GEF-7 CHILD PROJECT CONCEPT

CHILD PROJECT TYPE: FULL SIZE CHILD PROJECT
PROGRAM: COMMON OCEANS ABNJ PROGRAM

Child Project Title:	Strengthening the stewardship of an economically and biologically significant high seas area – the Sargasso Sea
Country:	Global
Lead Agency	FAO
GEF Agency(ies):	UNDP

INDICATIVE FOCAL/NON-FOCAL AREA ELEMENTS AND FINANCING

Programming Directions	Trust Fund	(in $)	
		GEF Project Financing	Co-financing
IW-2 Improve management in Areas Beyond National Jurisdiction (ABNJ)	GEFTF	$2,652,294	$26,035,000
Total Project Cost		$2,652,294	$26,035,000

PROJECT COMPONENTS AND FINANCING

Project Objective: Facilitation of a collaborative, cross-sectoral ecosystem-based sustainable stewardship mechanism for the Sargasso Sea through improvement in the knowledge base and strengthened frameworks for collaborative management and governance

Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Co-financing
Component 1: Partnerships and Organisational Infrastructure for Stewarding the Sustainable Management of the Natural Resources of the Sargasso Sea Ecosystem	TA	Collaborative stewardship of an iconic high seas ecosystem through the development and adoption of interactive, sustainable management measures for the conservation and protection of its natural resources	A road-map and budget to support a collaborative Ecosystem Based Approach to sustainable management of natural resources and conservation within the Sargasso Sea. This would clearly define the roles and align with the mandates of the relevant stakeholders	GEFTF	$673,740	$3,409,324
Component 2: Improved Knowledge Base to Support a Collaborative, Adaptive Ecosystem-Based Stewardship Approach	TA	Quantified threats and impacts identified along with immediate and root causes establishing a baseline for on-going monitoring and adaptive management	A detailed Ecosystem Diagnostic Analysis (EDA) for the entire Sargasso Sea Ecosystem providing a baseline for long-term collaborative monitoring and stewardship of the natural resources of Sargasso Sea by the relevant partners	GEFTF	$242,000	$3,673,000
		Analysis of the global value of this unique ecosystem (with precise figures and conclusions where possible) so as to further justify and	An Ecosystem Valuation (including a value-chain analysis) delivering a detailed global economic assessment of the actual and potential value of goods and services	GEFTF	$254,000	$475,000

		mobilize support for a collaborative sustainable management approach	provided by or falling within the Sargasso Sea ecosystem along with a cost-benefit analysis of potential stewardship /management approaches			
		Knowledge and Information capture and analysis to support effective stewardship and decision-making	Filling of Priority Information and Knowledge Gaps arising from the Ecosystem Diagnostic Analysis along with a Road-Map and Programme under implementation for Monitoring of the Ecosystem	GEFTF	$647,568	$10,661,773
Component 3: Development of a Strategic Action Programme for addressing Threats and Strengthening the Stewardship and Conservation of the Sargasso Sea Ecosystem	TA	Priority immediate and long-term actions identified in order to a) address or mitigate the impacts of threats and b) strengthen stewardship and conservation	A list of priority immediate and long-term actions needed along with identified partnerships and responsible entities for delivering on these priority actions.	GEFTF	$250,000	$2,516,000
		Stewardship measures and associated priority actions identified and agreed by various management-mandated institutions, and other partners and stakeholders to support adoption of a sustainable process for the conservation and protection of the Sargasso Sea	A Strategic Action Programme defining the stewardship measures and associated priority actions, agreed between and endorsed by the appropriate mandated institutions, partners and collaborators supporting partnerships for implementation of sustainable management processes within the Sargasso Sea	GEFTF	$180,500	$325,000
Component 4: Knowledge Management, Monitoring and Evaluation	TA	Knowledge Capture and Management through Identification of Best Lessons and Practices	Best lessons and practices captured at Mid Term for effective distribution Information packages developed and disseminated which inform appropriate government bodies and regional entities on management and decision-making processes Project support to and engagement with IW:LEARN activities with allocated (1% plus)	GEFTF	$180,000	$2,708,428

			budget. A Communications and Awareness Outreach Programme with clear assessment and reporting on its effectiveness			
		Effective on-going Project Monitoring and Evaluation			$95,000	$0
			Subtotal	GEFTF	$2,522,808	$23,768525
				Project Management Cost (PMC)	GEFTF	$129,486	$2,266,475
				Total Project Cost		$2,652,294	$26,035,000

INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount ($)
Donor Agency	World Maritime University	Grant	Investment mobilized	$400,000
Other -Scientific Institute	Bermuda Institute of Ocean Science	Grant	Investment mobilized	$17,220,000
Other -Scientific Institute	NASA	Grant	Investment mobilized	$1,500,000
Other -Scientific Institute	NOAA	Grant	Investment mobilized	$500,000
Other -Scientific Institute	AFB (Agence Francais de Biodiverité)	Grant	Investment mobilized	$115,000
Other – Academic/Research Institute	Duke University	Grant	Investment mobilized	$2,300,000
Other - Academic Institute	Imperial College London	Grant	Investment mobilized	$200,000
Other - Academic Institute	Edinburgh University UK (ATLAS & I-Atlantic Project)	Grant	Investment mobilized	$200,000
Other – Research Institute	Global Fishing Watch	Grant	Investment mobilized	$ 500,000
Donor Agency	FFEM	Grant	Investment mobilized	$ 1,500,000
Civil Society Organisation	Sargasso Sea Commission	Grant	Recurrent Expenditure	$1,000,000
		In-Kind	Recurrent Expenditure	$600,000
Total Co-financing				$ 26,035,000

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized Amount ($)
Donor Agency	World Maritime University	Grant	Investment mobilized $400,000[1]
Other -Scientific Institute	Bermuda Institute of Ocean Science	Grant	Investment mobilized $17,220,000[2]
Other -Scientific Institute	NASA	Grant	Investment mobilized $1,500,000[3]
Other -Scientific Institute	NOAA	Grant	Investment mobilized $500,000[4]
Other -Scientific Institute	AFB (Agence Francais de Biodiversité)	Grant	Investment mobilized $115,000[5]
Other – Academic/Research Institute	Duke University	Grant	Investment mobilized $2,300,000[6]
Other - Academic Institute	Imperial College London	Grant	Investment mobilized $200,000[7]
Other - Academic Institute	Edinburgh University UK (ATLAS & I-Atlantic Project)	Grant	Investment mobilized $200,000[8]
Other – Research Institute	Global Fishing Watch	Grant	Investment mobilized $750,000[9]
Donor Agency	FFEM	Grant	Investment mobilized $1,500,000[10]
Civil Society Organization	Sargasso Sea Commission	Grant	Recurrent Expenditure $1,000,000[11]
		In-Kind	Recurrent Expenditure $600,000[13]

TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
UNDP	GEFTF	Global	International Waters	N/A	2,652,294	238,706	2,891,000
Total GEF Resources					2,652,294	238,706	2,891,000

PROJECT PREPARATION GRANT (PPG) - Amount requested by agency(ies), Trust Fund, country(ies) and the Programming of funds

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					PPG (a)	Agency Fee (b)	Total c = a + b
UNDP	GEFTF	Global	International Waters	N/A	100,000	9,000	109,000
Total PPG Amount					100,000	9,000	109,000

[1] Grants from Swedish Agency for Marine and Water Management (SwAM) and the Government of Germany of $400,000 within a number of cognitive fields that are directly project related;
[2] National Science Foundation grants for Hydrostation H and BATS, also assistance with vessel costs for help with fundamental oceanography;
[3] NASA Funding for Sargasso Sea Pilot part of COVERAGE program approved by international Committee for Earth Observation Satellites (CEOS);
[4] Relevant part of proposed cruise of NOAA vessel OKAENOS in 2021/2022;
[5] AFB co-financing for FFEM project;
[6] Grants from US Navy and German IKI through GOBI for migratory species connectivity;
[7] Multiple grants for work on fisheries and ecosystem management;
[8] EU financed projects dealing with Atlantic seafloor and ecosystem mapping, including Sargasso Sea;
[9] Value of satellite and terrestrial AIS data processed regarding vessel of interest and expert application as well as machine learning modeling;
[10] Grant to SSC from French Global Environment Fund (FFEM);
[11] SSC Secretariat budget for 4 years period. In kind is contributions of Secretariat and Commissioners time.

PROJECT'S TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

Project Core Indicators		Expected at PIF
5	Area of **marine habitat under improved practices** (excluding protected areas) (Hectares)	685 million
11	Number of **direct beneficiaries disaggregated by gender** as co-benefit of GEF investment	8560 (3842 Male; 4718 Female) *

The project will address **a number of the SDG 14 targets and indicators** as follows:

14.1 Steps will be taken to try and minimize ship-based pollution within the Sargasso Sea.

14.2 The project objective will be to protect the Sargasso Sea to avoid any significant adverse impacts and support a healthy and sustainable ocean through a process of monitoring and stewardship.

14.3 Improved understanding of the impacts of climate change, including ocean acidification, through an on-going time series of measurements at a suite of sampling stations throughout the area

14.4 Collaboration with SSC partners and particularly the appropriate existing and mandated regional bodies in measures designed to regulate and eliminate IUU fishing and other destructive fishing practices and to promote a more effective science-based management approach

14.5 Contribute to the global conservation of 10 percent of marine areas consistent with international law and based on best available scientific evidence

14.7 Increase the economic benefits to Small Island Developing States (i.e. Dominican Republic, Bahamas, Haiti) and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism which depends on the Sargasso Sea ecosystem and the species it supports.

14.7c Implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want (i.e. piloting governance mechanisms for ABNJ)

Furthermore, the Project will address **Aichi Biodiversity Target 11** by contributing to the requirement that 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures.

* It is quite challenging to calculate potential direct beneficiaries from a high seas project with no resident population. Two groups of possible beneficiaries might be the artisanal glass eel fisheries of the Caribbean and North Africa (due to critical role of Sargasso Sea in the eels life cycle) and high seas fishers who operate in the Sargasso Sea. Country reports to an American Eel range State meeting in 2018 organized by the SSC suggested that each of the large Northern Caribbean island countries had approx. 25 organizations (of average some 5 individuals – usually male) fishing for glass eels with some family back up including females. So very roughly 170-200 in each country Haiti, DR, Jamaica and Cuba that means that a sustainable eel fishery could have about 800 beneficiaries of whom 200 may be women. Assuming similar figures for Algeria, Libya, Tunisia, Morocco, and Egypt, 1000 beneficiaries of whom 250 may be women. Totals: 1800 (1350 male; 450 female). Regarding high seas fishers- Global Fishing Watch has identified 92 vessels fishing in the Sargasso Sea in 2018 and 2019. Using averages of crew sizes for relevant vessel types that is 1334 beneficiaries– predominantly men. For each distant water fisher, there are on average some 4 shore support workers most of whom are women fish processors, i.e. 5336 and if 80% of shore workers are women - 4268. Totals –6760 (2402 male; 4268 female) Grand total: 3842 male, 4718 female.

PROJECT DESCRIPTION

Country Context

The Sargasso Sea is a 685 million hectare ecosystem in the North Atlantic. It is named for the two species of holopelagic macro algae (*Sargassum natans* and *S. fluitans*) that exist without contact with land and accumulate in the North Atlantic Subtropical Gyre where they form into large mats or windrows. Only the archipelago of Bermuda has direct coastal frontage on the Sargasso Sea. The Sargasso Sea is bounded on all sides by the clockwise flow of major ocean currents. The Gulf Stream and North Atlantic Drift form the western and northern boundaries, the Canary Current forms a more diffuse eastern boundary, and the North Equatorial Current and Antilles Current form the southern boundary. Its goods and services have a direct as well as indirect inherent value to many countries outside of its borders.

A detailed science and supporting evidence case for the Sargasso Sea ("The Protection and Management of the Sargasso Sea')[12] completed in 2011 provides evidence that the Sargasso Sea constitutes a unique high seas marine ecosystem, home to numerous endemic species and essential habitat for a very large number of others. Many of the species inhabiting the Sargasso Sea are vulnerable, endangered or threatened and are listed as such in IUCN Red List, CITES, and the 1990 SPAW Protocol to the Cartagena Convention, including sea turtles, cetaceans, sharks (including the porbeagle), seabirds and invertebrates, as well as commercially valuable fish such as billfish and tunas. Seamounts in the Sargasso Sea also host a diverse range of fragile communities containing endemic and undescribed species; It is an important migratory route for many commercially important species, such as Anguillid eels, bill fishes and tunas, as well as non-commercial species such as whales and turtles It is also the only known spawning ground of the critically endangered European eel (*Anguilla anguilla*) and the endangered American eel (*A. rostrata*), at the centre of what has recently become a global multi-million dollar industry.

In March 2014, five governments signed the Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea, which authorized the establishment of the Sargasso Sea Commission with a mandate to "Exercise a stewardship role for the Sargasso Sea and keep its health, productivity and resilience under continual review." [13] See Annex 1 for more details.

Project Overview and Approach

A suite of ecosystem services can be linked to the ecological conditions and health of the Sargasso Sea and which can be seen as directly beneficial to human activities. These services include a) provisioning services, such as commercial fishing, b) cultural services, such as tourism in Bermuda and the Caribbean countries, sport and recreational fishing, education, and turtle, bird, and whale watching; and c) regulating services, such as carbon sequestration. The global fishery for glass and mature eels (which ultimately depends entirely on spawning and migration from the Sargasso Sea area) is both highly lucrative and under significant threat. The current price of glass eels (an early life stage of the species as they enter river mouths on return from the sea) stands at $5,500 per kilo. In addition, the Sargasso Sea has an inherent socioeconomic value to humankind because of its existence as a unique ecosystem and home to rare and charismatic species. Based on all the best available science, the Sargasso Sea has been estimated to contribute significant values to the global community in the order of multi-millions to billions of

[12] Laffoley, D.d'A., Roe, H.S.J., (eds) *The protection and management of the Sargasso Sea: The golden floating rainforest of the Atlantic Ocean. Summary Science and Supporting Evidence Case*. 2011. Sargasso Sea Alliance, 44

[13] http://www.sargassoseacommission.org/storage/Hamilton_Declaration_with_signatures_April_2018.pdf in Annex II, para a..

US$.[14] Furthermore, the Sargasso Sea has been shown to meet six out of the seven possible criteria for being described as an EBSA (only one is required by CBD). Recent studies on connectivity between ABNJ, EEZ and coastal ecosystems, goods and services are highlighting the importance of the physical, chemical and biological exchange between these areas[15]. Furthermore, as noted in the Transboundary Waters Assessment Programme (TWAP) report on Governance Arrangements for the Ocean[16], given the interconnectedness of the world's ocean, linkages to national and even local level governance processes will also play critical roles in the governance of ocean areas beyond national jurisdiction (ABNJ).

The 2011 Science case noted above identified a number of threats on the ecosystem and its marine life including climate change, rising sea temperatures, changes in ocean currents and the North Atlantic Oscillation[17]. Some of the more prominent threats include:

Pollution: Surface pollutants, including plastics, accumulate in the central Sargasso Sea, because the encircling currents trap water for periods of 50 years or more. Plastics and debris concentrate in Sargassum mats and in frontal zones where animals also concentrate to feed. This may even include ingestion by eel larvae (leptocephali) in the 'marine snow' that they feed on. This problem may be compounded in the knowledge that the plastics can adsorb a range of other pollutants[18]. Increasingly, evidence regarding microplastic toxicity and epidemiology is emerging and should not be ignored.[19]

Fishing: There is evidence from Global Fishing Watch[20] (and other sources) of increasing commercial fishing vessel activity from the vessels of a few nations in this area of traditionally low fishing effort.[21] The data required to assess the impact of tuna fisheries on Endangered, Threatened and Protected (ETP) species is not available from ICCAT. As an example, observer data are currently available only for US longline for 1992-2000, despite there being big changes in the ecosystem in the last 20 years, many changes to management measures, and increasing demand for fish resources. In addition, effort data are unavailable for the Atlantic, and catch data are of insufficient scale (5-degree scale) and quality to assess the potential impact. The Sargasso Sea Commission is therefore providing valuable assistance in validating the GFW data and developing appropriate indicators of impacts on ETP species. However, the main threat from fishing takes place outside the Sargasso Sea. Other than the licenced and legal catches,

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[14] Sumaila, U. R., Vats, V., and W. Swartz. 2013. Values from the Resources of the Sargasso Sea. Sargasso Sea Alliance Science Report Series, No 12, 24 pp. ISBN 978-0-9892577-4-9; Pendleton, L., F. Krowicki., P. Strosser, and J. Hallett-Murdoch. *Assessing the Economic Contribution of Marine and Coastal Ecosystem Services in the Sargasso Sea*. NI R 14-05. Durham, NC: Duke University… and … Ingestion of Microplastics by Fish and Its Potential Consequences from a Physical Perspective. Boris Jovanovic. Integr Environ Assess Manag. 2017;13:510–515. C2017 SETAC

[15] Ecological connectivity between the areas beyond national jurisdiction and coastal waters: Safeguarding interests of coastal communities in developing countries. Ekaterina Popova et al. (2019). Marine Policy. Marine Policy. Volume 104, June 2019, Pages 90-102.

[16] Lucia Fanning, Robin Mahon, Kimberly Baldwin and Selicia Douglas. 2015. Transboundary Waters Assessment Programme (TWAP) Assessment of Governance Arrangements for the Ocean, Volume 1: Transboundary Large Marine Ecosystems. IOC-UNESCO, Paris. IOC Technical Series, 119: 80 pp.

[17] The world's longest continuous open-ocean time series (Hydrostation S and BATS) is showing increases in surface temperature and pH as well as increases in upper ocean salinity

[18] https://www.researchgate.net/deref/https%3A%2F%2Fdoi.org%2F10.1016%2Fj.eti.2019.100352

[19] Microplastics in Seafood and the Implications for Human Health. Madeleine Smith, David C. Love, Chelsea M. Rochman, Roni A. Neff. Curr Environ Health Rep. 2018; 5(3): 375–386. Published online 2018 Aug 16. doi: 10.1007/s40572-018-0206-z

[20] Paul Woods, Global Fishing Watch Presentation 2019 http://www.sargassoseacommission.org/storage/GFW_-_Sargasso_Sea_Commission_March_2019_2_1.pdf,

[21] Brian E. Luckhurst, Analysis of ICCAT Reported Catches of Tunas and Swordfish in the Sargasso Sea (1992-2011) ICCAT SCRS/2014/119 at http://www.sargassoseacommission.org/storage/documents/Luckhurst_2014_-_SCRS_2014_119.pdf.

there are tens of tonnes of glass eels (of both the European and American species) taken illegally every year. The European Eel is assessed as critically endangered by the IUCN red list. Since the early 1980s, a steady and almost continent-wide decline of ~90% has been observed, particularly in the recruitment of European glass eels. Less is known about the state of American eel stocks, but they are also assessed as endangered and the number of eels reaching the rivers of Europe and North America has already fallen dramatically over the last 4-5 decades. This could have dramatic socioeconomic impacts on communities on both sides of the Atlantic as well as on the food-chain within the ecosystem itself and beyond even at a global level.

The Sargasso Sea is also relevant to fisheries at the community level outside the geographical project area but in the countries that are partners in the project There is a local fishery for glass eels in Hispaniola (Haiti and DR) but not in the Bahamas. Only limited information exists on the extent of harvesting in Algeria or Morocco. The latter has indicated that all fishing is done by a commercial aquaculture firm. There is similar lack of knowledge on who fishes in Algeria. Some IP communities (such as the Amazigh) are on the coast of North Africa and the PPG will aim to explore whether there is any overlap with these.

Shipping: The Sargasso Sea lies within one of the world's busiest international shipping areas and is crossed by a large number of vessels each year. The full range of vessel types operate in these waters, with many, but not all, following distinct routing patterns according to the vessel type and the nature of the cargo carried. Ship-related impacts may include pollution from discharges, introduction of alien species through ballast water, underwater noise, collisions with whales, and physical damage to the Sargassum mats.

Other Commercial Activities: Other potential commercial pressures and threats include the continuing interest in harvesting Sargassum (especially if this were to be directed at the Sargasso Sea), the possible impacts of submarine telecommunication cables and possible future seabed exploration and mining. There are now three seabed exploration licences granted by the ISA to Russia, France and Poland on the Northern Section of the Mid-Atlantic ridge adjacent to the Sargasso Sea. Waste plumes from seabed mineral extraction on these sites could constitute a future risk.

Climate Change and Acidification: Long-term series of ocean measurements in the Sargasso Sea show rises in surface ocean temperature and increases in salinity in the upper 300m. Such climate change is pushing the warm sub-tropical convergence in the south of the Sargasso Sea further north, which could cause a shift in direction and intensity of ocean currents, which, in turn, could impact significantly on successful spawning of eels and upon the return migration of their larvae to the rivers of Europe, N Africa and America. It may also lead to the warmer waters further north being able to support the spread of *S. natans VIII*, thus expanding its range into new geographical areas. This particular variant of Sargassum cannot support the same level of diversity of associated organisms as the currently more common forms found in the Sargasso Sea[22]. It is also responsible for much of the so-called 'inundations' negatively affecting many coastlines[23] in the Caribbean and appears to be emanating from the central equatorial Atlantic and/or the mouth of the Amazon River. Furthermore, globally, only four carbon dioxide time series are of known sufficient duration to unequivocally show that ocean acidification is a reality. Three

[22] Pelagic Sargassum and its associated mobile fauna in the Caribbean, Gulf of Mexico, and Sargasso Sea. A Thesis by Lindsay Margaret Martin Submitted to the Office of Graduate and Professional Studies of Texas A&M University in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE. Available from: https://www.researchgate.net/publication/299560667_Pelagic_Sargassum_and_its_associated_mobile_fauna_in_the_Caribbean_Gulf_of_Mexico_and_Sargasso_Sea [accessed Jan 20 2020].

[23] A genetic and morphological analysis of Atlantic Sargassum. Olson E. and Tonkin E. https://www.sea.edu/images/uploads/mbc/SEA_MBC15_01_AtlanticSargassum.pdf (accessed Jan 20, 2020)

of these are from the Sargasso Sea. Given the changes now occurring to the global climate, such long time series are critically important for our understanding of such planetary processes and for demonstrating the key role of the Sargasso Sea in these processes.

Within GEF's overall Programmatic Approach for the GEF7 Common Oceans ABNJ Program, this Child Project aims to provide a concrete demonstration of how a 'stewardship' agency and associated partnership can play a leading role in sustaining and restoring the health, productivity and resilience of such an area beyond the jurisdiction of any one country but within the mandate of the UN Convention Law of the Sea, the associated Precautionary Approach and the concepts of duty and cooperation of states to adopt measures for conservation and management of living resources in the area of the high seas.

a) Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

A variety of organizations have mandates to address some of the threats identified above but not all have taken the necessary action as yet and, furthermore, actions by individual organizations are not taking account of cumulative impacts from all human activities affecting the Sargasso Sea. Moreover, significant gaps exist in the ways in which the mandates of these organizations relate to the Sargasso Sea. These include the lack of any international regime for managing non-tuna fisheries in most of the Sargasso Sea, with the exception for fisheries managed by the Northwest Atlantic Fisheries Organization (NAFO) in a small Northern area of the Sargasso Sea. Tuna and tuna-like species are managed by ICCAT. There is limited information available on bycatch and this is an area of improvement in which the Project would wish to collaborate with the mandated regional fisheries organisations. Gaps also exist in the regulation of shipping impacts on the marine environment in the Sargasso Sea, including on the Sargassum and the habitat protection it provides for many fish and marine mammal species and the lack of specific mitigation measures to address the potential impacts of increases in shipping in the Sargasso Sea.

The Sargasso Sea Alliance partnership was formed in 2010 led by the Government of Bermuda, in collaboration with scientists, international marine conservation groups and private donors, who all share a vision of protecting the unique and vulnerable ocean ecosystem of the Sargasso Sea. US philanthropic foundations and individuals invested some $2 million dollars between 2010 and 2014. The signing of the Hamilton Declaration in March 2014 and the associated formation of the Sargasso Sea Commission has further advanced the original intent of the Alliance and provided a tangible opportunity to address the barriers and shortfalls that are highlighted below. Annex 1 gives more detailed information on the Hamilton Declaration and how the Project aligns with that Agreement's aims and objectives

Since the signing of the Hamilton Declaration support for the Commission has increasingly come from national agencies in Monaco, Netherlands, US and Canada as well as foundations. Currently, its annual income is c$300k a year. The Commission also receives direct support for certain activities from individuals and entities listed on its website.

The Commission and Signatories have endorsed the current overarching goals: a) Promoting international recognition of the unique ecological and biological nature and global significance of the Sargasso Sea; b) Encouraging scientific research to expand existing knowledge of the Sargasso Sea ecosystem in order to further assess its health, productivity and resilience; and c) Developing proposals for submission to existing regional, sectoral and international organizations to promote the objectives of the Hamilton Declaration.

The Commission works closely with other appropriate bodies with interests or mandates that overlap into the Sargasso Sea. The general strategy of the Sargasso Sea Commission and its activities is to identify the most important threats to the Sargasso Sea ecosystem and to address these by seeking appropriate

conservation measures within the relevant existing international or regional sectoral organizations. Possible threats from shipping or vessel source pollution would be addressed through the International Maritime Organization (IMO); threats from fishing through the only two relevant fishing organizations – the International Commission for the Conservation of Atlantic Tunas (ICCAT) and (for the small area of the Sargasso sea above 35°N) the North-west Atlantic Fisheries Organization (NAFO); and seabed mining issues through the International Seabed Authority (ISA). Through such interactions and relationships with existing bodies certain improvements have been made. For example, NAFO has already enacted protection measures for the Northern seamounts in the Sargasso Sea.

During the development of the full Project, the SSC and its stakeholders will explore the feasibility and value of partnering with the private sector where appropriate. Partnerships worthy of exploration include with the shipping sector (along with IMO) in consideration of ensuring reduced pollution and invasive species risk; the fisheries sector (in collaboration with RFMOs) to identify and implement improvements in catch management and bycatch reduction; the eel fishery and marketing sectors in target countries such as Morocco, Dominican Republic and others. The Sargasso Sea Commission already has a range of Collaborating Partners – which includes important private sector players – like the International Cable Protection Committee and *LookBermuda*. The project will be engaging with the private sector in the glass eel fishery – particularly in Morocco where the private sector runs the eel aquaculture industry. Ocean research has tended to be dominated by public and state owned and operated vessels. Nevertheless, the Commission has excellent relations with Professor Alex Rogers, the Scientific Director of the privately owned *REV Oceans,* who is committed to conducting research in the Sargasso Sea in its early cruises.

b) Describe how the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits;

Discussion of the Theory of Change and Linkages to the Overall Programme

The Theory of Change Schematic in Annex 2 provides a simplified flow-chart demonstrating broadly how the four components of the Child Project will provide outcomes in the medium term that will help to initiate and support system changes and achieve some of the long-term goals of the overall ABNJ Program

Project Components and Outcomes Outputs:

Component 1 will create the collaborative institutional arrangements and organisational infrastructure through partnerships (existing and new) that will drive both the process of evolving an effective stewardship role for the Sargasso Sea as well as direct the overall project and its various activities, deliveries and outcomes.

Component 2 will undertake the required technical and scientific work through the direction of the institutional arrangements and Partnerships of Component One to improve overall knowledge of the Sargasso Sea, identify the threats and root causes and define management strategies to address them while developing an effective monitoring programme and advising the institutional and organisational partners on the value and cost-effective nature of such an ecosystem management approach (an Ecosystem Diagnostic Analysis).

The Outputs from Component 1 and 2 (i.e. a 'management' structure for long-term stewardship as well as a 'state-of-the-ecosystem' analysis and long-term monitoring for change) will then be used to guide and evolve a formal long-term Strategic Action Programme through Component 3, including formal adoption

of the institutional arrangements and the long-term activities and road-map with associated budget to mitigate or eradicate threats to the ecosystem and maintain a sustainable use of its resources.

Component 4 will capture the lessons and best practices from the sequential delivery from the previous components and recommend options for replication and scaling-up while also ensuring that the positive work undertaken by the project and its Outcomes are well documented and distributed and the importance of this ABNJ and the efforts and successes in managing it through an effective stewardship approach is globally recognised.

Medium-Term outcomes and System Changes:

The Project will aim to deliver an effective example of long-term sustainable management of an ABNJ marine ecosystem through stewardship, supported and guided (through an adaptive management process) by on-going and continuous monitoring of the ecosystem and its goods and services. This will demonstrate and maintain sustainability of socioeconomic interests and food security related to this unique ecosystem. Further system changes include the improved conservation of an economically and ecologically/biologically significant ecosystem. The demonstration and sharing of this process and the consequent Lessons and Best practices will hopefully provide opportunities to further catalyse system changes elsewhere.

Long-Term Goals aligned to the Overall Program:

The GEF-7 ABNJ overall Program Goal (situation sought) has been defined as "Sustainable use of ABNJ living resources and strengthened biodiversity conservation in the face of a changing environment'.

The demonstration of the sustainable use of ABNJ living resources and improved conservation of biodiversity and ecosystem services within this Sargasso Sea EBSA/marine Ecosystem arising from the Project and the medium-term continuation of effective stewardship, scientific monitoring and associated socioeconomic and food security benefits will provide a model for achieving the overall project Goal that can be replicated and scaled up elsewhere as applicable. The sustainability at the global level will be further supported through the sharing and distribution of specific lessons and best practices from this GEF initiative. Continuing the support to sustainable use of ABNJ living resources will be the ongoing flow of updated information for better understanding and analysis of this ABNJ and how this can also be used in other global ABNJ ecosystems.

The Theory of Change will be further elaborated in the Full Project Document with a preceding Causal Chain Analysis clearly defining the Threats and Root Causes (as identified in the current text) and how these drive the adopted Components and Outputs.

This Child Project will address all of the four immediate intended programme Outcomes in the overall ABNJ Program's Theory of Change as follows:

Common Oceans ABNJ Program Outcomes	Conformity within Child Project
Outcome 1: Frameworks and processes for more effective governance and management in ABNJ (including	The Child project has an overall Objective to facilitate and deliver an integrated, cross-sectoral, ecosystem-based sustainable management mechanism for the Sargasso Sea as an ABNJ of significant importance. To this effect, the Project aims to deliver effective management and stewardship of the ecosystem as whole as a primary Outcome. Appropriate policy and legal frameworks will be explored in support of this aim/objective along with the necessary institutional mandates and governmental commitments.

fisheries management) strengthened	Furthermore, the Project will work closely both with the relevant RFMOs and with the market countries for products from the Sargasso Sea to ensure compliance with relevant legislation (such as the fisheries legislation of UK, Norway, South Africa as an example) and to promote sustainability through greater control within the natural resource markets, including incentives for marketing sustainable products. Component 1 will focus on building this effective stewardship and governance along with the appropriate institutional structure
Outcome 2: Capacity for better implementation of ecosystem-based management in fisheries management in the ABNJ strengthened	Through the EDA-SAP process, the Child Project will identify capacity needs for strengthening ecosystem management and the Ecosystem Approach to Fisheries and then set out to address them through the appropriate capacity building and training programme(s). This will include building and supporting capacity for scientific monitoring of the ecosystem and its resources (including data collection, compliance monitoring and reporting to support science-based decision making and implementation) as well as building capacity for adaptive, solutions-based ecosystem and fisheries management and institutional support. This will be covered through both Component 1 & 2
Outcome 3: Participation in multi-sectoral coordination for more effective governance and management of ABNJ improved	The Project as a whole will develop and strengthen multi-sectoral Partnerships and Organisational Infrastructure for Stewardship of the Sargasso Sea Ecosystem. The Project will focus on improving, developing and adopting governance options that would acknowledge the role of existing sectoral and other organisations and institutions with responsibilities and interests in the Sargasso Sea area while addressing the gaps in the measures needed for the conservation and stewardship of the ecosystem in its entirety.. The Project will specifically work closely with the RFMOs in this region (ICCAT and NAFO) as well as with neighbouring LMEs, the IMO and ISA. The end landscape delivered by the Project will thus include a dedicated and sustainable partnership program and a supporting institutional base with appropriate administrative arrangements
Outcome 4: Knowledge and information exchange for more informed decision-making among stakeholders to support sustainable utilization of ABNJ improved	The Project will strengthen and expand the knowledge base in support of the adaptive ecosystem-based management approach which it will be creating and implementing. This will include mechanisms for handling and managing this wealth of information and knowledge. Not only would this be used to support the ecosystem monitoring process and its adaptive management/stewardship structure, but it will also define best lessons and practices for replication and up-scaling as appropriate to other similar areas. The project includes twinning arrangements with other ABNJ management initiatives, particularly the Costa Rica Thermal Dome project (through FFEM). Technical and scientific information will be collected on issues related to the ABNJ which may be of value in other ABNJ. Information exchange mechanisms will be developed and implemented. This innovative project will provide significant lessons, practices and opportunities for up-scaling and replication in other ABNJ

Annex 2 also demonstrates how this Project aligns with the Criteria for selection of Child Projects for the Common Oceans ABNJ Program.

c) Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

The UN Law of the Sea Convention provides an overarching framework for governance of Areas beyond National Jurisdiction. Negotiations are underway at the United Nations for the development of a new International Legally Binding Instrument for the conservation of marine biodiversity beyond national jurisdiction (BBNJ ILBI). It will inevitably take some time to reach formal agreement and adoption. Meanwhile, stewardship and conservation measures still need to be evolved and tested for those marine ecosystems which are already under pressure from anthropogenic impacts (including climate change). As

described above, one such significant marine ecosystem within the High Seas of the Atlantic Ocean is the Sargasso Sea.

As a geographically sizeable and globally significant marine ecosystem falling nearly entirely in Areas Beyond National Jurisdiction, interventions for improved stewardship and collaborative governance of the Sargasso Sea are fully eligible for GEF financing within the GEF7 Objective IW-2, Improve management in Areas Beyond National Jurisdiction. As in intervention within such an ABNJ this project will have numerous global benefits as defined under the Global/Regional Framework Engagement below.

In order to counter the actual/potential threats and impacts to the Sargasso Sea, certain causes and barriers need to be resolved. These include:

- Inadequate knowledge/understanding of ecosystem features (and their associated socio-economic values) including resident, endemic and migratory species, biodiversity and habitat interactions, vertical and horizontal connectivity within and beyond the area, etc.
- Absence of sufficient time-date on IUU fishing and the need for a more active response mechanism to address IUU fishing in the Sargasso Sea
- Inadequate baseline and/or long-term monitoring data relevant to the main threats and impacts. Climate change -related impacts are of particular concern here as in ocean acidification and its effect on marine life as well as sea surface temperature and salinity increases in the upper layers of the ocean and associated potential changes in current movements and direction.
- The potential impacts from seabed mining are a growing concern with the rapid development of technology and the allotment of a significant number of exploration licences globally by the International Seabed Authority. Currently, there are no exploratory licences allocated within the Sargasso Sea system boundary, but several have been issued for the mid-Atlantic Ridge. ISA is developing regulations which will need careful consideration by the Commission in relation to the Sargasso Sea.
- Absence of a mechanism for adaptive management or stewardship response to any perceived or measurable impacts and threats to the Sargasso Sea area.
- Despite the fact the Sargasso Sea hosts the famous Hydrostation S and associated BATS time series,[24] there is no existing ecosystem-based management system to take advantage of these data.
- Limitations in current capacity for addressing the barriers and constraints to the removal or mitigation of threats and impacts, both in the context of funding and available/accessible expertise and resources.

GEF, through its various Implementing Agencies, has evolved a very effective approach to developing and implementing regional management approaches for Large Marine Ecosystems (LMEs) which admirably suits the needs for developing and adopting a Sargasso Sea stewardship mechanism. This involves undertaking a Transboundary Diagnostic Analysis to identify the importance of the ecosystem in question, the value of its goods and services, who benefits from these goods and services, what the threats and real/ potential impacts are to the ecosystem and its goods and services, and how these threats might be mitigated or eradicated. A similar process will be used for the Sargasso Sea, although it would be referred to as an Ecosystem Diagnostic Analysis (EDA) as the Sea is not strictly transboundary, being an ABNJ. The standard next step then within LME projects is to translate the information from the TDA into a Strategic Action Programme that defines what actions need to be taken for effective management of the areas and by whom. It also defines partnerships and sustainability including management, administrative and financial requirements. The SAP is a negotiated policy-level document which the various and

[24] http://www.bios.edu/research/projects/sustained-ocean-observations/

appropriate stakeholders to the LME sign up to and implement. Similarly, the EDA for the Sargasso Sea would from the basis for a SAP which would be agreed and implemented by the various signatories to the Hamilton Declaration along with the partners to the Sargasso Sea Commission.

To address the shortfalls and barriers to effective stewardship and to develop, adopt and implement the Strategic Action Programme for the Sargasso Sea, the project will aim to deliver the following sequential Outcomes under four Components:

Component 1: Partnerships and Organisational Infrastructure for Stewarding the Sustainable Management of the Natural Resources of the Sargasso Sea Ecosystem

A. A road-map and budget to support a collaborative Ecosystem Based Approach to sustainable management of natural resources and conservation within the Sargasso Sea. This would clearly define the roles and align with the mandates of the relevant stakeholders. This would include a review of stewardship and governance options (both existing and potential) that incorporates the role of existing organisations and institutions with responsibilities and interests in the Sargasso Sea area, and identify any gaps in the measures needed for the conservation and stewardship of the ecosystem as a whole with a view to i) the development and adoption of a more focused and effective collaborative stewardship regime for the long-term conservation and sustainable use of the Sargasso Sea, consistent with the UNCLOS and its implementation agreements and following an Ecosystem-Based Approach and ii) delivering on the mandate given to the Sargasso Sea Commission within the Hamilton Declaration that relates to Collaboration for the Conservation of the Sargasso Sea.

Component 2: Improved Knowledge Base to Support a Collaborative, Adaptive Ecosystem-Based Stewardship Approach

A. An Ecosystem Diagnostic Analysis (EDA), applying similar methodology as for the GEF's Transboundary Diagnostic Analysis (TDA), for the entire Sargasso Sea Ecosystem area that quantifies the actual or potential threats and impacts to the ecosystem and its resources, links these back to the immediate and root causes of these threats/impacts (and any barriers preventing their removal) and identifies the interests of major stakeholders and countries. This would provide a much-needed baseline for monitoring and adaptive stewardship of the Sargasso Sea. Where appropriate, the project will use this EDA process to develop closer links with the Private Sector, engaging them into the discussions and analyses on threats and root causes as a prelude to development of the SAP (see below).

B. An Ecosystem Valuation and Value-Chain Analysis delivering an economic assessment of the value of both market and non-market goods and services provided by the Sargasso Sea. This would include a detailed analysis of the global value (actual and potential, market and non-market) of this unique ecosystem and its resources with precise figures and conclusions where possible. The reasoning behind this is to further justify and support on-going stewardship (using a cost-benefit analysis approach) and to encourage further support by countries and signatories and other partners in order to promote and implement the work needed.

C. Information and Knowledge Gaps Analysis and Road-Map for Filling such Gaps and to support long-term Monitoring of the Ecosystem. Based on information arising from the Ecosystem Diagnostic Analysis, existing monitoring and time-series data collection and information on the effects from impacts that are already being measured, a baseline of 'knowledge' will be developed. This will then aid in identifying a list of gaps in knowledge and information for the Sargasso Sea

area and its biological, chemical and physical status and interactions along with a road-map for filling the priority gaps that directly influence decisions for effective stewardship guidance and decision-making. This would build on work already undertaken by the SSC and its partners and would aim to identify expertise and collaborators to assist in addressing these gaps. The project will explore the opportunities to engage with remote sensing expertise and existing programmes in order to facilitate better capture of data and long-term monitoring of the area.

Component 3: Development of a Strategic Action Programme for addressing Threats and Strengthening the Stewardship and Conservation of the Sargasso Sea Ecosystem

A. A list of priority immediate and long-term actions needed to a) address or mitigate the impacts of threats and b) strengthen stewardship and conservation so as to prevent or mitigate impacts on the ecosystem and its stakeholders along with agreed partnerships for delivering on these priority actions. An emphasis would be placed on the long-term predictable effects from climate change and how this is likely to affect the integrity of the ecosystem, its biodiversity and its resources. In this context, focus will also be placed on defining what are the links with carbon sequestration and the potential to sustain or even improve this. Consideration would also be given to potential threats (such as deep-sea mining, shipping and IUU fishing) and the actions that could be taken prior to any such threat arising with the aim of avoiding or mitigating such threats. The Project will engage with the Private Sector where appropriate in helping to define the feasible actions to address impacts with their root causes in that sector. The project will specifically explore the possibility of long-term partnerships with remote sensing service providers such as Vulcan, that are highly active in the data management area within the ABNJ space, See https://www.vulcan.com/areas-of-practice/technology-science

B. All of this to be captured and agreed within a Strategic Action Programme defining the stewardship measures and associated priority actions, agreed between and endorsed by the appropriate mandated institutions, partners and collaborators supporting partnerships for implementation of sustainable management processes within the Sargasso Sea and further endorsed by the Signatory Countries to the Hamilton Declaration. As with defining the appropriate actions to address and mitigate impacts, the SAP development process will include close engagement with and input from the Private Sector as important potential partners thus ensuring their full engagement and contribution to the immediate and longer term sustainability of actions committed to under the SAP. The SAP will also build on any existing knowledge-sharing arrangements within the Commission and its partners and through other pertinent learning and experience synthesis mechanisms, particularly in the context of management and policy improvements and associated capacity building and awareness for more effective ecosystem management including strengthening/implementing the ecosystem approach to fisheries.

Component 4: Knowledge Management, Monitoring and Evaluation

A. Knowledge Capture and Management through Identification of Best Lessons and Practices: Knowledge capture and management is a critical component of any GEF project to ensure that best lessons and practices can be put to good, long-term use as well as identifying pitfalls and actions to be avoided. Knowledge products, services and assets need to be properly formulated and catalogued as well as distributed efficiently to the appropriate bodies that can act on them in the context of improved or strengthened management practices. Various tools will be explored for better Knowledge Management. Information packages will be developed and disseminated which

target appropriate government bodies and regional entities (both for participating partners and for the BBNJ community as a whole) and provide descriptions and updates on management and decision-making processes. 1% of the child project budget will be dedicated to GEF IW portfolio learning activities through engagement in a range of IW:LEARN activities such as biennial GEF IW Conferences, website support, thematic meetings (annual LME meeting), etc. The effectiveness of project management and delivery will be assessed and steered through a Monitoring and Evaluation Plan also supported by a Stakeholder Engagement Plan that requires strong stakeholder inputs to the project's outputs and to their on-the-ground delivery.

B. Monitoring And Evaluation: a standard UNDP GEF Monitoring And Evaluation Process and Plan will be incorporated into the full Child Project including quarterly and annual reporting as well as a Mid-Term Review and a Terminal Evaluation

C. Project Management will include the necessary staffing and their support within the PCU.

Under the International Waters portfolio, three key objectives have been targeted for GEF-7 investments: 1) strengthening national Blue Economy opportunities to reduce threats to marine and coastal waters; 2) **improving management in the Areas beyond National Jurisdiction (ABNJ)**, and 3) enhancing water security in freshwater ecosystems. Through Objective 2, GEF recognizes that the complex ecosystems in the ABNJ include both the water column and seabed and this makes the sustainable management of fisheries resources and biodiversity conservation especially challenging. GEF further recognizes that urgent action is needed to improve conservation and sustainable use of the open oceans that covers almost half of the planet and are increasingly under pressure and threatened by over-fishing of iconic pelagic migratory species, maritime navigation, ocean energy facilities, bottom trawling on seamounts, pollution and extraction of minerals and hydrocarbons. GEF is therefore encouraging collaboration among relevant international, regional and domestic bodies on area-based management in national waters and ABNJs. GEF investments will assist capacity building among concerned states and organizations and will facilitate cooperative frameworks between the ABNJs and the Large Marine Ecosystems that they border, to improve management opportunities and cohesion between these two interdependent management frameworks. The GEF 7 Programming Directions recognizes that coordination and cooperation between various existing organizations (including intergovernmental and international organizations responsible for the management and governance of relevant activities in the ABNJ oceans such as the International Maritime Organization, the International Seabed Authority, and several regional fisheries management organizations) would contribute to combating degradation of the open oceans and their ecosystems.

This is a Child Project which falls within the overall Programmatic approach as part of the GEF 7 ABNJ Programme which includes similar Child Projects on high seas fisheries, etc. Within this context it will be important for the Child Projects to coordinate and communicate with each other as well as with the overall Programme management body. It is expected that the Child Projects would meet up with each other under the umbrella of the Programme itself. However, interim arrangements will be made to maintain communications, share information and particularly exchange lessons and best practices between the Child Projects. This will be elaborated more effectively in the Full Project Document once the Child Projects have received more guidance on this from the Programme management and its implementing agencies.

The Sargasso Sea Commission is considered by many 'BBNJ' experts to be an "innovative approach to high seas governance" that provides "a new paradigm" for stewardship of the high seas. It has to date been financed by a unique mix of private philanthropy and governmental support. Although the Sargasso Sea is an iconic high seas ecosystem, its governance is typical of most high seas areas – in that human activities are regulated purely on a sectoral basis – with no overarching co-ordination framework that can

detect governance gaps or cumulative impacts of such activities. This new stewardship approach pilots and promotes closer interaction and partnership. The UN BBNJ current (2020) negotiating text envisages "legal agreements and networks" (draft art 19) for ABNJ. The challenges facing the Sargasso Sea are common to most other high seas areas and so the Sargasso Sea approach is likely to be an important model for other ABNJ, thus providing strong opportunities for both replication and scaling-up.

The Outcomes listed above will directly respond to the requirements of the GEF 7 Programming Directions by aiming to deliver improved stewardship within a globally important ABNJ and to address any identified threats from commercial activities. The project will build on the existing collaborative efforts of the Commission through the Hamilton Declaration in achieving an area-based ecosystem management approach and will encourage and promote coordination and cooperation across a wide range of stakeholders and responsible institutions/bodies, including neighbouring LME management mechanisms. The existing collaborations and partnerships have some considerable history of success already and this will help to ensure further the long-term uptake and sustainable impact of this project into the future, The Commission has already reached out to the Caribbean LME community which has expressed a willingness to establish a partnership with the Commission to their mutual benefit, particularly in the area of fisheries and tourism. The full Project Document will elaborate on this partnership and its objectives and deliverables. Other linkages to the relevant Eastern Caribbean States will be further explored during Project Preparation and captured as appropriate in the full Project Document. This will help to enhance the linkages between this ABNJ and dependent coastal communities. One particular area of collaboration between the Commission and the Eastern Caribbean States (through the Secretariat of the Cartagena Convention, Caribbean Regional Coordinating Unit) and West African States (through the Abidjan Convention) would be related to the causes and impacts of massive accumulations of the brown macro-algae Sargassum in the nearshore environment of the Caribbean and West Africa. This issue is now of such global concern that it has been referred to GESAMP[25] for a scoping activity to advise the UN agencies on the extent of the problem, its long-term predictability and potential mitigating or adaptive actions. Although the source of such massive accumulations has not been traced back to the Sargasso Sea (but to other sources), information related to the Sargassum arising from the TDA and on-going monitoring processes established thereafter could be of considerable value.

The Project also aligns with the thematic papers and initial findings of the High-Level Panel on Sustainable Ocean Economy through a number of their Blue Papers as shown below:

HLP Blue Papers	Areas of Complementarity with Sargasso Sea Project
The future of food from the seas	
The expected impacts of climate change on the ocean economy	
National Accounting for the ocean and ocean economy	Noting the critical role of national accounting in achieving a sustainable ocean economy, and major gaps in how the ocean, ocean services, and ocean assets are currently treated in national accounts.
Ocean Finance	Identifying financing mechanisms that can support the ocean transition in an inclusive manner and how catalytic funds can be mobilised to finance that transition. Recommending new solutions that incentivise sustainable management.
Critical habitats and biodiversity:	Examining the distribution of species and critical marine

[25] Joint Group of Experts on the Scientific Aspects of Marine Environmental Pollution - http://www.gesamp.org/

Inventory, thresholds and governance	habitats. Analysing trends in drivers, pressures, impacts and response; Establishing thresholds for protecting biodiversity hotspots, and indicators to monitor change. Assessing the current legal framework and available tools for biodiversity protection, current gaps in ocean governance and management and the implications for achieving a sustainable ocean economy
The relationship between humans and their ocean planet	Related to concerns about the appropriation of marine resources and displacement of indigenous visions for ocean governance by identifying ways in which these culturally distinct institutions are compatible and charting a path toward inclusive ocean governance.
The ocean transition: what to learn from system transitions	This Blue Paper considers the current dynamics of transition already underway; alternative future transition pathways; and policy or other responses that can help encourage a transition to a more sustainable ocean.

Cognizant of the United Nations Decade of Ocean Science for Sustainability (2021-2030), the Project will also engage with IOC of UNESCO as they support efforts to reverse the cycle of decline in ocean health and gather ocean stakeholders worldwide behind a common framework that will ensure ocean science can fully support countries in creating improved conditions for sustainable development of the Ocean (see 'The Science We Need For The Ocean We Want' at https://www.oceandecade.org/ The Child Project Outcomes and Outputs will be particularly relevant to certain Decade activities and focus such as Clean Oceans (Where sources of pollution are identified and removed), Healthy & Resilient Ocean (Where marine ecosystems are mapped and protected), Predicted Oceans, Sustainable Productive Oceans (Where society has the capacity to understand ocean conditions), (To ensure the provision of food supply), and Transparent & Accessible Ocean (With open access to data, information and technologies).

During the Project preparatory stage, the Commission and its signatories will also seek to identify and engage with other GEF-eligible partner countries that depend on or have an impact on the Sargasso Sea. Two such countries have already been identified by the meetings of the Commission and Signatories. These are Haiti (which supports adult populations of eels) and Morocco (where young eels, although not a cultural delicacy, are processed into adults for the sushi market). Algeria is also a GEF-eligible country and the PPG process will explore the feasibility and value of bringing Algeria in as a partner to the Project. The history behind Haiti's possible involvement relates back to the largely unregulated fishery for glass eels of the species *A. rostrata* in the Dominican Republic. All of these eels are exported to China via Hong Kong. One intention is to use some of the project preparation funds to support a workshop in the region that would address the need for capacity building, with further funding support from one of the partners or co-financiers. In this context, Haiti (through their Ministry of Foreign Affairs) has expressed an interest in joining in on such a workshop. Morocco, meanwhile, could be an important partner country. Although the European Union has strict regulations over the glass eel fishery in Europe, their regime/jurisdiction does not cover the North African States. Both Morocco and Algeria attended the Range State meetings that the SSC held with the Convention on Migratory Species in 2018 as well as 2019. Both countries have expressed an interest in receiving assistance and support with their capacity building for improved eel regulation and monitoring and this could be discussed further with these countries during the preparatory stage. Any specific allocation of GEF funding for these activities and to support these countries would be determined and identified during the PPG along with the respective co-financing from those countries. Furthermore, the PPG would also identify any relevant co-financing for these activities from non-GEF eligible countries such as from the EU or the USA.

The Commission already has close working relationships with NAFO and ICCAT and this collaboration would be strengthened further in order to identify the level of impact from fishing (both licenced and IUU) and associated bycatch on the ecosystem. Further linkages to be explored and implemented as appropriate will include those between the Sargasso Sea area as a spawning ground for high-value eels and the capture and marketing industry in those countries that harvest these eels. Of particular concern will be the illegal trade in such countries. Glass eels have, in the past, been targets for smugglers who illegally poach and smuggle the small creatures from Europe to Asia, where the eels are then raised in aquaculture operations. The small eels can be worth up to EUR 2,000 (USD 2,204) per kilogram, allowing smugglers to make a large amount of money in a short period of time. Europol, the E.U.'s law enforcement agency, recently revealed that 5,789 kilograms of smuggled eels have been seized in Europe (value of over USD 12.6 million)[26]. and 154 people have been arrested during the latest fishing season. This will help to expand the benefits of better management in the Sargasso Sea to national waters and *vice versa* by ensuring a healthier stock of adults from the returning immature eels.

The Project will further the knowledge not only of the Sargasso Sea as an ecosystem but also provide a demonstration of how effective stewardship process may be evolved that can pave the way for better global management of ABNJ and BBNJ. Interaction and input to such global information bases such as IW:LEARN, (OBIS) the Ocean Biogeographic Information System), ICES (International Council for the Exploration of the Sea) and similar bodies and mechanisms will assist and promote the sharing of such knowledge and experiences. It is intended that the experiences and results from this project will be replicable in other similar (ABNJ) geographic areas and ecosystems and this project will thereby constitute an innovative opportunity for development of such mechanisms.

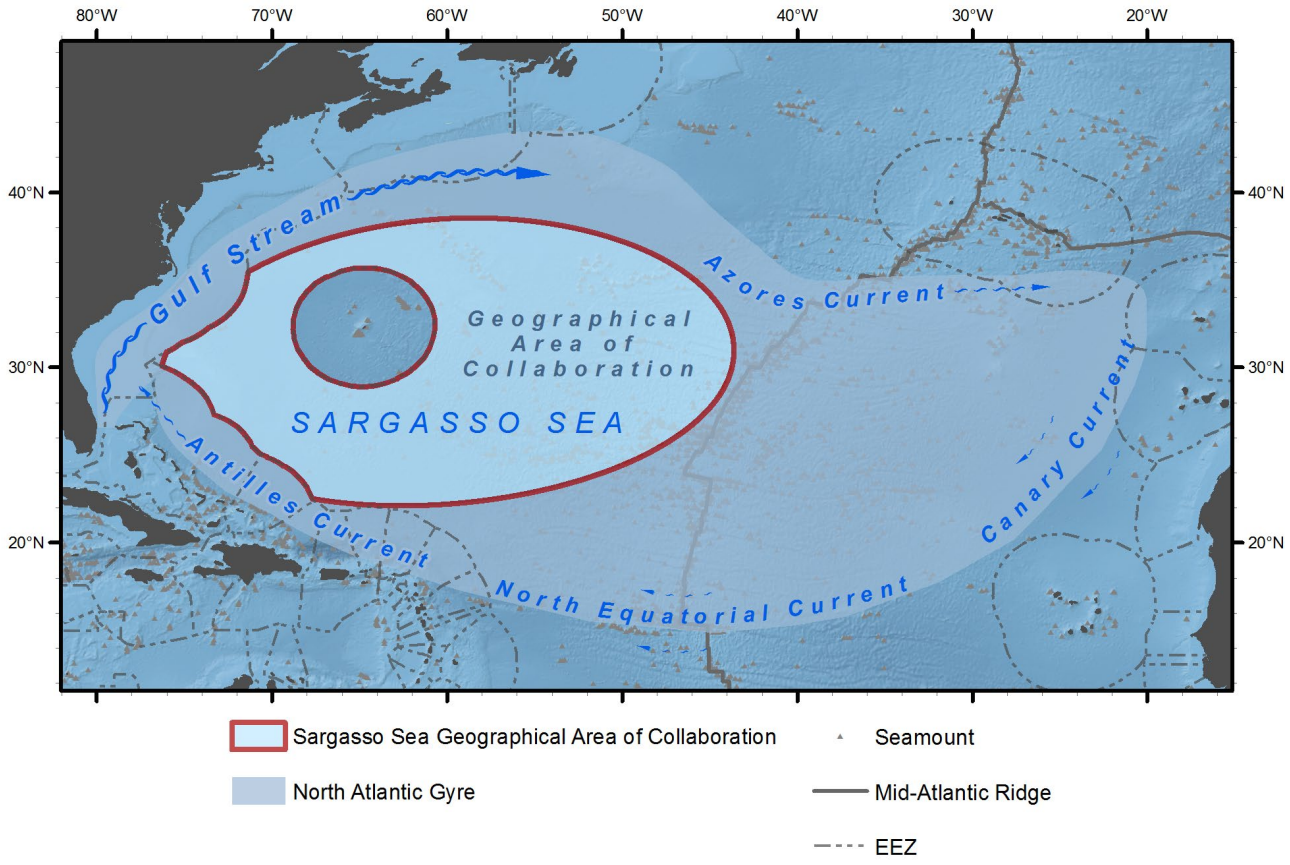
Even at the early stages of Project development, the Commission has already identified substantial commitments and co-financing from its partners (greater that 7:1 of mostly grant financing against the GEF contribution) which complement GEF funding rather than duplicate it and provide significant funds for areas beyond GEF eligibility which are nevertheless essential for effective management purposes (e.g. research and science at the baseline and for monitoring purposes). This confirms the strong interest and concern among the stakeholder community as well as the long-term sustainability of this intervention and its subsequent management and stewardship agreements and actions. The expected benefits from this project promise to extend significantly beyond the cost of the GEF investment.

Gender diversity for this Project is reflected within the Government Focal points of the Signatory Governments (5 out of 10) and in the Secretariat (50%). Two of the seven current Commissioners are women and the Commission is striving to increase this participation. The Project has little control over the human activities taking place within the Sargasso Sea – such as navigation and fishing which are traditionally male oriented, but it can ensure gender and other diversity in its staff and the meetings that it convenes. A full Gender Analysis and Gender Mainstreaming Plan will be prepared during the PPG in line with GEF and UNDP policies and guidelines.

[26] https://www.seafoodsource.com/news/environment-sustainability/positive-signs-for-european-eels-as-recruitment-increases accessed 29 November 2019

ANNEX 1: THE SARGASSO SEA AREA OF COLLABORATION AND THE HAMILTON DECLARATION

The map below indicates the Sargasso Sea "Area of Collaboration" (annexed to the Hamilton Declaration, including some of the major features that influence overall boundary definition and location. The line around Bermuda represents the innermost boundary of the area marking the edge of the 200 nm Bermuda EEZ.



The Sargasso Sea Alliance, led by the Government of Bermuda, started laying the groundwork for international collaboration to provide stewardship for this area. As a result of these efforts, supportive governments convened in Bermuda in March 2014 to finalise and sign the Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea. The Hamilton Declaration was the result of a two-year negotiation between interested governments that are either located in the broader Sargasso Sea area or have an interest in high seas conservation. There are now ten signatories to the 2014 Declaration, namely the Azores, Bahamas, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominican Republic, Monaco, the United Kingdom and the United States. Other governments including the Netherlands, South Africa and Sweden have actively supported the Declaration. The Declaration and its signatories endorsed the establishment of a Sargasso Sea Commission to exercise a stewardship role for the Sargasso Sea and to encourage and facilitate voluntary collaboration toward the conservation of the Sargasso Sea. The Commission has a wide network of collaborating partners from academia, the private sector and the national and international NGO community and bodies such as IUCN which represents both government and civil society.[27]

[27] http://www.sargassoseacommission.org/about-the-commission/collaborating-partners and http://www.sargassoseacommission.org/about-the-commission/programmatic-partners

These partners, along with the existing mandated bodies variously responsible for activities within the Sargasso Sea area, will create the stakeholder base for the Project initially and further partnerships will be developed and embraced as appropriate through the Project and their different roles recognised and employed in the overall management and stewardship process. In particular these stakeholders will form the basis of both the delivery and the targets for capacity building for more effective management. The stakeholder engagement and partnership process will aim to develop stronger cooperation and coordination that will help to promote and implement stronger and more effective cross-sectoral management and stewardship of this ecosystem.

In line with the Hamilton Declaration, the intended purpose of the proposed Project, supported by GEF through UNDP implementation, would be:

A. To assist the signatories to the Hamilton Declaration and their partners to collaborate to the extent possible, in pursuing conservation measures for the Sargasso Sea ecosystem through existing regional and international organisations with relevant competencies (as agreed in the Declaration)

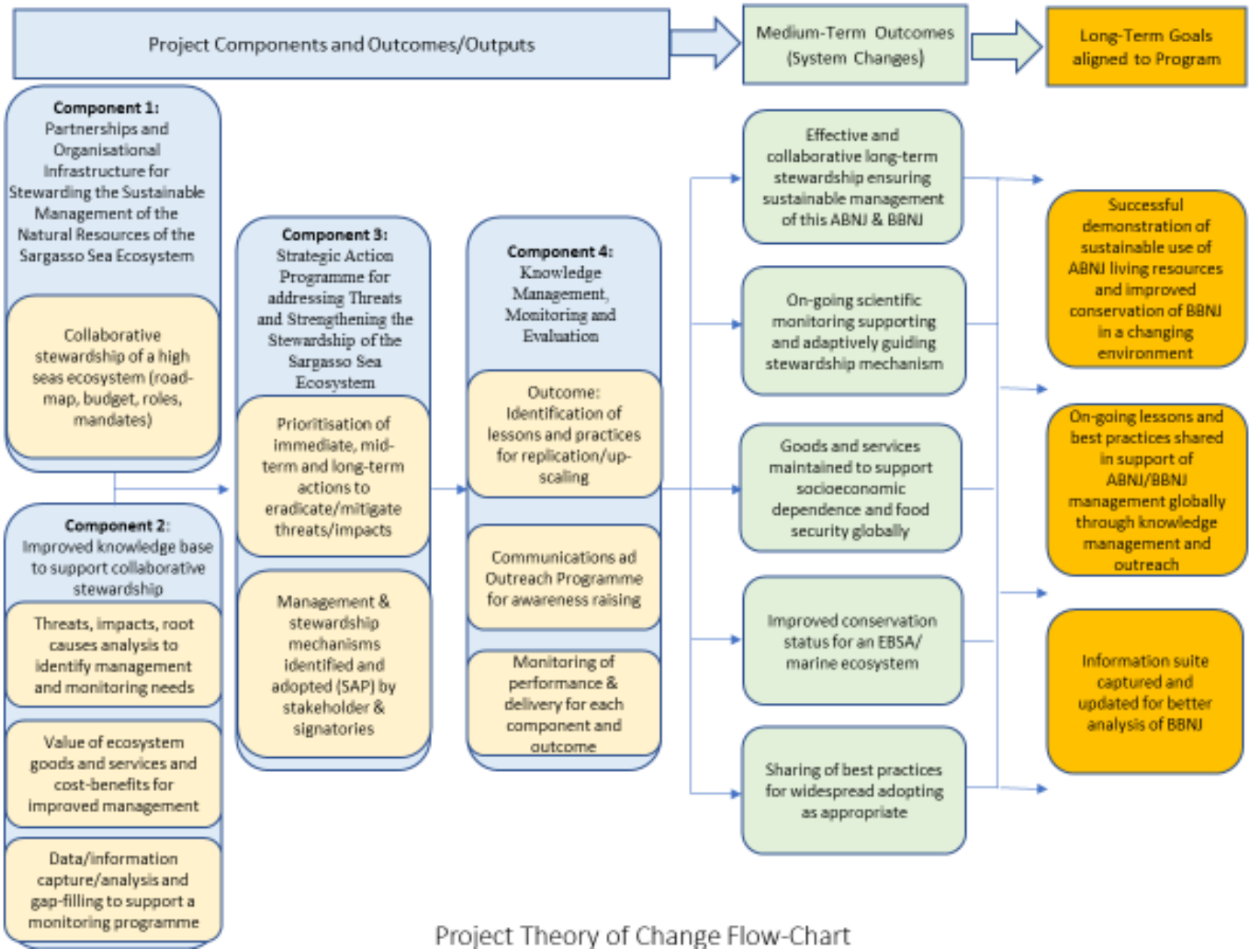
B. To consider the means and modalities by which Signatories could, according to their mandate and their means, support the work of the Commission

C. Encourage relevant regional and international organisations, as well as other bodies and entities, who wish to contribute to efforts to conserve the Sargasso Sea ecosystem in accordance with the Declaration to participate as collaborating partners.

The signatories and the Commission are of the opinion that this can best be achieved through the development and adoption of a more focused and effective collaborative stewardship regime for the long-term conservation and sustainable use of the Sargasso Sea, consistent with the UNCLOS and its implementation agreements and following an Ecosystem-Based Approach. Such a stewardship regime would include the involvement and direction of the mandated bodies already responsible for management in the ecosystem along with other stakeholders and partners.

This project is developed within the framework of the intergovernmental collaboration established by the 2014 Hamilton Declaration. The proposal has been developed in close collaboration with the representatives of the 10 governments which have signed the Declaration and notably the 6 States involved - namely Bahamas, Canada, Dominican Republic, Monaco, United Kingdom and the United States. These States are actively involved in the BBNJ process at the United Nations. GEF specifically notes (in its GEF-7 Programming Directives) that it will support investments related to the ‘Collaboration among relevant international, regional and domestic bodies on area-based management in national waters and ABNJs’;

ANNEX 2: PROJECT THEORY OF CHANGE AND LINKAGES TO PROGRAM



Project Theory of Change Flow-Chart

ANNEX 3: GEF 7 CORE INDICATOR WORKSHEET

Project Core Indicator 5 Area of marine habitat under improved practices to benefit biodiversity

Approximately 685 Million hectares of marine habitat will come under improved management to benefit biodiversity and a Strategic Action Programme will be adopted that will provide the mechanism, infrastructure, agreed activities and partnerships for effective monitoring and stewardship of this area beyond national jurisdiction.

The area to come under improved management has already been identified as per the map below. The Strategic Action Programme would be adopted prior to the Terminal Evaluation of the Project.

ANNEX 4: RISK ASSESSMENT TABLE

Risk Type	Description of risk	Likelihood of risk (H,M,L)	Impact of risk (H,M,L)	Suggested mitigation measures
Political	Collaborating / Signatory Governments fail to support the project or its proposed SAP	L Commission has six years' experience working with Signatory Governments	M	Maintain existing close communications and contact with government focal points and other stakeholders throughout the project cycle. Strengthen and expand the partnerships and interaction in order to consolidate a single, interactive stewardship approach
Institutional	Being a High Seas Project, no entity provides an institutional base	L Commission already has a current base	M	Several institutions have already offered to provide a long-term base for this stewardship process in the context of offices, administrative support and utilities
	Inadequate capacity built to effectively monitor the ecosystem and 'manage' this stewardship approach	L	M	Much of the scientific and technical capacity is already available through the evolving partnerships. Component 2 of the Child Project will focus on identifying any critical gaps and addressing these through a dedicated CB&T programme. This will include building capacity for adaptive, solutions-based ecosystem management and institutional support
Governance	The Project ultimately fails to develop, adopt and implement a governance mechanism based on interactive stewardship	L	H	A formal, standard UNDP GEF Monitoring and Evaluation Process and Plan with associated budget will be incorporated into the full Child Project including quarterly and annual reporting as well as a Mid-Term Review and a Terminal Evaluation. This will further be the priority subject of review by the regular meetings of the Steering Committee

Financial/economic	Co-financiers fail to deliver expected support	L	M	Wide diversity and spread of co-financiers which have been subject to detailed outreach and awareness raising from the Commission over several years including sharing of information and mutual attendance at appropriate venues. The desire to support is thus very real and mostly fostered over a long period
	Project fails to establish and implement a long-term financial sustainability road map	L	H	The long-term financial support will be identified as part of the development of the Strategic Action Programme as is standard for such SAPs. This will be one of the priorities also in establishing the long-term institutional arrangements. This will be further elaborated and explained in the full document
	Project intervention is insufficient to prevent the economic impacts from the depletion of important natural resources dependent on the Sargasso Sea	L	M	The planned project design is such that it will only improve the control and mitigation of any deleterious economic impacts on stakeholders and users of Sargasso Sea resources The RF will be designed to ensure that appropriate indicators and targets are included to monitor sustainability of natural resources where feasible
Social	Stronger management and stewardship may impact on existing exploitation of natural resources (e.g. fishing)	L	M	On the contrary, a more effective stewardship of the Sargasso Sea and its resources will ensure long-term sustainability and access to such resources which would otherwise likely be depleted fast and create issues related to food security, livelihoods and general community well-being well beyond the system boundary of the Sea itself. Furthermore, the development process for the full project will carry out a SESP (Social and Environmental Screening Process) which is a requirement of the Implementing Agency
Environmental (including climate change up to 2050)	Major changes to the Sargasso Sea Currents and Ecosystem particularly warming and acidification	M/H	L	The project is designed to analyse and model possible impacts on the ecosystem from climate change and recognise any associated Adaptive management /stewardship requirements or guidelines