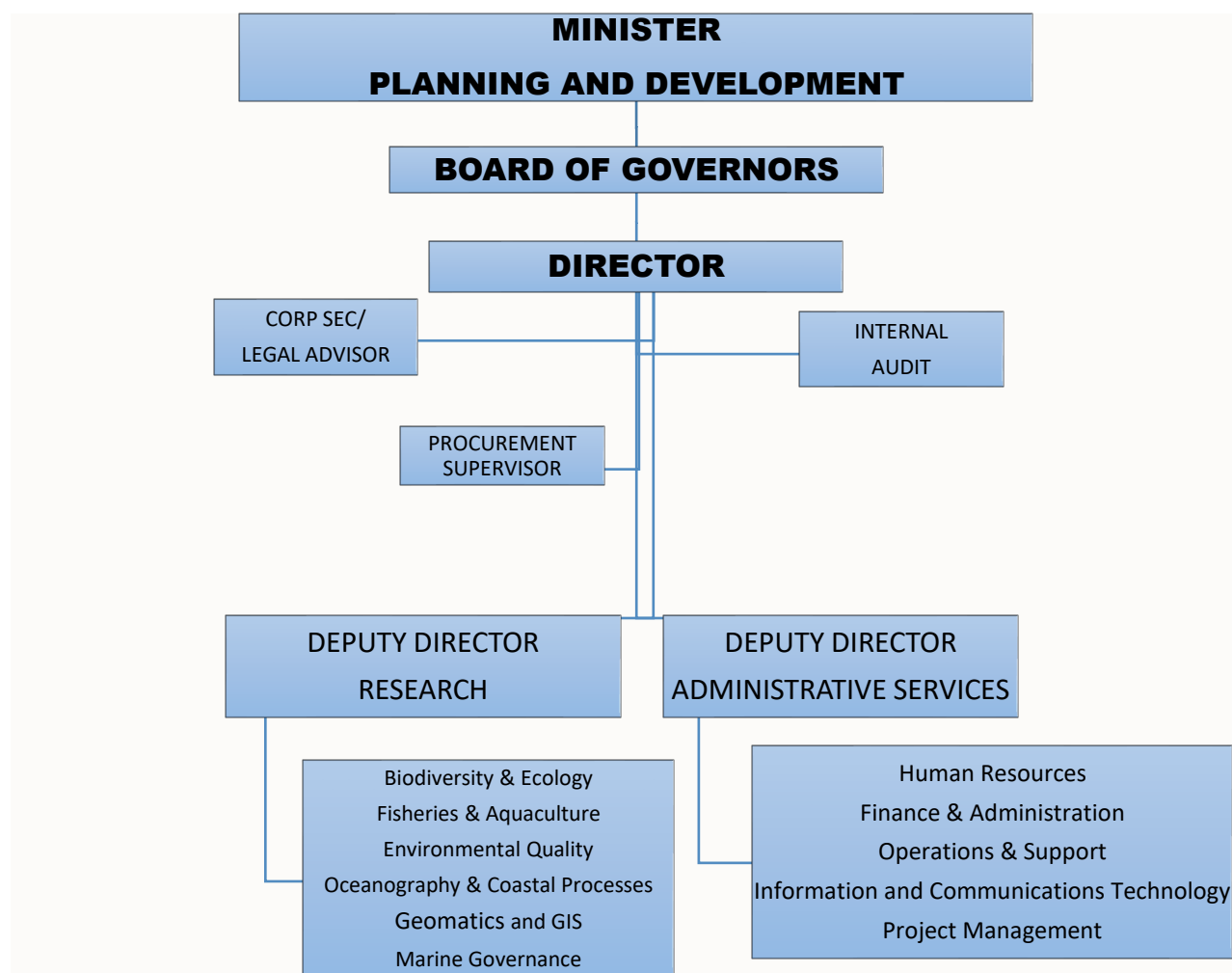


Figure1: The organisational chart of IMA in the approved Strategic Plan for the period (2019-2024).

- To fulfil the regional mandate as the Regional Activity Centre for the English-speaking Caribbean for the LBS of Pollution Protocol;
- IMA's research programme will align its output to the GORTT Vision 2030 – Theme V:

- Strategic Initiatives aligned to strengthening of environmental governance and management systems;
- Reduction of carbon footprint;
- Assessment of vulnerability to climate change impacts;
- Creation of comprehensive waste and pollution systems;
- Improvement of natural resource management.

Five broad strategic research areas have been identified that are aligned to achieving the targets under Sustainable Development Goal (SDG) Goal # 14- Life underwater:

1. Assessment of marine ecological systems, their biodiversity, ecological processes and functioning so as to advise on conservation initiatives, that includes restoration plans;
2. Assessment of the geophysical and chemical processes operating in the coastal and marine environment, and assessing the various impacts on the coastal and marine environment from anthropogenic and natural influences;
3. Supporting the implementation of an Integrated Coastal Zone Management (ICZM) Policy, and development of regional ICZM plans that promotes ecosystem-based management approaches;
4. Supporting food production through ecosystem conservation initiatives and mariculture;
5. Assessment of the vulnerabilities of the non-living and living resources in the coastal zone to climate change impacts to provide advice on building coastal resilience.

The objectives to be realised under the broad strategic research areas are to be achieved through the work of IMA's Research Programmes :

- Biodiversity and Ecology (B&E)
- Oceanography and Coastal Processes (OCP)
- Fisheries and Aquaculture (F&ARP)
- Environmental Quality Programme (EQP)
- Marine Governance and Policy Research
- Geomatics and Remote Sensing

2.0 Historical Background of IMA as a RAC

On the April 4, 2018, the Honourable Minister of Planning & Development, Mrs Camille Robinson-Regis and Dr. Lorna Innis, Coordinator, UN Environment Cartagena Convention Secretariat, signed the official agreement to have the IMA recognized as a RAC of the Caribbean Environment Programme (CEP) of the United Nations Environmental Programme (UNEP). However, it should be noted that at the 7th Conference of Party of the Cartagena Convention in 2002, Parties agreed that IMA be the designated Regional Activity Centre for the English speaking islands of the Caribbean, undertaking activities aimed at implementing the LBS protocol at the regional level and since then IMA "in principle" has operated in carrying out various duties and functions as a

LBS RAC. These activities are detailed in the biennial RAC reports to the Convention in support to the broad headings of the UNEP-CAR/RCU workplan:

Support to Programme Coordination and Management

- Hosting of Workshop and Training.
- Support activities that promote the ratification and implementation of the LBS Protocol
- Production of promotional DVD to LBS protocol.
- Hosted Regional Workshop for the Launch of the Caribbean Platform for the Global Partnership on Nutrient Management

Land and Marine Based Sources of Pollution Management

- Participation in Workshops and Training
- Conducting monitoring and assessment. Submission of environmental data.
- Support to the Regional Nutrient Pollution Reduction Strategy and Action Plan
- Support to SOCAR development.
- Support to STAC.
- Support to Monitoring and Assessment working group and data sub-group.

Knowledge Management and Communications

- Production of a public education and awareness DVD on the work of the CEP.
- Production of article on CEP website on Ecosystem based management.
- Design and development of GIS maps, infographics as well as promotional and awareness material about the LBS Protocol

The development of RACs and RANs was initially proposed to, and accepted by, CEP Member Governments in 1992 at the Sixth IGM through the presentation and adoption of the 1992 Concept Paper (UNEP(OCA)/CAR WG. 10/3). The RAC / RAN Guidelines, adopted through Decision IV.1 of the Thirteenth Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme and Tenth Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region held in September 2008 in Antigua and Barbuda, provides guidance on the establishment and operation of RACs and RANs under the Cartagena Convention. The guidelines are intended to assist Contracting Parties, other participating governments, organizations or institutions responsible for RACs and RANs (existing or proposed), and the Secretariat of the Cartagena Convention in the evaluation of the administration and implementation of existing RACs and RANs and to evaluate new RAC and RAN proposals as they arise. These guidelines are recommendatory in nature and not binding under international law.

In accordance with Decision IX, of the Tenth IGM, 7-11 May 2002, two RACs were established to support the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS). These were established within the existing institutions of the Centro de Ingeniería y Manejo Ambiental de Bahías y Costas (CIMAB) in Cuba and the Institute of Marine Affairs (IMA) in Trinidad and Tobago.

The Second Meeting of the Interim Scientific Technical and Advisory Committee (ISTAC) to the LBS Protocol, held from 12 to 16 May 2003 in Managua, Nicaragua, decided to establish a Steering Committee for the LBS RACs and agreed on its composition, terms of reference and reporting requirements. The formal signing of host agreements has delayed the operationalization of these Steering Committees.

3. Objectives of RAC-IMA

The primary objective is to provide scientific and technical support to UNEP-CAR/RCU for the coordination of the implementation of the Convention, its Protocols as well as the following:

- (a) To assist the UNEP-CAR/RCU with the development and the identification of potential sources of funding to ensure the achievement of Convention/Protocol.
- (b) To facilitate the provision of technical and scientific assistance (expertise, consultancies) to Contracting Parties and other governments, as appropriate;
- (c) To promote the implementation of specific activities individually or jointly in cooperation with e.g. UN specialized agencies, intergovernmental, governmental and non-governmental organizations;
- (d) To foster scientific and technical cooperation with e.g. UN specialized agencies, intergovernmental, governmental and non-governmental organizations;
- (e) To promote cooperation on research and monitoring and assessment needs of the region.

Functioning of RAC- IMA

RAC-IMA will seek over the 2021-2026 period to provide the overall supervision, technical guidance and administrative oversight for the implementation of specific and selected activities to fulfil the LBS Protocol and its Convention assigned by the Contracting Parties for the RAC through UNEP-CAR/RCU. Specifically, IMA RAC will seek to:

- (a) Supervise and coordinate the implementation of specific project activities approved by the Contracting Parties to the Cartagena Convention ("Contracting Parties") in consultation with UNEP-CAR/RCU;
- (b) Assist, at the scientific and technical levels, with the coordination of the implementation of specific activities in support of the Convention and its Protocols;

- (c) Provide administrative input related to the implementation of project activities;
- (d) Assist in the identification of institutions and experts required for programme implementation and the development of arrangements and sub-contracts for project implementation with participating institutions or individuals;
- (e) Provide assistance to and advise UNEP-CAR/RCU on specific technical matters and programme development;
- (f) Exchange information with UNEP-CAR/RCU and institutions within the region;
- (g) Provide technical assistance, training and research inputs to the sub-programmes of the CEP;

Strategic Directives of RAC IMA

The strategic directives for the development of the 2021-2026 strategic plan would be based on support to UNEP-CAR/RCU as a RAC and alignment to the updated CEP Strategy.

4. CEP Strategy

Vision: Healthy coastal and marine ecosystems of the Wider Caribbean Region provide a secure supply of ecosystem goods and services for human well-being and livelihoods.

Mission: To facilitate integrated ecosystem-based management through the control, reduction and prevention of marine pollution and the conservation, sustainable use and restoration of coastal and marine resources and habitats.

The updated CEP Strategy can form the basis for further development and implementation of approaches that focus on ocean-based economies and blue economy strategies. It will facilitate a more integrated approach to the delivery of the pollution and marine biodiversity programmes in support of the implementation of the Cartagena Convention, its Protocols and related regional and global commitments. The implementation of programmes on pollution, marine biodiversity and knowledge management and communications is aligned to the CEP Strategy.

6. Challenges for the Marine Environment of the Wider Caribbean Area (WCR)

The surface of the WCR is about 3.3 million km², with an average depth of 2,200 m and a coastal length of 55,383 km (Ref). The coast/land area ratio (km/km²) is double the world's average, highlighting the importance of coastal management for the region. With over 40 million people living within 10 km of the coastline, human activities are reported to threaten two thirds of the Caribbean's coral reefs, placing one third at high risk. Major economic sectors including tourism, fisheries, maritime transportation and trade are all inextricably linked to the Caribbean Sea. A conservative estimate of the gross revenues generated in 2012 by the ocean economy in the

Caribbean was US\$407 billion and US\$53 billion for the Island States and Territories (Patil et al., 2016).

The coastal and marine environment forms a fundamental part of the economic, recreational, cultural and spiritual ethos of the WCR and its peoples. However, the marine environment's capacity to provide goods and services that support livelihoods and sustained socio-economic development and well-being, has become increasingly impacted by marine and land-based activities including by global phenomena such as climate change and sea-level rise. Increasing human populations, poorly planned urbanization, and harmful production and consumption patterns are generating unprecedented pressures on the marine environment. There is undisputed evidence that pollution, particularly from land-based sources, has become a serious and pervasive threat to marine ecosystems as well as to human health, livelihoods, and economies in the WCR (UNEPCEP, 2019). According to the United Nations Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), an estimated 80 percent of marine pollution originates from land-based sources. This includes solid waste, domestic and industrial wastewater, plastics, nutrients, sediments, and toxic by-products from various industries, including mining and oil exploration.

Due to the many challenges of the marine environment of the WCR, understanding the processes and the threats faced by the marine systems allows RAC IMA to contribute to the development of management best practices for the conservation of marine resources. Assessment and monitoring will be geared towards promoting healthy coastal waters, their associated ecosystems and resources as well as supporting sustainable development of ecosystem services derived from the marine ecosystems of the WCR.

7. Strategic objectives

IMA activities will be closely aligned to the achievement of the CEP Strategic objective as summarized below:

- (a) Strategic objective 1: Enhance regional and national decision-making and policy-making for improving the management of coastal and marine resources of the Wider Caribbean Region – Knowledge Management and Communications;
- (b) Strategic objective 2: Increase use of innovative pollution prevention and reduction tools, innovative/appropriate technologies including circular economy approaches, waste as a resource and sustainable consumption and production - Pollution Prevention, Reduction and Control;
- (c) Strategic objective 3: Support policies, strategies and action plans that enable the integrated management and sustainable use of coastal and marine resources; - Marine Biodiversity Conservation and Management;

(d) Strategic objective 4: Implement innovative institutional, policy, legislative and financing programmes, projects, instruments and initiatives to facilitate a transition to sustainable ocean-based economies. – Ocean-Based Economies;

RAC IMA activity/ role in achieving these objectives are detailed below:

Strategic objective 1: Enhance regional and national decision-making and policy-making for improving the management of coastal and marine resources of the Wider Caribbean Region – **Knowledge Management and Communications.**

RAC-IMA will seek to assist countries in developing their monitoring and assessment programmes to provide quality data. The science-based assessment of the functioning of coastal and marine ecosystems and the pressure and drivers that lead to changes in their health will inform the development of appropriate national and regional policies to address those pressure and drivers. This objective will be addressed through increased generation, dissemination and use of quality data and information, and through a fully participatory process that engages stakeholders. RAC IMA through its Public Education and Awareness programme, and in close coordination with the technical programmes on pollution and marine biodiversity will support the generation and dissemination of data and information for targeted audiences.

This will assist contracting parties in meeting their obligation on the reporting towards the LBS protocol and contributing monitoring data to UN Environment as part of the global monitoring of targets 14.1., 14.2 and 14.5 and in ensuring that data and information from the Wider Caribbean Region (WCR) contribute to Voluntary National Reports and SDG databases.

Strategic objective 2: Increase use of innovative pollution prevention and reduction tools, innovative/appropriate technologies including circular economy approaches, waste as a resource and sustainable consumption and production - **Pollution Prevention, Reduction and Control.**

For the prevention, control and reduction of pollution from land and marine-based sources, RAC-IMA would seek to establish demonstration projects for select countries aimed at assessing pollution levels and to implement innovative technologies, tools and mechanisms leading to progressive pollution reduction and impact on the environment. These demonstration projects would be chosen from select countries based on previous environment assessments from SOCAR (UNEP CEP, 2019) and the Regional Nutrient Pollution Reduction Strategy and Action Plan 2021 that warrants reduced pollution to the coastal and marine environment. This will support Contracting Parties in meeting their obligations specifically under the LBS Protocol.

Strategic objective 3: Support policies, strategies and action plans that enable the integrated management and sustainable use of coastal and marine resources- **Marine Biodiversity Conservation and Management**

RAC-IMA will seek to promote Ecosystem Based Management (EBM) approaches, which aim to utilize a broad management approach that considers cumulative impacts on marine environments. It is an approach that works across geographical scale and sectors to manage species and habitats, economic activities, conflicting uses, and the sustainability of resources. EBM allows for consideration of resource tradeoffs that help protect and sustain diverse and productive ecosystems and the services they provide. Lessons learnt and recommendations from demonstration projects at different locations will be shared among countries for implementation, and upscaling in the North Brazil Shelf Large Marine Ecosystem and wider Caribbean region.

Marine and coastal ecosystem services are under threat from human activities that degrade ecosystem health and functions. The situation is exacerbated by uncoordinated sector policies and management arrangements. There are often trade-offs between the benefits generated by various human activities and their cumulative environmental impacts. Integrated policies and management across sectors have the potential to reduce undesirable sector impacts and enable the sustainable use of the system overall, balancing the provision of ecosystem services to various users at appropriate spatial scales. Ecosystem-based coastal and marine planning and management is a key approach to ensure long-term ecosystem service delivery and resilience to environmental change.

Strategic objective 4: Implement innovative institutional, policy, legislative and financing programmes, projects, instruments and initiatives to facilitate a transition to sustainable ocean-based economies – *including Ocean-Based Economies*.

Traditional investments in the ocean economy have often resulted in negative impacts and externalities, damaging the health of marine and coastal ecosystems. Sustainable investments need to meet the triple bottom line of providing environmental, social and economic benefits. Through this approach, the intended impact will be healthy and productive marine and coastal ecosystems, while ensuring job creation, business development and sustained economic growth. For sustained economic benefits while protecting human health and ecosystem goods and services, maintaining healthy and resilient ocean and coastal ecosystems must be a core priority. RAC IMA will seek grant funding towards implementation of ocean based economies in promoting sustainable livelihood to coastal communities through training, policy intervention.

These four Strategic Objectives will guide the specific objectives of the pollution and marine biodiversity programmes of the Secretariat in which RAC IMA will contribute to enable a more integrated delivery of the biennial work plans and budgets.

RAC-IMA approach will be based on short (1-2yrs), medium (4yrs) and long-term (6yrs) implementation of the 6-year strategy.

In the short term RAC-IMA will implement a phased approach to involve key staff based on a 10-20% time spent on project at national and regional basis. A biennial work plan will be developed and project done will be based on the strategic research areas of the CEP Strategy. RAC IMA will

continue to contribute in-kind to small scaled funded projects with UNEP CAR/UNEP and will seek grant funding from other sources.

Annex 1 list Potential RAC IMA Projects and Activities of the 2021-2022 Work Programme.

7. Key Strategic Areas based on Regional Mandate for RAC IMA

In order to focus the IMA to meet the needs of its regional mandate as a Regional Activity Center, the IMA will address certain Key Strategic Areas within the planning period (2021-2026) by building on existing strengths of the organization and treating with weaknesses and threats (economics and financial). The elements of the Key Strategic Areas are:

- 1. Programme Alignment;**
- 2. Human Resource Management & Mobilization Strategy;**
- 3. Income Generation;**
- 4. Networking and Relationship Building with agencies;**
- 5. Public Relations; Image Improvement & Marketing;**

In addressing these Strategic Areas, the Critical Success Factors are outlined in the Table 1 below:

Table 1: Critical Success Factors Addressing Regional Mandate for RAC IMA.

Key Strategic Areas	Critical Success Factors
Programme Alignment	<p>Alignment of IMA's research programmes to meet regional needs and objectives.</p> <p>Shared vision between IMA's national mandate and regional mandate as a RAC.</p> <p>Relevance of research programmes, cost cutting and alignment with RAC IMA mission.</p> <p>An organizational culture alignment striving for common goals, one vision and mission.</p> <p>Making IMA unique, more efficient, flexible and professional in its operations</p> <p>Incorporation of specific, measurable, attainable, realistic and timely (SMART) objectives in projects.</p> <p>Alignment of IMA's research programmes to meet national/regional needs and objectives.</p> <p>Participation in regional / global observation networks such as CREWS, GOOS</p> <p>Generating income from external, grant funding and reducing reliance from Government sources.</p> <p>Shared vision between the Management of the IMA and the Board of Governors.</p>

	Capacity building regarding equipment and training being provided by the International Atomic Energy Agency (IAEA) for enhancement of IMA's laboratory capacity to conduct research on ocean acidification, HABs, coastal eutrophication and microplastics.
Human Resource Management and Mobilization Strategy	<p>A structure of the RAC within the organization to be created and aligned with current structure.</p> <p>Filling in positions comprising the RAC.</p> <p>Appointment to the post of Director of RAC and minimizing conflicts.</p> <p>Attracting and retaining a strong cadre of human resources for the RAC.</p> <p>Recruitment of qualified and experienced research staff.</p> <p>Strategy for in-kind cost and improvement in remuneration packages.</p> <p>Providing training for staff in Spanish to allow closer communication/ collaboration with RAC-CIMAB</p> <p>Enhancing its laboratory capacity through the purchase of equipment.</p> <p>IMA seeking ISO 17025 accreditation for nutrient scope, implementing a quality management system to ensure reliable data</p>
Income Generation	<p>The skill set for marketing and winning grant funding</p> <p>Training in grant funding</p>
Networking and Relationship Building	<p>Development of strong networks and co-investment partners</p> <p>Regional capacity building - Staff exchange programme</p> <p>Strengthening regional networks for LBS. SPAW has an email group for sharing of information / published literature</p> <p>Conducting a needs assessment for countries under IMA RAC for programmes development and prioritization to fill the gaps – e.g., training, providing laboratory services etc.</p>
Public Relations, Image Improvement & Marketing	<p>Enhanced relationship between RAC IMA and its regional stakeholders</p> <p>Responsiveness by IMA to the needs of regional stakeholders on mandate of convention and protocols.</p> <p>Feedback between IMA and its stakeholders</p> <p>Sound public education processes</p> <p>Sound image/brand development</p> <p>Making the IMA library a resource for other countries – providing literature etc.</p>

Human Resource Complement

Based on the approved strategic plan of IMA 2019/2024 the new organisation structure of the

IMA proposes the following as indicated in Table 2.

Table 2: Human Resource Capacity of the IMA as per the approved Strategic Plan/Organisation Structure 2019/2024:

Human Resource Proposed Staffing	
<u>Department</u>	<u>Organisation Structure</u>
Directorate	<u>12</u>
Research Programmes	<u>41</u>
Information Technology	<u>7</u>
Human Resources	<u>4</u>
Information/Education/PR/Marketing	<u>8</u>
Operations and Support	<u>17</u>
Finance and Administration	<u>18</u>
<u>TOTAL</u>	<u>107</u>

The Human Resource complement based on the approved established in 1998 is shown in Table 3.

Table 3: Human Resource complement of IMA based on approved establishment (1998)

Human Resource Disposal	
<u>Department</u>	<u>Approved Establishment 1998</u>
Directorate	6
Research Programmes	46
Analytical Laboratory	6
Information Technology	2
Geomatics	0
Human Resources	2
Information/Education/PR/Marketing	9
Advisory and Business	1
Operations and Support	18
Accounts and Administration	11
<u>Total</u>	<u>101</u>

Finance Proposal

Income

The IMA receives the majority of its funding from the Government. However, the inherent uncertainty of Government funding as provided in the Official Estimates continues to be a weakness that the IMA faces. IMA proposes to increase its contribution over the period from 5%

up to 10% at the end. This would be achieved through increased grant/donor funded research projects as generated by the business unit, sale of products derived from research activities, and attraction of sponsorships for certain operational aspects such as a laboratory facilities or equipment.

Capital Expenditure

Capital expenditure is met from a variety of sources. Major items of equipment are obtained through Public Sector Investment Programme funding from the Government under specific projects. Other acquisitions are the result of the application of funds earned on consultancy projects as well as counterpart funding on sponsored or grant funded projects. The largest single capital project is the completion of construction of the IMA's new facilities.

Recurrent Expenditure

The IMA acknowledges its continuing need to attract and retain suitable professional staff. In order to accomplish this, the IMA expects that it will have to improve on the remuneration packages of its staff generally, and those of its professional staff.

Cost of maintenance as well as utilities and other costs will increase owing to the coming on stream of new facilities.

It is expected that, based on the suggested research programme, the budget for materials and supplies is expected to significantly increase by the end of the period.

References

RAC_RAN Guidelines rev3 2008, Consolidated version for the 13th IGM which include the observation of all States and Organizations which participated in the working group – 10/09/2008.

Updated CEP Strategy document.

IMA's Approved Strategic plan 2019-2024

UNEP CEP, 2019. State of the convention area convention report.

Vision 2030-The National Development Strategy for Trinidad and Tobago

Annex1: Potential RAC- IMA Projects and Activities of the 2021-2022 Work Programme.

THEME A. Programme Coordination and Management				
Strategic objectives: ^{1.} To strengthen regional and national governance mechanisms, resource availability, and capacity for the implementation of and compliance with the Cartagena Convention, the Oil Spills and LBS Protocols, and approved national and regional strategies and action plans for pollution prevention. ^{2.} To mobilize additional resources for implementation of unfunded AMEP Projects and Activities; ^{3.} To strengthen synergies and collaboration among RACs, international and regional partners, and organizations active in the Wider Caribbean region, and enhance broad stakeholders' participation.				
2020-2021 Targets: ^{1.} At least 4 additional ratifications of the LBS Protocol; ^{2.} 2 MoUs/MoC concluded and/or updated with regional partners; ^{3.} At least 10 joint activities with partners;				
Main Activities	Project(s)	Lead	Partners	Expected Deliverables
Promote ratification of the LBS Protocol by Non-Contracting Parties.	ACP MEA, IWEco, CReW+, GoM	Secretariat	RAC CIMAB, RAC IMA , CARPHA, OECS, CCAD, IDB, GIZ	^{a)} Increased number of ratifications of the LBS Protocol; ^{b)} Targeted promotional material on the benefits of ratification for multiple audiences e.g. General Public, Private Sector, Governments and Key Economic Sectors.
Provide Secretariat support to Ad Hoc Meetings of Working Groups	N/A	Chairs Working Groups	Working Group Members RAC IMA	^{a)} Meetings of Working Groups successfully facilitated;
Identify opportunities for implementation of Regional and/or National Strategies and Action Plans addressing marine pollution.	N/A	Secretariat	LBS RACs RAC IMA	Countries begin implementing national strategies and/or action plans on pollution; Action plan on nutrient reduction strategies
Ensure timely and coordinated programme implementation, monitoring of progress against targets and indicators, periodic evaluation and reporting.	All	Secretariat, Regional Project Coordinators	LBS RACs, Partner Executing Agencies RAC IMA	a) CREW+: - 8 National Projects successfully initiated and implementation started; - Steering Committee meetings organized; Project Work Plan timely implemented; b) Support to preparation of new GEF Project Proposals – Procaribe+, GEF Marine Plastics c) Support to ongoing implementation of ACP MEA, GEF IWEco and UNHSTF Projects d) Support to closure and final reporting for UNDP GEF CLME+ Project e) Support to launch of new GEF and non-GEF Projects – GEF Islands, GEF IW Learn, German Plastics Project for SIDS f) New projects and activities in support of the blue economy, sustainable consumption and production, green economy, solid and liquid waste management including waste as a resource, circular economy and oceans governance developed; Periodic quarterly updates made of Secretariat responses to STAC Recommendations, COP Decisions and Targets;
Provide technical assistance and guidance to CPs for the implementation of the Cartagena	N/A	Secretariat	LBS RACs, RAN, Regional Nodes	^{a)} Guidance on the national implementation of the CC and the LBS Protocol provided through briefs, model cabinet papers and/or twinning; ^{b)} Guidance on sampling, monitoring and assessment for oil spills (by IMA RAC)

Convention, Oil Spills and LBS Protocols.			RAC IMA	
Facilitate cooperation with relevant projects and coordinating mechanisms relating to pollution.	N/A	Secretariat	RACs RAC IMA	^{a)} Participation in CLME+ SAP Coordinating Mechanism; ^{b)} Participation in relevant UNEP HQ committees and working groups on marine pollution; ^{c)} Continued Participation in BASEL Plastics Partnership; ^{d)} Representation on Global Water Caribbean Technical Committee; ^{e)} Representation of Committee overseeing implementation on Regional Strategic Action Plans on Waste and Water; ^{f)} Representation on Project Steering Committees of relevant projects including the following GEF Projects: “Facilitating Dialogue And Strengthening Trans-boundary Cooperation With Legislators To Improve Marine Governance” and ‘Strengthening the Blue Economy: The Economic Case, Science-Informed Policy, and Transparency’;
Evaluate the role of pollution prevention, control and reduction as part of ongoing efforts to develop ocean-based and blue economy approaches.	N/A	Secretariat	RACs RAC IMA	Ongoing activities and consultations that the Secretariat is involved in concerning efforts by CP to develop ocean-based and blue economy approaches reflect the economic impacts of pollution as well as the economic benefits of pollution control, prevention and reduction actions;

THEME B: Land and Marine Based Sources of Pollution				
Ecological Objectives: <ol style="list-style-type: none"> Pollution from Land and Marine-Based Sources cause no significant impact on coastal and marine ecosystems and human health; New and emerging land-based pollution related problems are identified and tackled, as appropriate. 				
Strategic objectives: <ol style="list-style-type: none"> To control, prevent and reduce marine pollution from land and marine-based sources. 				
2020-2021 Indicators: <ol style="list-style-type: none"> Number of countries with pollution related policies, legislation and/or regulations updated and/or developed; Number of new and/or updated guidelines on marine pollution; Number of Training and Capacity Building Workshops Number of Contracting Parties with: <ol style="list-style-type: none"> National Plans of Actions developed to address marine pollution, wastewater, marine litter and nutrients National/Pilot Projects focusing on pollution reduction activities 			2020-2021 Targets: <ol style="list-style-type: none"> 6 countries with updated and/or new policy/regulatory instruments; 3 new/updated guidelines developed/updated; At least 6 Regional Workshops Conducted (a) At least 5 national plans of action relating to marine pollution; (b) At least 10 national/pilot projects focusing on pollution reduction. 	
Main Activities	Project(s)	Lead	Partner(s)	Expected Deliverables
2.1. Strengthening implementation of the obligations under the Land-Based Sources of Marine Pollution and Oil Spills Protocols and related regional strategies on Marine Litter, Wastewater and Nutrients				
Strengthen the capacity of CPs to respond efficiently to marine pollution incidents through strengthening sub-regional and regional mechanisms and contingency plans,	N/A	RAC REMPEITC	IMO RAC (IMA)	Technical support provided to CPs, which so request, to assess, prepare, adopt, update as well as implement and test national contingency plans and regional or sub-regional agreements/contingency plans dealing with preparedness for and response to oil and HNS spills from ships, sea ports, oil handling facilities and offshore installations; (subject to funding) Host Regional work shop on guidance on oil spill sampling, monitoring, spill assessment, effect on environment and linking with polluter (Subject to funding)
2.2 Development, and/or update and/or implementation of new/existing regional strategies, action plans including guidelines, standards and criteria including possible amendments to the LBS Protocol and its Annexes				
Update the Annexes/Text of the LBS Protocols	CRew+	Secretariat	Working Group(s) RAC (IMA)	Working group(s) established by COP 5 and proposed recommendations for Amendments to the LBS Protocol and/or its Annexes formulated as appropriate for submission to COP 6; Recommendations for amendments to the LBS Protocol to facilitate increased reuse of domestic wastewater including adoption of new criteria or standards for domestic wastewater discharges; Review, Analysis and Report for developing a new Strategy or Protocol on the management of freshwater resources within the framework of the Cartagena Convention.
Develop technical Guidelines for classification of waters as per the LBS Protocol.	CRew+	Secretariat	LBS RACs, Working Group	Guidelines for classification of waters according to the LBS Protocol developed (subject to funding); Contracting Parties supported to classify their recreational/receiving waters, based on request (subject to funding) Contracting Parties supported to classify their recreational/receiving waters, based on request (subject to funding)
Develop technical Guidelines for classification of watershed and water bodies for good ecological status	CRew+	Secretariat	RAC IMA	Guidelines for classification of watershed and water bodies (developed (subject to funding);

Promote and support implementation of Regional Marine Litter and Regional Nutrients Reduction Strategies	ACP MEA	Secretariat	LBS RACs, Regional Node RAC (IMA)	Regional Strategies Launched and used as basis for developing new project proposals and partnership opportunities;
2.3 Enhancing national marine pollution prevention and control policies, legislation and regulations.				
2.4 National and Pilot projects implemented on marine litter, nutrients, wastewater.				
Implement national/community-based projects on wastewater management, marine litter/plastics and nutrients reduction, reuse & recycling;	ACP MEA, German Plastics; CREW+	Secretariat	CP, LBS RACs, UNEP GPA, IDB, GIZ RAC (IMA)	a) National and/or Community Based Projects successfully implemented b) Pilot projects on pre-treatment of industrial discharges into domestic wastewater systems implemented (subject to funding) c) National and/or Community Based Projects successfully implemented on elimination of floating plastics on major river catchments.
2.5 Identifying and tackling new and emerging issues, as appropriate.				
Identify and compile latest research on new and emerging pollutants for briefing CP.	IWEco	Secretariat	LBS RACs, RAN RAC (IMA)	Fact Sheets and review briefs prepared on the high priority contaminants identified by the 5 th LBS STAC including but not limited to ocean acidification, microplastics and the links between pollution and Sargassum;

THEME C: Monitoring and Integrated Ecosystem Assessment				
Ecological Objectives: ³ Pollution from Land and Marine-Based Sources cause no significant impact on coastal and marine ecosystems and human health; ⁴ New and emerging land-based pollution related problems are identified and tackled, as appropriate.				
Strategic objectives: ² To control, prevent and reduce marine pollution from land and marine-based sources.				
2020-2021 Indicators: ⁵ Number of countries with national recreational water quality monitoring programmes; ⁶ Number of countries with system for classification of recreational waters for effluent discharges; ⁷ Number of Training and Capacity Building Workshops			2020-2021 Targets: ⁶ 6 countries develop and/or enhance recreational water quality programmes; ⁷ 3 countries develop systems for classification of receiving water bodies as per requirements of LBS Protocol ⁸ 3 regional capacity building workshops convened.	
Main Activities	Project(s)	Lead	Partner(s)	Expected Deliverables
2.1 National pollution monitoring programmes developed and/or enhanced to include the relevant indicators recommended by the SOCAR Report in Marine Pollution				
Support the development and/or enhancement of national recreational water quality monitoring programmes based on recommendations from SOCAR;	IWEco, CREW+, GoM	Secretariat	LBS RACs, RAN, CARPHA, INVEMAR, IAEA, GCFI RAC (IMA)	Strengthening of national and as appropriate regional Laboratory Capacity based on needs assessment; Technical Recommendations provided for the development and/or strengthening of national recreational water quality monitoring programmes; Relationships developed with regional laboratories to facilitate testing and analysis by CP;
Harmonize and standardize the monitoring and assessment methods of pollution and marine litter.	IWEco, CREW+	Secretariat	LBS RACs, RAN, GCFI, GIZ RAC (IMA)	^{a)} Protocols for applying good laboratory practices prepared; ^{b)} Monitoring Protocols (6 maximum) related to Pollution (eutrophication and contaminants), Marine Litter, and sampling and analysis of microplastics developed; ^{c)} Field testing of Harmonized approach to Marine Litter Monitoring conducted.
2.2 Marine pollution assessment tools (including maps, infographics and factsheets) developed and/or updated for key pollutants				
Update thematic fact sheets based on SOCAR and Regional Nutrients Reduction Strategy;	CREW+, ACP MEA, IWEco	Secretariat	LBS RACs, RAN, IDB, GIZ, OAS RAC (IMA)	^{a)} Updated assessment factsheets and maps prepared with new data originating from pollution reports and strategies;
2.3 Enhanced capacity at regional, sub- regional and national levels including technical assistance, training and capacity building.				
Support countries in the implementation of the LBS Protocol	IWEco, CREW+, ACP MEA	Secretariat	LBS RACs, RAN, IDB, GIZ RAC (IMA)	Technical assistance provided and capacities built to support LBS implementation Sub-regional/regional workshops and trainings related to common capacity-building needs and knowledge gaps for LBS Protocol Implementation by CP
Develop and implement national training programmes around key pollution issues.	IWEco, CREW+, ACP MEA, IWLearn	Secretariat	LBS RACs, RAN, GIZ, IDB, CAWASA, GWP, UNEP HQ RAC (IMA)	At least 5 capacity building activities developed to enhance knowledge on monitoring and/or integrated ecosystem assessments including on: (1) sample collection, analysis and monitoring; (2) data analysis, evaluation and reporting; (3) monitoring of specific pollutants and emerging contaminants in recreational water and wastewater effluent; Training courses and other capacity-strengthening guidance developed on cross-cutting topics of relevance to SIDS (marine spatial planning as a

				tool for strengthening blue economy opportunities) Intra and inter-regional training delivered in and among SIDS regions through regional partners Training on Index of Coastal Eutrophication & Harmful Algal Blooms; (subject to funding) Training in monitoring impact of run-off & poor land-use practices; (subject to funding) Training in the identification and tracking of priority pollutants; (subject to funding)
Strengthen collaboration with RAC REMPEIC and IMO to provide Contracting Parties with technical assistance relating to oil spill detection, monitoring, the oil spill modelling, risk assessment of contaminated areas.		RAC REMPEITC	Secretariat; IMO,RAC IMA	Technical assistance provided and national capacities strengthened in the following areas: oil spill detection, monitoring, the oil spill modelling, risk assessment of contaminated areas

THEME D. Ecosystem Based Management Approaches				
Long-Term Impacts: 1. Sustainable use and development of coastal and marine resources through reduced impacts of land and marine-based pollution; 2. Incorporation of environmental considerations into decision-making processes on the development and use of coastal and marine resources; 3. Coherence is achieved between public and private initiatives and between decisions by the public authorities, which affect coastal and marine ecosystems. 4. Integration of Pollution (LBS) and Marine Biodiversity (SPAW) sub-programme areas.				
2020-2021 Indicators: 8. Number of countries implementing EBM Projects; Number of Case Studies and/or Experience Nodes on EBM Number of Countries supported with Decision Support tools Training Courses/Webinars on EBM or related integrated planning tools			2020-2021 Targets: 9. 10 countries implementing EBM project; 10. 4 Case Studies developed and disseminated; 11. 4 Countries integrating EBM Principles into national Decision Support Tools 12. 3 Regional Training Workshops/Webinars Convened	
Strategic objectives: 1. To reduce anthropogenic pressures/pollution on coastal and marine areas in order to prevent and/or reduce their degradation; 2. To ensure preservation of the integrity of coastal and marine ecosystems through the control, reduction and prevention of marine pollution; 3. To adopt measures to reduce the negative impact of natural hazards and in particular of climate change which may exacerbate polluting impacts; 4. To ensure that activities in terrestrial, coastal and nearshore marine areas do not increase marine pollution.				
Main Activities	Project(s)	Lead	Partners	Expected Deliverables
Support continued integration of the LBS and SPAW sub-programmes thought joint activities and capacity building	All	Secretariat	Working Groups, RACs, RAN RAC (IMA)	a) Joint projects and activities designed and implemented;
Support region-wide use of EBM approaches by sharing lesson learnt and case study for implementation	IWEco, ACP MEA, CLME+	Secretariat	RAC IMA	b) Case studies on EBM developed and shared with member states. c) Lessons learnt on project implementation shared. d) Webinar convened and information shared with member states.

THEME E. Knowledge Management and Communications				
Strategic objectives: ^{4.} To strengthen knowledge and awareness on best practices, lessons learned and appropriate technologies for the control, reduction and prevention of marine pollution; ^{5.} To compile, analyze and present pollution related data and information for informing policy and decision-making in the Wider Caribbean Region; ^{6.} To ensure visibility of the LBS Protocol, its role and achievements and the work of the Secretariats, LBS RACs and RAN; ^{7.} To improve national reporting on sources, impacts and status of marine pollution in the Wider Caribbean Region. ^{8.} To facilitate greater engagement and networking with Governments, Civil Society, Donors, Youth, Private Sector and General Public				
2020-2021 Targets: ^{4.} 25 reports, factsheets and other scientific publications; ^{5.} At least 12 online press releases and 30 news items; ^{6.} 30 events/ side events; ^{7.} 1 Decision support tool on pollution piloted.				
Main Activities	Project(s)	Lead	Partners	Expected Deliverables
Prepare thematic products building on the findings of the State of Convention Area Report on Marine Pollution and the Regional Nutrients Reduction Strategy	IWEco, CReW+, ACP MEA	Secretariat	LBS RACs, GIZ RAC (IMA)	Fact Sheets and Infographics on specific pollution issues prepared;
Identify opportunities to enhance national and/or regional databases and information platforms.	IWEco, CLME+, CReW+	Secretariat	RACs, GIZ RAC (IMA)	^{a)} Operationalize regional platforms for sharing of pollution data and information with an emphasis on data contained within the SOCAR and promote integration with marine habitat data; ^{b)} Reporting on the CLME+ Hub including keeping Project and Focal Points databases updated; ^{c)} New or updated national platforms/databases, supported by a regional platform for IWWM developed ^{d)} National data bases on existing wastewater treatment facilities developed (subject to funding) ^{e)} CEP Website updated to reflect clearinghouse function for pollution related indicators and for reporting on selected SDGs e.g. SDG 6 and 14 and including information on financial options, small- and large-scale wastewater treatment technologies, and wastewater and water management policies and practices.
Support the implementation of the Communications Strategy of the CC Secretariat and projects under execution.	IWEco, CReW+	Secretariat	RACs, GIZ RAC (IMA)	^{a)} CEP and Project Websites updated regularly with stories relating to the LBS Protocol and Marine Pollution; ^{a)} At least 2 Communications campaigns on pollution prevention designed and implemented; ^{b)} Participation in national and regional meetings, exhibitions and webinars to showcase best practices, lessons learned and appropriate technologies for pollution prevention, reduction and control in the Wider Caribbean Region; ^{c)} New pollution fact sheets, project briefs, PSAs and infographics developed for the AMEP Sub-Programme in English, Spanish and French; ^{a)} Standard presentation templates and communication material on the AMEP sub-programme developed and disseminated to LBS Focal Points, RACs, RAN and Regional Nodes; ^{b)} Knowledge products, case studies and best practices from the GEF CLME+, GEF IWEco and other projects and activities involving the management of domestic wastewater, reduction of marine litter and the management of nutrients compiled and dis; ^{c)} Formal Launch of State of Convention Area Report on Marine Pollution, Regional Nutrients Reduction Strategy and Regional Marine Litter Strategy. ^{d)} Awareness, information materials on marine pollution from ships produced and disseminated ^{e)} Input provided to regional and global reports and assessments relating to marine pollution

Facilitate exchange of best practices, lessons learned, twinnings and experience between and among Contracting Parties	IWEco, CReW+, IWLearn	Secretariat	GIZ, RACs and RANs RAC (IMA)	^{b)} Twinning and dialogue activities in support of regional collaboration among SIDS via cooperation among all GEF focal area projects and participating countries ^{c)} Strengthened web portal and resource catalogue to facilitate information-sharing and learning across the SIDS project portfolio in support of the SAMOA Pathway areas and beyond
Support Environmental Commemorative Days focusing on marine pollution.	ACP MEA, IWEco, CREW+,	Secretariat	UNEP Regional Office, GIZ RAC (IMA)	Three national celebrations supported with technical and promotional material, and participation of Secretariat, RAC and/or RANs. One regional celebration supported with technical and promotional material and participation of Secretariat, RACs and/or RANs .
Improve Communication and Outreach with LBS Focal Points	All	Secretariat	RACs RAC (IMA)	Newsletter/E Bulletin prepared and circulated to focal points on a quarterly basis; At least 3 Webinars organized per annum related to the work of the LBS and Oil Spills Protocol; Newsletter circulated quarterly on ICZM news (RAC IMA)

